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April 27, 2023

Mr. Jim McCourt
Oregon Department of Environmental Quality
Western Region
Materials Management Program
165 E 7th Avenue #100
Eugene, Oregon 97401

SUBJECT: Submittal of 2022 Annual Environmental Monitoring Report
Riverbend Landfill Solid Waste Disposal Site Closure Permit No. 345
Yamhill County, Oregon

Dear Mr. McCourt:

This letter accompanies the enclosed two copies of the 2022 annual environmental monitoring report (AEMR) for the Riverbend Landfill (RL), consistent with requirements in RL's solid waste disposal site closure permit (SWDSCP) #345 issued by Oregon Department of Environmental Quality (DEQ) on August 31, 2022.

SCS Engineers (SCS), in Portland, Oregon, prepared the 2022 AEMR on behalf of Riverbend Landfill Co. The 2022 AEMR presents and evaluates the RL environmental monitoring data from 2022, consistent with the RL's SWDSCP and DEQ-approved environmental monitoring plan (EMP) dated December 2014.

Statement of Compliance Per Section 17.2 of SWDSCP

Evaluation of the 2022 compliance groundwater monitoring data did not identify any confirmed change in groundwater quality at RL's point-of-compliance boundary, as defined in the site's SWDSCP and EMP.

Comparison of the 2022 compliance groundwater analytical results to the EMP-required data evaluation standards, which include prescriptive or statistically-derived concentration limits, showed the following notable results:

- Volatile organic compounds (i.e., action limits or permit-specific concentration limits) were not detected in compliance well groundwater samples collected in 2022, consistent with historical results.

- There were no confirmed detections of three or more inorganic parameters confirmed 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 2022. 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.

Additionally, no significant change in methane monitoring data and land quality events occurred in 2022 (e.g., reportable spills). Quarterly LFG monitoring performed in 2022 indicated methane was not detected above the regulatory compliance levels in perimeter landfill gas monitoring probes or onsite structures.

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 2022 AEMR (hardcopy and electronic)

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Ashley Watkins, Yamhill County
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2022 Annual Environmental Monitoring Report

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2022 Annual Environmental Monitoring Report

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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 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 2022 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 2022 and Historical Groundwater, Surface Water, and Leachate Management System Samples Analytical Data
Appendix G: 2022 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 Environmental Testing.
Fe	iron
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™ 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
SWDCP	solid waste disposal closure 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

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 2022 at Riverbend Landfill (RL) in Yamhill County, Oregon. Monitoring and reporting were performed in 2022 consistent with requirements in (1) Riverbend Landfill's (RL) solid waste disposal permit (SWDP) No. 345, issued by Oregon Department of Environmental Quality (DEQ) on December 3, 1999 and subsequent addenda, (2) RL's solid waste disposal site closure permit (SWDSCP) #345, issued by DEQ on August 31, 2022 with revised and approved Permit-Specific Concentration Limits, Action Limits and Site-Specific Limits (SCS, 2021) and (3) RL's DEQ-approved environmental monitoring plan (EMP; SCS, 2014).

RESULTS AND CONCLUSIONS

Compliance Well Groundwater Quality

Analytical results of groundwater samples collected in 2022 from the site's compliance monitoring well network did not indicate any confirmed change in groundwater quality, as defined in the SWDSCP and the EMP. Volatile organic compounds (VOCs) were not detected in compliance well groundwater samples in 2022. There were no confirmed detections of three or more site-specific inorganic parameters were detected above their respective statistically-derived site-specific limits (SSLs) in the groundwater samples collected during 2022 monitoring events.

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 2022, 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 2022 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 2022 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 9.89 million gallons of liquids to the leachate pond in 2022, which is a reduction in generation compared to 10.48 million gallons in 2021. Pumping volume data from LDSs during 2022 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. 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.

Analytical results of liquid samples collected from the LCRSs and LDSs in 2022 are generally consistent with historical results. VOCs were not detected in liquid samples collected from any of the secondary LDS Sumps. No changes in groundwater quality, including VOC detections, have been identified downgradient of any of the modules. 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 2022 continues to indicate that this improvement has been effective as only 462 gallons were pumped from the pond LDS in 2022. 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 pond liner system is effective at managing the site leachate and the minimal 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 2022 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 2022 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, (2) RL's solid waste disposal site closure permit (SWDSCP) #345, issued by DEQ on August 31, 2022 with revised and approved Permit-Specific Concentration Limits, Action Limits and Site-Specific Limits (SCS, 2021) and (3) RL's DEQ-approved environmental monitoring plan (EMP; SCS, 2014).

SCS performed 2022 compliance monitoring activities for groundwater, surface water, LMS liquids, and LFG. RL personnel conducted the management and performance monitoring of the LMS in 2022. With the exception of bacterial analyses in surface water samples, Eurofins Environmental Testing (Eurofins) in Denver, Colorado, analyzed all groundwater, surface water, and LMS liquid samples collected in 2022. 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 an approved vertical expansion above existing grades in the southwest portion of the landfill. As of 2022, 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 2022

Significant monitoring activities performed at RL in 2022 include the following:

- Submitted the 2021 AEMR to DEQ (SCS, 2022a).
- Submitted an Updated Environmental Monitoring Plan to DEQ, (SCS, 2022b).

- Notification to DEQ of four inorganic parameters (chloride, dissolved manganese, dissolved sodium and TDS) detected in MW-12A at concentrations above their respective site-specific limits (SSLs) during the Fall 2022 monitoring event (WM, 2023a). Subsequent resampling event did not verify the Fall 2022 results and these data were also reported to DEQ (WM, 2023b).

- RL performed routine quarterly monitoring and inspections of the mechanically-stabilized earthen (MSE) berm in 2022. 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). The frequency of monitoring was increased during onsite construction in May through September. The results of the monitoring performed throughout 2022 do not indicate stability concerns (Geosyntec, 2023).

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 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 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 on the attached CD): Results of SCS's field and laboratory QA/QC reviews.

- Appendix E (included on the attached CD): Time-concentration graphs of 2022 and historical groundwater, surface water, and LMS analytical data.

- Appendix F: Geochemical diagrams for groundwater and LMS samples.

- Appendix G (included on the attached CD): 2022 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 2022 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 on April 18 through 22, 2022 and June 1, 2022 (hereafter referred to as Spring). SCS performed fall semiannual sampling activities on November 14 through 17, 2022, and January 5 and 13, 2023 (i.e., Fall). The 2022 semiannual and annual groundwater monitoring schedule, was performed consistent with the EMP, and 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 2022. During the Spring event, the pump was not functioning in MW-21B. The pump was pulled, repaired, reinstalled and the well sampled on June 1, 2022. There was insufficient water in MW-14A and MW-15A during the Fall 2022 event and these locations were sampled in January 2023.

- Detection monitoring: Detection well MW-5A was sampled semiannually in Spring and Fall 2022 and detection well MW-5B was sampled annually in Spring 2022. 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 2022, and MW-20B was monitored annually in Spring 2022 (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 2022.

- Detection monitoring downgradient of leachate pond: MW-22A was monitored annually in Spring 2022.

- Groundwater elevation monitoring: Groundwater elevations were monitored semiannually in Spring and Fall 2022 in the monitoring wells and piezometers 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, screened 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 2022 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 2022 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 2022.
- Leachate from Modules 1/5, 6/7, 8, and 9 LCRS sumps annually in Spring 2022.
- Liquid from Modules 4/5, 6/7, 8, and 9 LDS sumps annually in Spring 2022.

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 2022 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 Gas Collection and Control System (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 2022 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 method was done at P-06A during the Spring monitoring event and MW-16A during the Fall 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 2022 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 through a sample port mounted on the truck loadout arm, where sample bottles were filled directly.

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 2022 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™ 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 were recorded. The facility structures were monitored for LFG using the GEM in potentially confined areas where air movement may be restricted.

At each monitoring location, the probe or sample tube is purged for at least 90 seconds. Once the readings have stabilized for at least one minute, then the methane concentration is recorded. Any readings above regulatory limits are immediately reported to the Site Manager. 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 2022. Analytical laboratory reports (with COCs and cation-anion balance values) are provided in Appendix C.

5.1 ANALYTICAL PARAMETERS

Consistent with the site's EMP (SCS, 2014b), 2022 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 as stated in the site EMP (SCS, 2014).

5.2 LABORATORY QA/QC PROCEDURES AND RESULTS

Results of SCS's QA/QC reviews of the laboratory reports (Appendix C) indicated that 2022 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.

Cation-anion balance results for groundwater and LMS samples collected in 2022 are summarized in Table 5-4. Cation-anion balances in groundwater samples collected in 2022 were below the QC guidance level of variability of plus or minus 10 percent, with the exception of MW-15A during the Fall 2022 event, which had a cation/anion balance of 22%. The charge balance difference is likely due to additional dissolved cations not included in the analysis. Consistent with the SWDP/SWDSCP 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 2022 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 2022, 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 2022 shallow WBZ groundwater potentiometric elevation and gradient data were generally consistent with historical data and 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.

- Horizontal hydraulic gradients in the shallow WBZ in 2022 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 2022 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-22B, and MW-23B during the Spring 2022.

- Horizontal hydraulic gradients in the deep WBZ in 2022 ranged from 0.008 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. 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 2022 monitoring well pair groundwater elevation data 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 pair MW-9A/BR, the 2022 groundwater elevation data showed upward vertical hydraulic gradients during both monitoring events, the same as previous years. Slight upward vertical gradients also occurred during the Spring event in well pairs MW-3A/B and MW-20A/B and during the Fall event at MW-14A/B and MW-16A/B (see Table 6-1).

6.2 GROUNDWATER ANALYTICAL RESULTS

As summarized in Section 6.2.2, SCS did not identify a confirmed significant change in groundwater quality in 2022 at RL's point-of-compliance boundary, as defined in the site's SWDP, the new SWDCP and EMP.

6.2.1 Evaluation Methods

Analytical results for the 2022 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. The results were evaluated based on the following criteria, consistent with RL's EMP (SCS, 2014). New limits were used for the Fall 2022 event, as specified in Attachment 1 for the new SWDSCP issued August 31,2022:

- 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), dissolved magnesium (Mg), dissolved potassium (K), and dissolved sodium (Na) are specified in the SWDSCP and summarized in Table 6-2[3].

Additionally, a statistical trend analysis was performed on 2022 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-19A, MW-20A, MW-20B, MW-22A, P-05A, P-06A, and P-07A. Statistically significant concentration trends in groundwater collected from these

[3] Spring 2022 data was evaluated with the SSLs as listed in the EMP (SCS, 2014) but the fall 2022 data was evaluated using the updated SSLs as listed in Attachment 1 of the 2022 SWDSCP.

site compliance and detection wells using the 2022 and historical data set are summarized in Table 6-3, and trend graphs are provided in Appendix E.

6.2.2 Compliance Well Groundwater Analytical Results

SCS did not identify a significant change in groundwater quality in 2022 at RL's point-of-compliance boundary, as defined in the site's SWDP, SWDCP 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.

- No confirmed detections of three or more inorganic parameters at concentrations above their respective SSLs were observed in site compliance wells during a single semiannual monitoring event (see Table 6-2).

The groundwater sample from MW-12A had chloride, Na, Mg, and TDS concentrations that were above their respective SSLs during the fall 2022 monitoring event. DEQ was informed of this in an email in January 2023 (WM, 2023a). Verification sampling at MW-12A was conducted in January 2023 and results showed that all concentrations, except Na, were below their respective SSLs, which was reported to DEQ in February, 2023 email (WM, 2023b). The original sample and verification sample results are shown on Table 6-2. Since there were not three or more confirmed results above SSLs 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 2022 data observations include:

- Statistical trend analysis results of 2022 and historical compliance groundwater analytical data were consistent with previous results except for one decreasing trend (MW-15A, sulfate) and three cases no significant trend was identified (MW-16A, MW-21A and MW-20B, 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 2022 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, MW-15A, MW-15B, MW-16B and MW-21B.
- 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 for informational purposes.

Low concentrations of two VOCs (chlorobenzene and 1,4-dichlorobenzene) were detected in samples collected in spring 2022 from MW-5A at concentrations that were consistent with recent results (see Table 6-4). VOCs were not detected in groundwater samples from MW-5A during the fall 2022 event and it is likely that the sample was inadvertently collected from MW-5B instead of MW-5A. This will be verified during the next semi-annual monitoring event, scheduled for spring 2023. 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 2022, 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 2022 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. Results since 2013 that support this conclusion include stabilized or

decreasing concentrations for (1) Ca, Cl, Mg, 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.[4]

Consistent with the EMP, SCS evaluated analytical results for groundwater samples from detection monitoring wells by reviewing 2022 data for order-of-magnitude increases over historical results using time concentration graphs.

Notable results based on evaluation of the analytical data for groundwater samples collected in 2022 (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.[5]
- 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 change to no trend for Na in MW-20B groundwater.
- Consistent with historical results previously reported to DEQ, Fe, Mn, and TDS were detected at concentrations above their NGQGLs of 0.3, 0.05, and 500 mg/L, respectively, in MW-20A groundwater samples collected in 2022. It should be noted that Cl concentrations in MW-20A groundwater continued to decrease and were below the NGQGL of 250 mg/L in 2022.
- 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 2022, consistent with historical results previously reported to DEQ.

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 2022 (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 2022 are generally consistent with historical results. Piper (trilinear) and Stiff diagrams showing the relative concentrations of common cations

[4] 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 2022) continues to identify these parameters as statistically significant increasing trends.

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

and anions in groundwater samples collected in 2022 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 2022 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 2022 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 2022.

Historical (since 2011) and 2022 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 2022. 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 2022 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 2022:

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.

October
- Installed replacement flow meters at several leachate and condensate sumps.

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

The leachate head on a cell liner is continuously monitored in all sumps. The LMS is effective at maintaining less than 12 inches head on the liner. Leachate in a module drains to a primary leachate sump, which is equipped with a dedicated submersible pump that discharges into a header that discharges into the leachate pond. This pump is triggered to turn on and empty the sump once a threshold depth is reached. A single event where this system broke down was reported to DEQ:

- February: Module 8 was above the one-foot head level on liner February 22, 2022 for a short time period. This event occurred as a result of shutting down the pump to replace the flow meter.

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 2022 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 9.89 million gallons, which is less than 2021 (10.48 million gallons) and 2020 (11.34 million gallons), and a notable decrease relative to the total volumes in 2018 (16.36 million gallons) and 2017 (23.48 million gallons), and attributed to final capping construction projects that have been completed over the last few years.

- Monthly leachate pumping volumes from RL's combined LCRSs ranged from 1,645,096 gallons in January to 307,914 gallons in September.

- Total volume of liquid pumped from the LDS sumps was 242,910 gallons. Total volume from the leachate pond LDS sump was 462 gallons. The 2022 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 2022 from LDSs included Modules 4/5 (11.9 to 46.9), Modules 6/7 (0 to 3.9), Module 8 (0.2 to 10.4), and Module 9 (0 to 130), with some variability across the site. While Modules 4/5 and 6/7 show decreasing liquid generation compared to previous years and Module 9 appears to be variable.

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 2022 was managed by collection, storage, and truck-haul to offsite, permitted wastewater treatment facilities. The truck haul program removed approximately 22.25 million gallons of leachate from the site in 2022, which included liquids collected from RL's GCCS.

7.3 LCRS LEACHATE AND LANDFILL LDS LIQUID ANALYTICAL RESULTS

Time-concentrations graphs presenting the 2022 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 and higher TDS relative to corresponding LDS samples (Appendix F Figures F24-28).

- 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).

- 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, ethylbenzene, 4-isopropyltoluene, 4-methyl-2-pentanone naphthalene, toluene, 1,2,4-trimethylbenzene, and total xylenes, (see Table 7-2).

- No VOCs were detected in liquid samples collected from LDS Sumps 4/5S, 6/7S, 8S and 9S (see Table 7-2).

Based on the 2022 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).

- No VOCs were detected in liquid samples collected from any of the four LDS Sumps in 2022.

- 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 2022 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 2022. 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).

Laboratory reports for liquid samples collected from the leachate pond in 2022 are provided in Appendix C. Time-concentration graphs presenting the 2022 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 2022 (462 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 2022 leachate pond and LDS sump analytical data include the following:

- VOCs were not detected in the leachate pond or LDS samples during the spring or fall 2022 events, with the exception of chloroform in the Pond and LDS samples in the fall (see Table 7-2).

- The ionic chemistries of leachate pond samples collected in 2022 were similar to previous results (see Piper diagram provided in Appendix F). Samples are characterized by significantly higher percentage of sodium and HCO_3 relative to other ionic species.

8.0 RECOMMENDED MODIFICATIONS

Groundwater monitoring program modifications proposed for 2022 were included in the updated EMP submitted to DEQ in 2022. Once approval has been given, these changes will be implemented at RL. The proposed changes will optimize the monitoring networks based on the current site conditions.

9.0 REFERENCES

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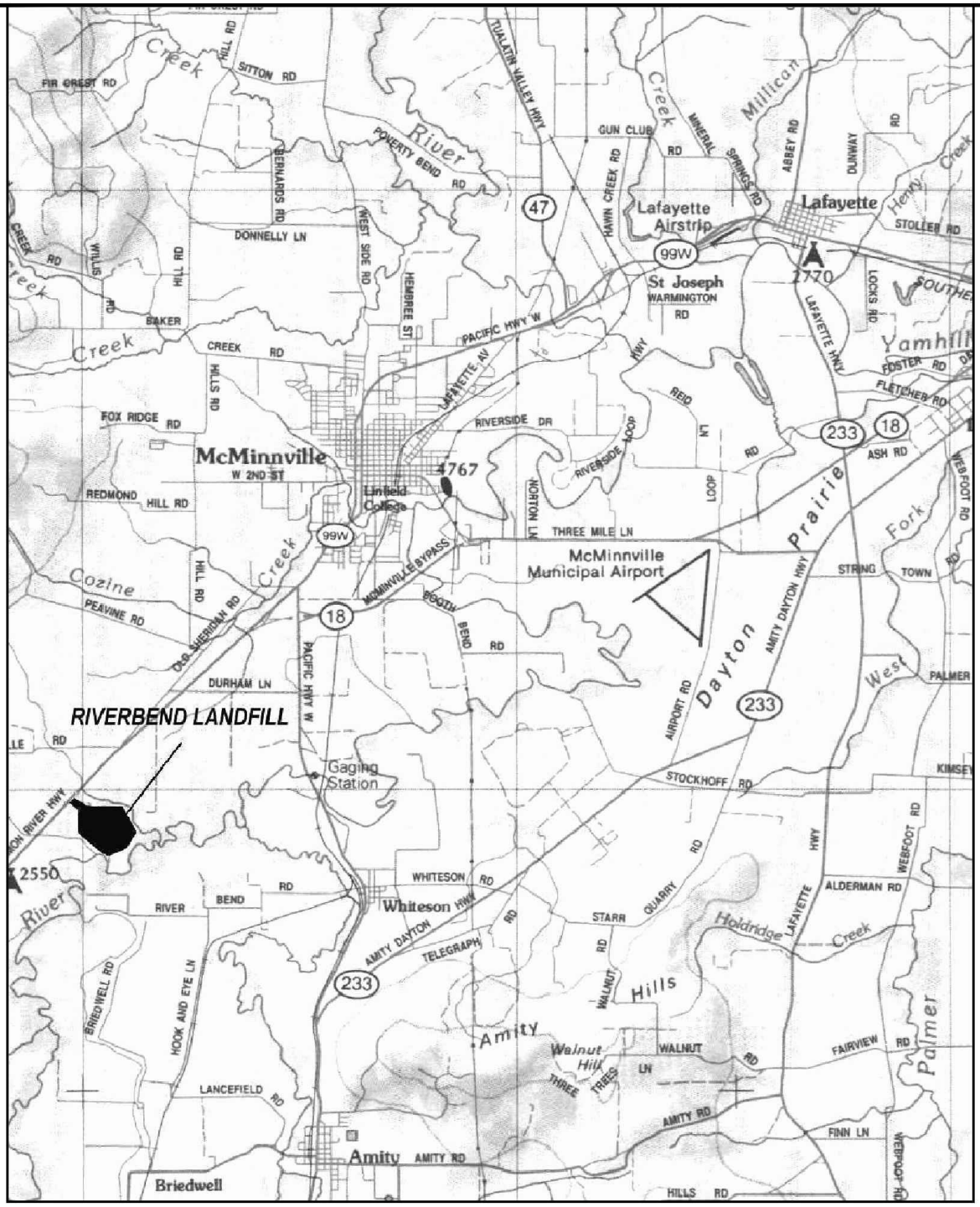
FIGURES



Basemap from Oregon Atlas and Gazetteer (DeLorme)

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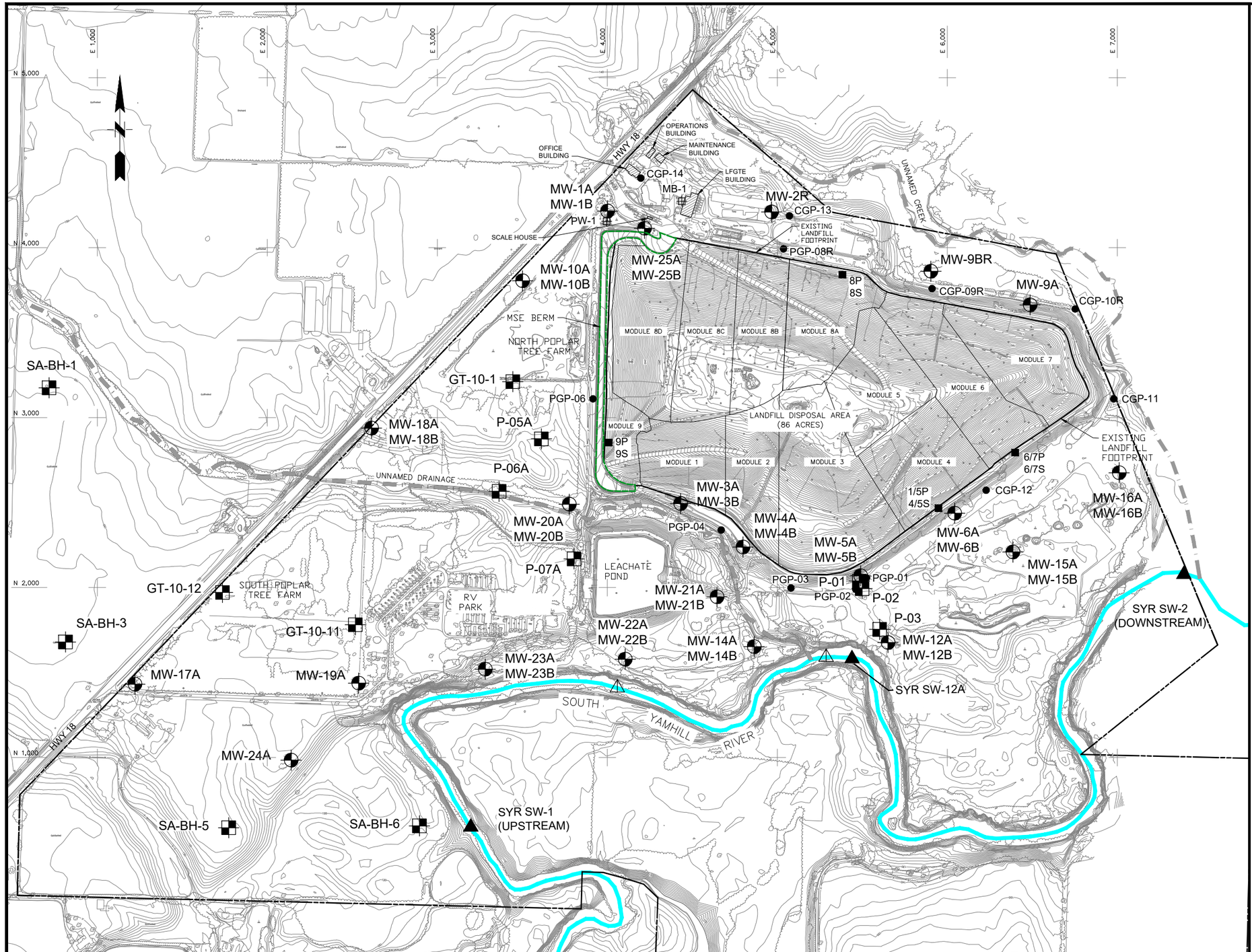
PROJECT NO. 04208022.23	DES BY B.L.	SITE LOCATION MAP RIVERBEND LANDFILL McMINNVILLE, OREGON	DATE MARCH 2023
SCALE AS SHOWN	CHK BY B.L.		FIGURE 1-1
CAD FILE FIGURE 1-1	APP BY G.H.		



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 29, 2023. 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
SCALE IN FEET

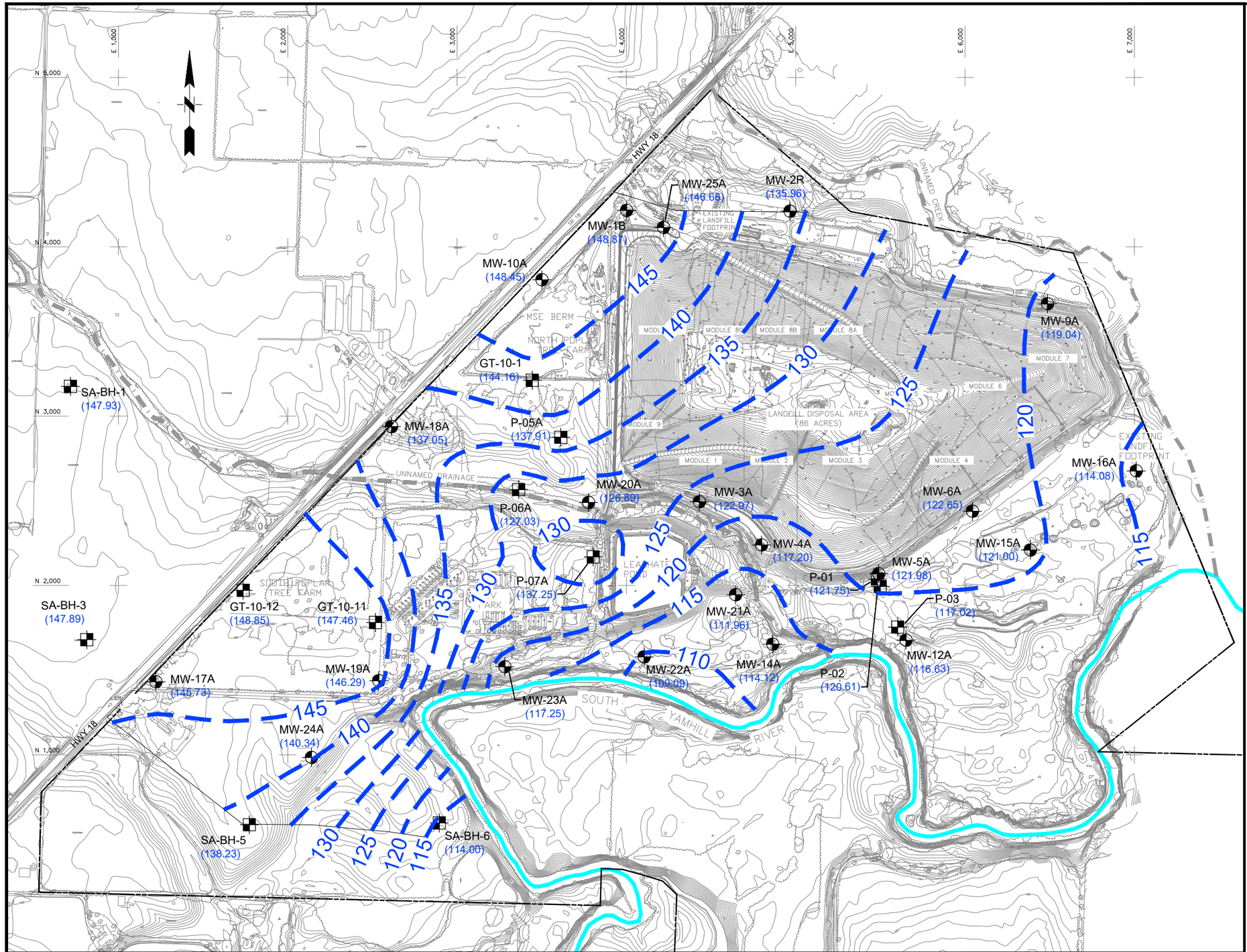
PROJECT NO. 04208022.23	DES BY B.L.
SCALE AS SHOWN	CHK BY B.L.
CAD FILE FIGURE 1-2	APP BY G.H.

SITE PLAN AND MONITORING LOCATIONS

RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2023

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
- (137.91) — Groundwater Elevation in Feet Above Mean Sea Level on April 18, 2022

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 29, 2023. 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

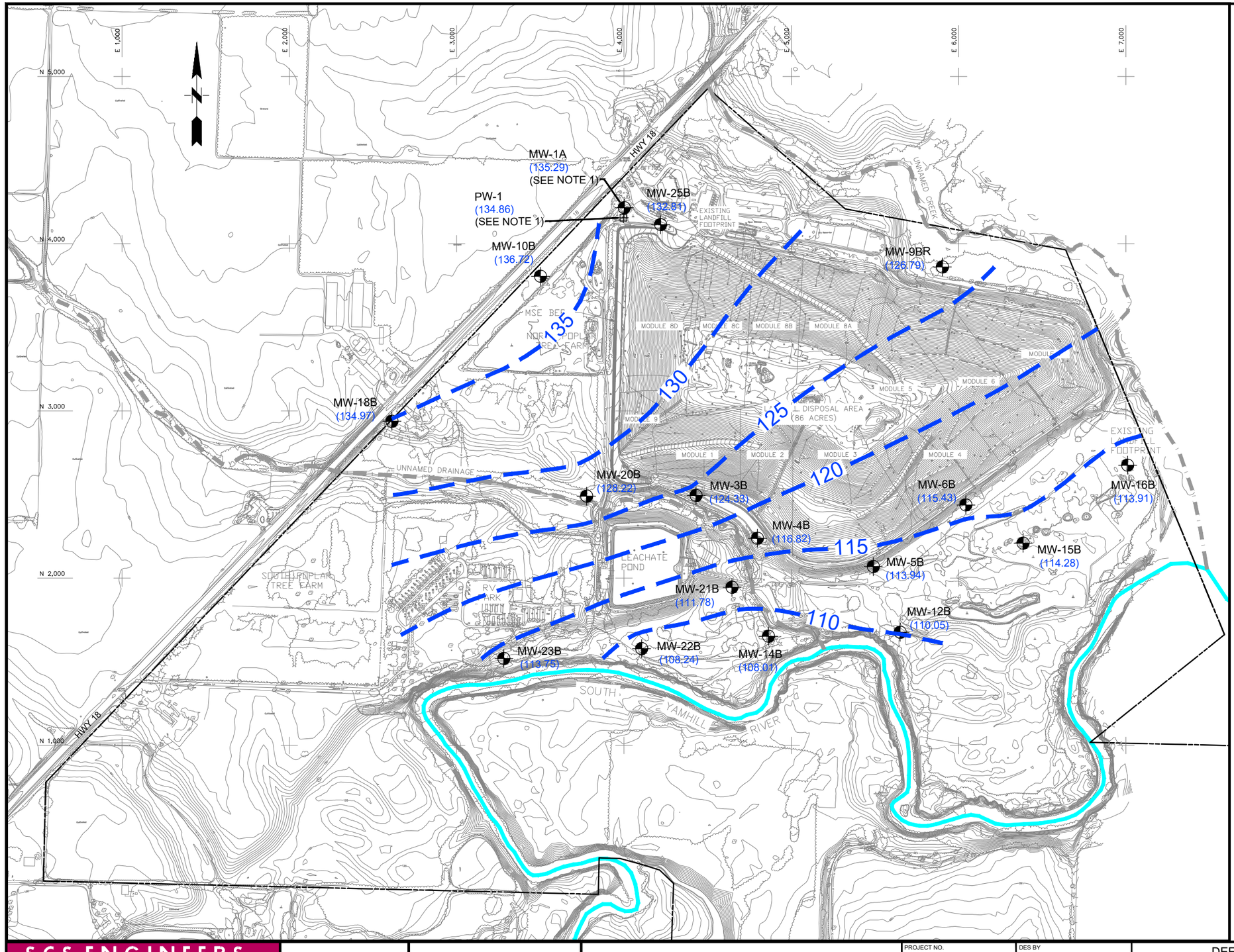
0 600 1200
SCALE IN FEET

PROJECT NO. 04208022.23	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 18, 2022)
RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2023

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
- (134.86) — Groundwater Elevation in Feet Above Mean Sea Level on April 18, 2022

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 29, 2023. 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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WASTE MANAGEMENT

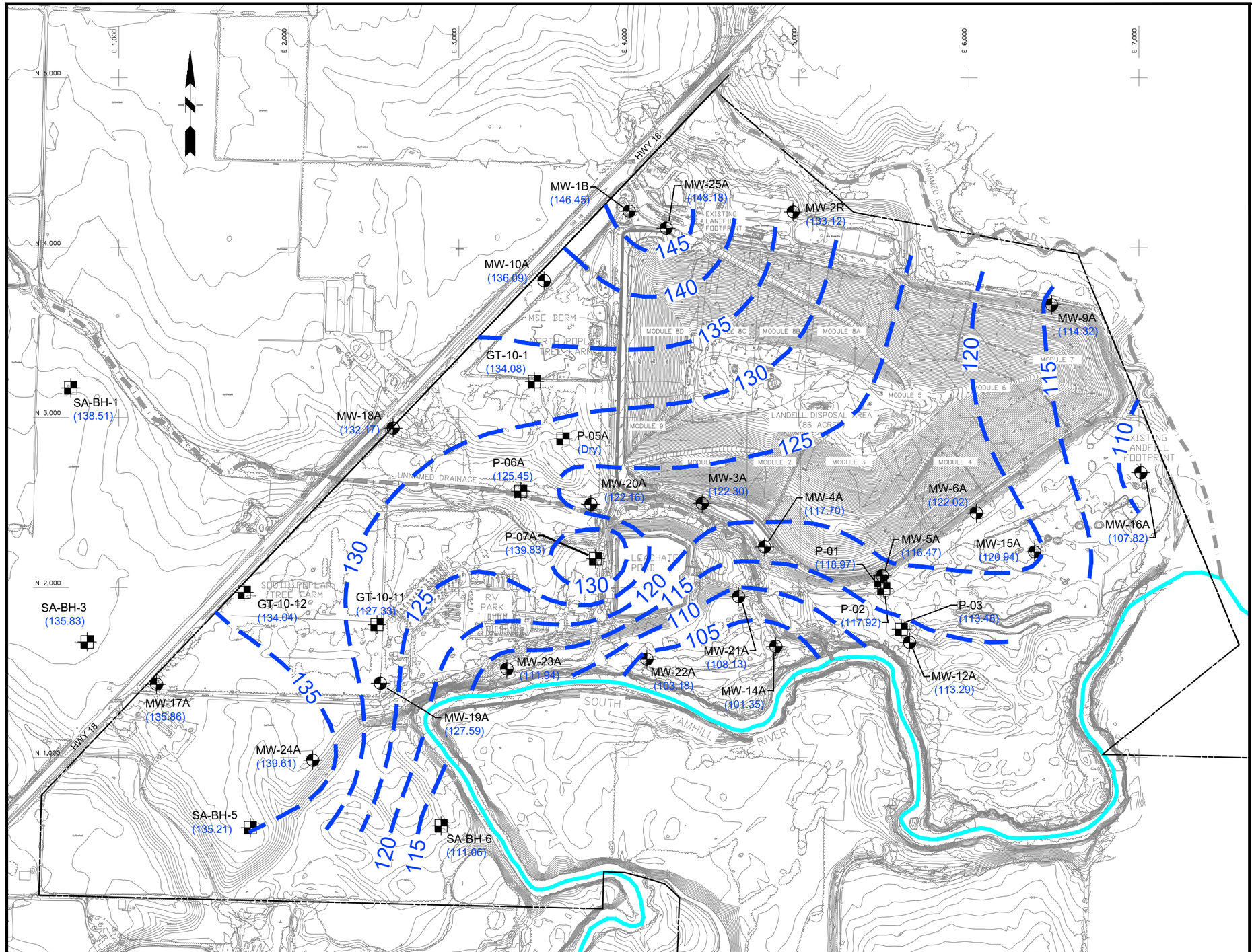
0 600 1200
SCALE IN FEET

PROJECT NO. 04208022.23	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 18, 2022)
RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2023

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
- (125.45) — Groundwater Elevation in Feet Above Mean Sea Level on November 14, 2022
- * — P-05A is Dry. Bottom of Screen at 119.30 (AMSL)

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 29, 2023. 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

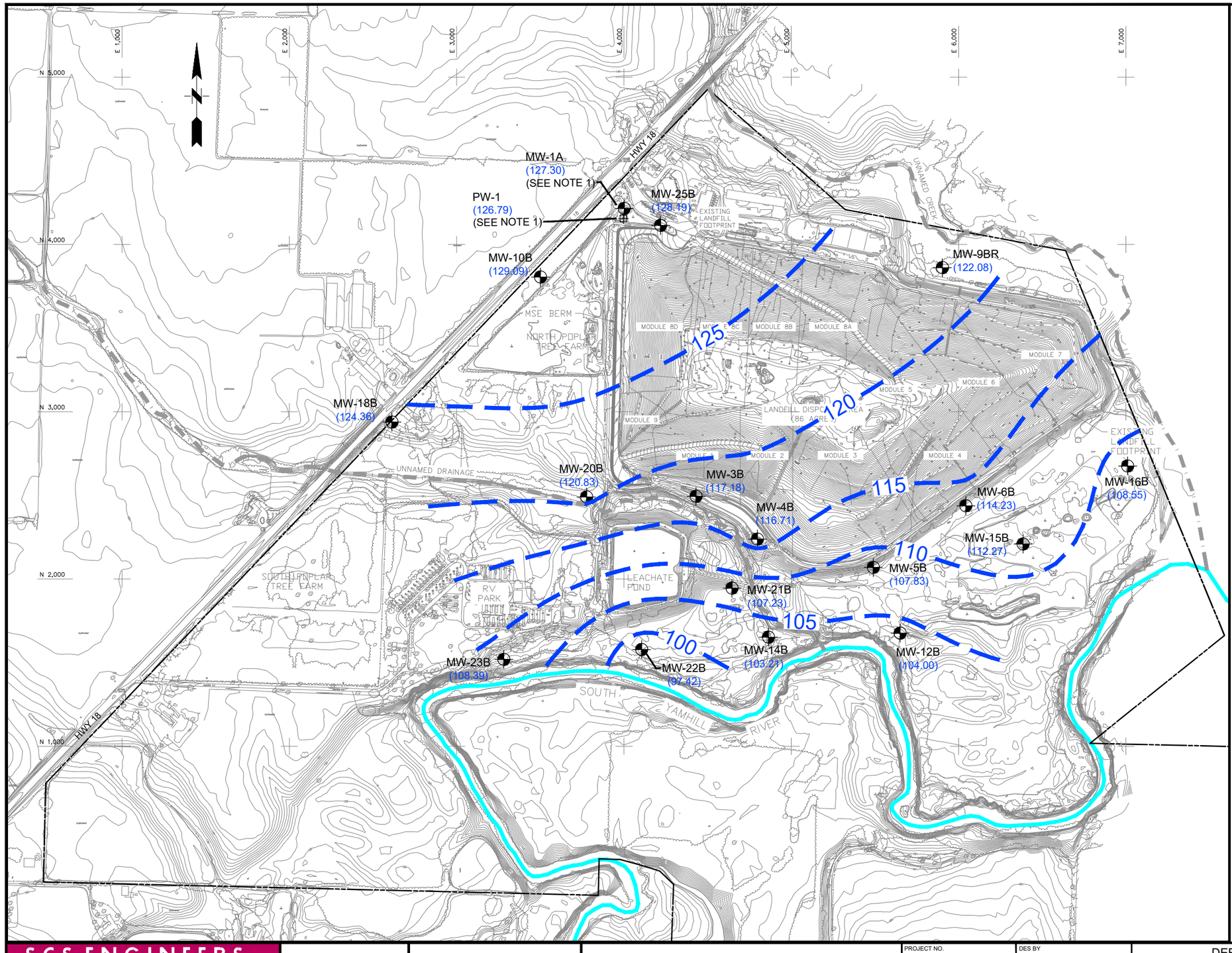
0 600 1200
SCALE IN FEET

PROJECT NO. 04208022.23	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 14, 2022)
RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2023

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
- (126.79) — Groundwater Elevation in Feet Above Mean Sea Level on November 14, 2022

SOURCE:

1) Existing contours based on aerial topography provided by Miller Creek Associates, date of photograph January 29, 2023. 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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WASTE MANAGEMENT

0 600 1200
SCALE IN FEET

PROJECT NO. 04208022.23	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 14, 2022)
RIVERBEND LANDFILL
McMINNVILLE, OREGON

DATE MARCH 2023

FIGURE 6-4

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

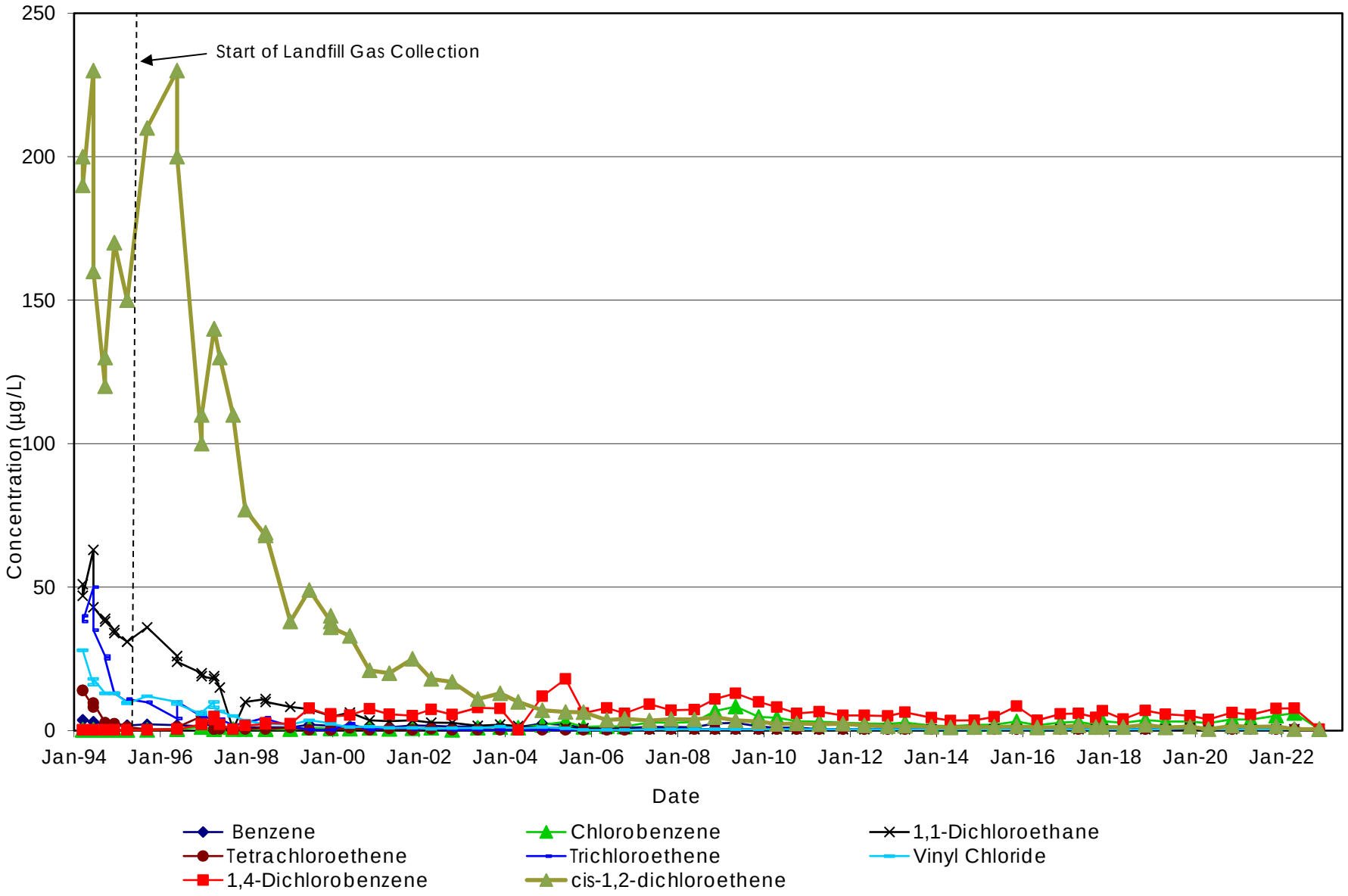
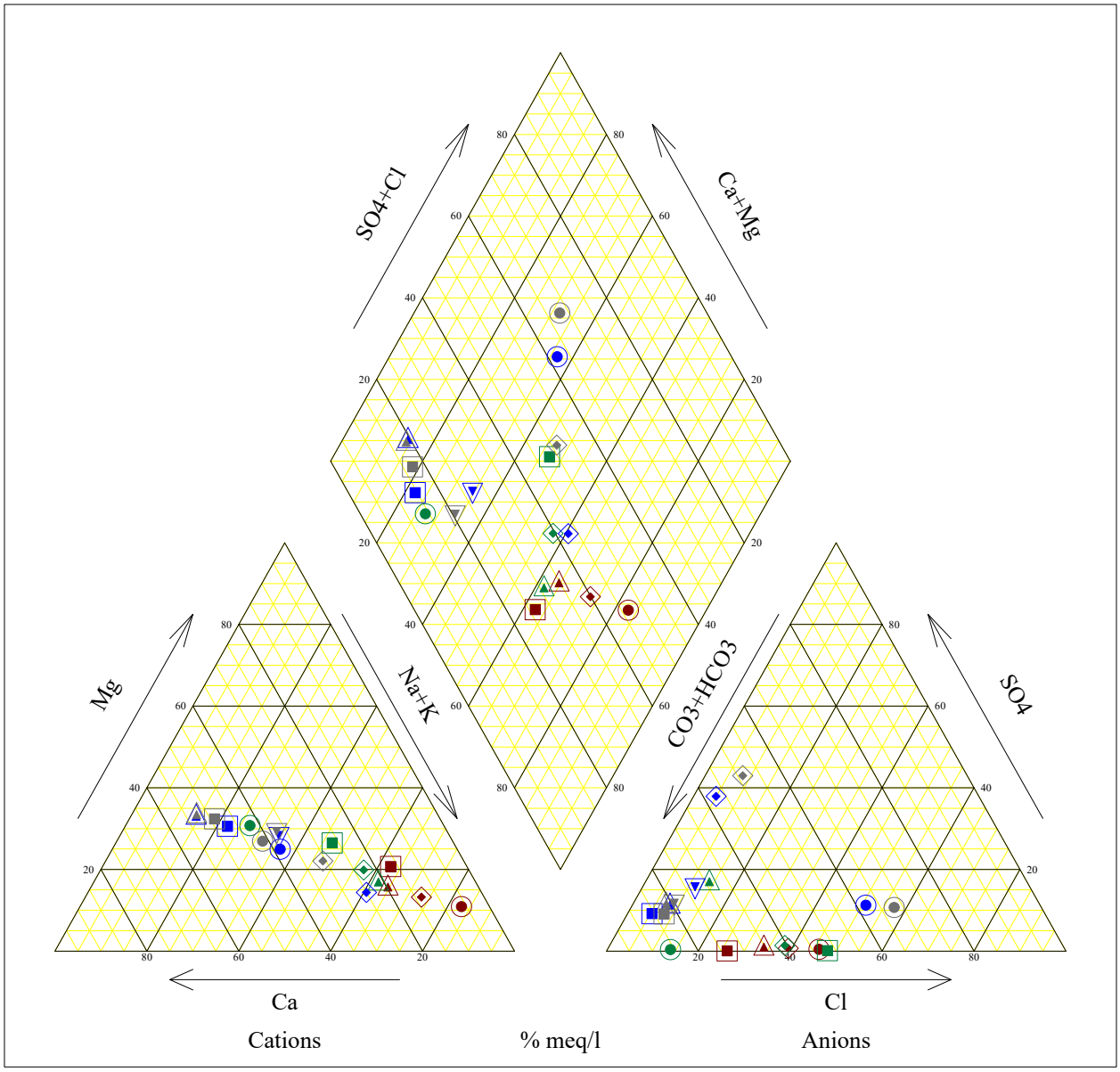


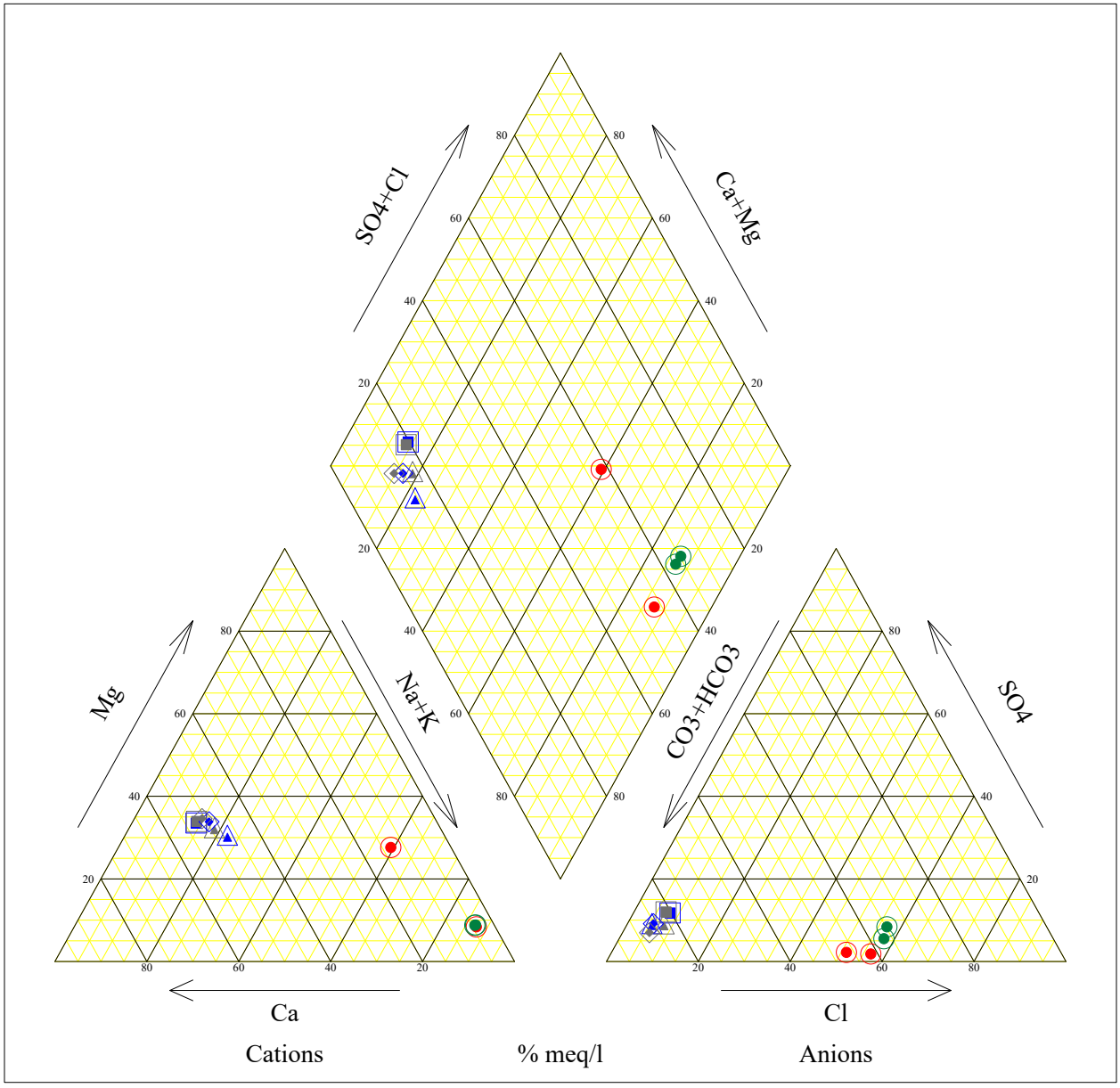
Figure 7-1 2022 Shallow Groundwater and Sumps Trilinear Diagram



1/5 P	4/20/2022	MW-12A	4/21/2022	MW-21A	4/21/2022
4/5 S	4/20/2022	MW-12A	11/15/2022	MW-21A	11/15/2022
6/7 P	4/20/2022	MW-14A	4/22/2022		
6/7 S	4/22/2022	MW-14A	1/05/2023		
8P	4/22/2022	MW-15A	4/19/2022		
8S	4/22/2022	MW-15A	1/05/2023		
9P	4/22/2022	MW-16A	4/19/2022		
9S	4/22/2022	MW-16A	11/16/2022		

Prepared by: SCS Engineers

Figure 7-2 2022 Leachate Pond, LDS Liquid, and nearby Shallow Groundwater Samples



LEACHATE POND	4/20/2022	MW-22A	4/24/2019
LEACHATE POND	11/17/2022	MW-22A	4/21/2022
LPOND LDS	4/20/2022		
LPOND LDS	11/17/2022		
MW-14A	4/22/2022		
MW-14A	1/05/2023		
MW-21A	4/21/2022		
MW-21A	11/15/2022		

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)	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	2	75.0 to 85.0	73.0 to 86.0	2.0 to 73.0

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)	Well Diameter (inches)	Well Screen Interval (ft-bgs)	Sand Pack Interval (ft-bgs)	Well Seal Interval (ft-bgs)
Piezometers											
MW-3A	Silt-Clay	23-Jun-93	4430.9	2493.9	138.20	140.81	35.0	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	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	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	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	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	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	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	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	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	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	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	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	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	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	2	15.0 to 25.0	13.0 to 30.0	2.0 to 13.0/ 30.0 to 65.0
SA-BH-1	Silt-Clay	24-Aug-10	716.6	3175.5	152.80	155.21	23.0	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	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	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	2	14.0 to 24.0	12.0 to 25.0	2.0 to 12.0

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.

Table 3-2
2022 Groundwater, Surface Water, and
Leachate Management Systems
Routine Semiannual and Annual Monitoring Schedule
Riverbend Landfill

Monitoring Location	Monitoring Function	Spring 2022 Semiannual [a]	Fall 2022 Semiannual [b]
Groundwater			
MW-12A	Compliance	X	X
MW-12B	Compliance	x	X
MW-14A	Compliance	X	O + Dup
MW-14B	Compliance	X	X
MW-15A	Compliance	x	O
MW-15B	Compliance	X	X + Dup 1
MW-16A	Compliance	X + Dup 1	X + Dup 2
MW-16B	Compliance	X	X
MW-21A	Compliance	X	X
MW-21B	Compliance	X +Dup5	X
MW-5A	Detection	X + Dup 2	X
MW-5B	Detection	X	---
MW-19A	Detection	X + Dup 4	X + Dup 3
MW-20A	Detection	X	X
MW-20B	Detection	X	---
MW-22A	Detection	X + Dup 3	---
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 April 18 through April 22, 2022 and June 1, 2022 (MW-21B - sampled later due to a broken pump).

[b] Sampling performed November 14 through November 17, 2022.

O = Sampled January 27, 2023, first opportunity to access wells and find sufficient water for sampling.

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	X	X	---	---
Piezometers				
P-05A	---	X	---	---
P-06A	---	X	---	---
P-07A	---	X	---	---

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

Table 5-2
2022 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
2022 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
2022 Laboratory Analytical Data
Riverbend Landfill

Monitoring Location	Spring 2022 Event (%)	Fall 2022 Event (%)
Groundwater		
MW-12A	-2.6	0.92
MW-12B	2.4	1.1
MW-14A	-3.1	2.0/-1.4
MW-14B	-2.1	-0.64
MW-15A	-3.9	22
MW-15B	-0.47	1.1/0.59
MW-16A	6.3/9.6	-4.2/-4.1
MW-16B	-1.6	-0.95
MW-19A	-3.9/-1.9	-1.5/-1.5
MW-20A	-1.1	-0.7
MW-20B	-1.3	---
MW-21A	-1.8	-0.58
MW-21B	1.9/8.8	-0.53
MW-22A	-1.0/-2.0	---
Surface Water Samples		
SYR MW-12A	6.6	---
SYR SW-1 (Upstream)	-3.2	---
SYR SW-2 (Downstream)	1.3	---
Leachate Management System Liquid Samples		
1/5 P	9.8	---
4/5 S	1.6	---
6/7 P	-2.2	---
6/7 S	1.9	---
8 P	13	---
8 S	-1.3	---
9 P	4.1	---
9 S	-1.8	---
Leachate Pond	8.5	-1.9
Leachate Pond Secondary	2.6	-0.5

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 2022 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)	18-Apr-22	148.87	13.58
MW-1A (Deep)	18-Apr-22	135.29	(Downward)
MW-1B (Shallow)	14-Nov-22	146.45	19.15
MW-1A (Deep)	14-Nov-22	127.30	(Downward)
MW-3A (Shallow)	18-Apr-22	122.97	-1.36
MW-3B (Deep)	18-Apr-22	124.33	(Upward)
MW-3A (Shallow)	14-Nov-22	122.30	5.12
MW-3B (Deep)	14-Nov-22	117.18	(Downward)
MW-4A (Shallow)	18-Apr-22	117.20	0.38
MW-4B (Deep)	18-Apr-22	116.82	(Downward)
MW-4A (Shallow)	14-Nov-22	117.70	0.99
MW-4B (Deep)	14-Nov-22	116.71	(Downward)
MW-5A (Shallow)	18-Apr-22	121.98	8.04
MW-5B (Deep)	18-Apr-22	113.94	(Downward)
MW-5A (Shallow) [a]	14-Nov-22	116.47	8.64
MW-5B (Deep) [a]	14-Nov-22	107.83	(Downward)
MW-6A (Shallow)	18-Apr-22	122.65	7.22
MW-6B (Deep)	18-Apr-22	115.43	(Downward)
MW-6A (Shallow)	14-Nov-22	122.02	7.79
MW-6B (Deep)	14-Nov-22	114.23	(Downward)
MW-9A (Shallow)	18-Apr-22	119.04	-7.75
MW-9BR (Deep)	18-Apr-22	126.79	(Upward)
MW-9A (Shallow)	14-Nov-22	114.32	-7.76
MW-9BR (Deep)	14-Nov-22	122.08	(Upward)
MW-10A (Shallow)	18-Apr-22	148.45	11.73
MW-10B (Deep)	18-Apr-22	136.72	(Downward)
MW-10A (Shallow)	14-Nov-22	136.09	7.00
MW-10B (Deep)	14-Nov-22	129.09	(Downward)
MW-12A (Shallow)	18-Apr-22	116.63	6.58
MW-12B (Deep)	18-Apr-22	110.05	(Downward)
MW-12A (Shallow)	14-Nov-22	113.29	9.29
MW-12B (Deep)	14-Nov-22	104.00	(Downward)
MW-14A (Shallow)	18-Apr-22	114.12	6.11
MW-14B (Deep)	18-Apr-22	108.01	(Downward)
MW-14A (Shallow)	14-Nov-22	101.35	-1.86
MW-14B (Deep)	14-Nov-22	103.21	Upward
MW-15A (Shallow)	18-Apr-22	121.00	6.72
MW-15B (Deep)	18-Apr-22	114.28	(Downward)
MW-15A (Shallow)	14-Nov-22	120.94	8.67
MW-15B (Deep)	14-Nov-22	112.27	Downward
MW-16A (Shallow)	18-Apr-22	114.08	0.17
MW-16B (Deep)	18-Apr-22	113.91	(Downward)
MW-16A (Shallow)	14-Nov-22	107.82	-0.73
MW-16B (Deep)	14-Nov-22	108.55	(Upward)

Table 6-1
Comparison of 2022 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)	18-Apr-22	137.05	2.08
MW-18B (Deep)	18-Apr-22	134.97	(Downward)
MW-18A (Shallow)	14-Nov-22	132.17	7.81
MW-18B (Deep)	14-Nov-22	124.36	(Downward)
MW-20A (Shallow)	18-Apr-22	126.89	-1.33
MW-20B (Deep)	18-Apr-22	128.22	(Upward)
MW-20A (Shallow)	14-Nov-22	122.16	1.33
MW-20B (Deep)	14-Nov-22	120.83	(Downward)
MW-21A (Shallow)	18-Apr-22	111.96	0.18
MW-21B (Deep)	18-Apr-22	111.78	(Downward)
MW-21A (Shallow)	14-Nov-22	108.13	0.90
MW-21B (Deep)	14-Nov-22	107.23	(Downward)
MW-22A (Shallow)	18-Apr-22	109.09	0.85
MW-22B (Deep)	18-Apr-22	108.24	(Downward)
MW-22A (Shallow)	14-Nov-22	103.18	5.76
MW-22B (Deep)	14-Nov-22	97.42	(Downward)
MW-23A (Shallow)	18-Apr-22	117.25	3.50
MW-23B (Deep)	18-Apr-22	113.75	(Downward)
MW-23A (Shallow)	14-Nov-22	111.94	3.55
MW-23B (Deep)	14-Nov-22	108.39	(Downward)
MW-25A (Shallow)	18-Apr-22	146.66	13.85
MW-25B (Deep)	18-Apr-22	132.81	(Downward)
MW-25A (Shallow)	14-Nov-22	148.18	19.99
MW-25B (Deep)	14-Nov-22	128.19	(Downward)

NOTE:
feet-msl = feet mean sea level.
[a] Based on review of historical data, it appears that MW-5A and MW-5B water levels were switched on the field sheets during the fall 2022 monitoring event. The water levels were corrected prior to calculating elevations.

Table 6-2
2022 Compliance Well Groundwater Analytical Results
and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

Monitoring Well and Date	PSCL	AL	SSLs							
	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Potassium (mg/L)	Dissolved Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)	TOC (mg/L)
*MW-12A Concentration Limits (2014)**	*0.002*	*(see Note 1)*	*81.3*	*63.4*	*11.5*	*1.20*	*21.8*	---	*240*	*3.2*
MW-12A April 2022 Results	0.001 U	No Detections	77	60	11	0.79	**30**	---	240	1.8
*MW-12A Concentration Limits (2022)**	*0.002*	*(see Note 1)*	*86.3*	*64.3*	*12.4*	*0.88*	*27.2*	---	*248*	*2.8*
MW-12A November 2022 Results	0.001 U	No Detections	76	**79**	**15**	0.74	**33**	---	**270**	2.7
MW-12A January 2023 Results (Re)	NS	NS	NS	50	11	NS	**29**	NS	220	NS
MW-12A January 2023 Results (Re-DUP)	NS	NS	NS	52	10	NS	**29**	NS	220	NS
MW-12B Concentration Limits (2014)	*0.002*	*(see Note 1)*	*291*	---	*38.8*	*1.27*	*67.8*	*6.8*	*1,020*	*1.9*
MW-12B April 2022 Results	0.001 U	No Detections	190	---	19	0.53	23	1.0 U	310	1.5
MW-12B Concentration Limits (2022)	*0.002*	*(see Note 1)*	*295*	---	*37.6*	*0.92*	*67.7*	*6.8*	*970*	*1.9*
MW-12B November 2022 Results	0.001 U	No Detections	220	---	22	0.52	32	1.0 U	400	1.7
MW-14A Concentration Limits (2014)	*0.002*	*(see Note 1)*	*148*	*33.4*	*16.5*	*0.85*	*15.6*	---	*282*	*3.1*
MW-14A April 2022 Results	0.001 U	No Detections	130	7.5	12	0.50 U	9.3	---	170	1.1
MW-14A Concentration Limits (2022)	*0.002*	*(see Note 1)*	*155*	*31.4*	*17.4*	*0.50*	*15.3*	---	*269*	*2.3*
MW-14A January 2023 Results [c]	0.001 U	No Detections	120	6.0	13	0.50 U	9.9	---	180	1.1
MW-14A January 2023 Results (DUP) [c]	0.001 U	No Detections	130	6.0	13	0.50 U	9.8	---	180	1.1
MW-14B Concentration Limits (2014)	*0.002*	*(see Note 1)*	*230*	---	*16.1*	*0.85*	*43.0*	*16.8*	*329*	*3.2*
MW-14B April 2022 Results	0.001 U	No Detections	220	---	14	0.50 U	35	3.7	290	1.4
MW-14B Concentration Limits (2022)	*0.002*	*(see Note 1)*	*230*	---	*16.9*	*0.85*	*45.0*	*12.2*	*340*	*2.5*
MW-14B November 2022 Results	0.001 U	No Detections	230	---	15	0.50 U	39	4.3	280	1.5
MW-15A Concentration Limits (2014)	*0.002*	*(see Note 1)*	*135*	*19.5*	*12.7*	*1.00*	*29.50*	---	*349*	*2.2*
MW-15A April 2022 Results	0.001 U	No Detections	46	2.3	2.4	0.50 U	19	---	260	1.3
MW-15A Concentration Limits (2022)	*0.002*	*(see Note 1)*	*109*	*16.1*	*12.2*	*1.00*	*29.60*	---	*400*	*2.2*
MW-15A January 2023 Results [c]	0.001 U	No Detections	39	3.8	2.4	0.50 U	19	---	380	1.8

Table 6-2
2022 Compliance Well Groundwater Analytical Results
and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

Monitoring Well and Date	PSCL	AL	SSLs							
	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Potassium (mg/L)	Dissolved Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)	TOC (mg/L)
MW-15B Concentration Limits (2014)	*0.002*	*(see Note 1)*	*372*	---	*36.3*	*0.68*	*42.2*	*10.7*	*543*	*2.1*
MW-15B April 2022 Results	0.001 U	No Detections	280	---	25	0.50 U	31	2.4	330	1.1
MW-15B Concentration Limits (2022)	*0.002*	*(see Note 1)*	*372*	---	*36.0*	*0.68*	*42.0*	*10.9*	*538*	*2.1*
MW-15B November 2022 Results	0.001 U	No Detections	350	---	32	0.50 U	37	1.4	370	1.4
MW-15B November 2022 Results (Dup)	0.001 U	No Detections	350	---	32	0.50 U	37	1.3	390	1.2
MW-16A Concentration Limits (2014)	*0.002*	*(see Note 1)*	*460*	*14.8*	*32.0*	*0.88*	*59.6*	----	*505*	*5.2*
MW-16A April 2022 Results	0.001 U	No Detections	140	13	14	0.50 U	33	----	210	1.7
MW-16A April 2022 Results (DUP)	0.001 U	No Detections	130	13	14	0.50 U	34	----	200	1.7
MW-16A Concentration Limits (2022)	*0.002*	*(see Note 1)*	*459*	*14.6*	*44.9*	*0.88*	*58.6*	----	*503*	*4.5*
MW-16A November 2022 Results	0.001 U	No Detections	180	12	14	0.50 U	31	----	210	2.1
MW-16A November 2022 Results (Dup)	0.001 U	No Detections	170	12	13	0.50 U	30	----	210	1.9
MW-16B Concentration Limits (2014)	*0.002*	*(see Note 1)*	*388*	---	*44.2*	*0.93*	*81.6*	*8.6*	*771*	*2.8*
MW-16B April 2022 Results	0.001 U	No Detections	350	---	35	0.55	65	3.7	580	1.5
MW-16B Concentration Limits (2022)	*0.002*	*(see Note 1)*	*396*		*43.7*	*0.93*	*81.1*	*7.6*	*770*	*2.8*
MW-16B November 2022 Results	0.001 U	No Detections	360	---	35	0.53	63	4.0	530	1.7
MW-21A Concentration Limits (2014)	*0.002*	*(see Note 1)*	*211*	*16.0*	*19.9*	*0.91*	*60.9*	----	*446*	*4.7*
MW-21A April 2022 Results	0.001 U	No Detections	130	4.7	**22**	0.50 U	15	----	180	1.5
MW-21A Concentration Limits (2022)	*0.002*	*(see Note 1)*	*203*	*16.0*	*19.0*	*0.91*	*60.9*	----	*486*	*2.4*
MW-21A November 2022 Results	0.001 U	No Detections	150	8.4	14	0.50 U	15	----	190	1.9

Table 6-2
2022 Compliance Well Groundwater Analytical Results
and Permit Specific Groundwater Concentration Limits
Riverbend Landfill

Monitoring Well and Date	PSCL	AL	SSLs							
	Vinyl Chloride[a] (mg/L)	VOCs[b]	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Potassium (mg/L)	Dissolved Sodium (mg/L)	Sulfate (mg/L)	TDS (mg/L)	TOC (mg/L)
MW-21B Concentration Limits (2014)	*0.002*	*(see Note 1)*	*325*	----	*26.4*	*1.40*	*46.6*	*21.7*	*372*	*5.9*
MW-21B June 2022 Results	0.001 U	No Detections	220	----	18	0.81	28	1.0 U	290	2.5
MW-21B June 2022 Results (DUP)	0.001 U	No Detections	220	----	20	0.89	33	1.0 U	290	2.6
MW-21B Concentration Limits (2022)	*0.002*	*(see Note 1)*	*314*	----	*25.6*	*1.10*	*48.1*	*21.2*	*424*	*5.4*
MW-21B November 2022 Results	0.001 U	No Detections	240	----	18	0.62	32	1.0 U	250	2.7

NOTES:

*Since the new site permit and site specific limits were issued August 31. 2022, the spring 2022 data is evaluated using the older SSLs (EMP, 2014) and the fall 2022 data was evaluated using the updated 2022 SSLs.

TDS = total dissolved solids; TOC = total organic carbon; Re = resampled

mg/L = milligrams per liter; --- = not applicable; Dup = field duplicate sample; 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 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 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 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 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 and MW-15A were "dry" in November 2022 and then inaccessible during December 2022. January 2023 was the first opportunity to sample the wells when there was sufficient groundwater.

Table 6-3
Statistical Trend Analysis Results Based on 2022 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	---	---	---	Decreasing	Increasing	---
MW-15B	---	---	Decreasing	Decreasing	---	Decreasing	---	---	---	---	---	Decreasing	---
MW-16A	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	---
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	---	---	---	---	---	---	---
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 2022 compared to 2021 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	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
MW-5A	20-Apr-22	1.0 U	**6.1**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.8**	1.0 U	2.0 U	1.0 U	1.0 U
MW-5A (Dup)	20-Apr-22	1.0 U	**6.1**	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	**7.7**	1.0 U	2.0 U	1.0 U	1.0 U
MW-5A [a]	17-Nov-22	1.0 U	1.0 U	2.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U

NOTE:
[a] MW-5B was inadvertently sampled instead of MW-5A in the fall of 2022. The resulting data are consistent with past results from MW-5B.

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 (ºC)	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 MW-12A	21-Apr-22	6.75	156.3	133	10.7	7.54
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-1 (Upstream)	21-Apr-22	6.43	179.3	88	9.7	15.66
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
SYR SW-2 (Downstream)	21-Apr-22	6.36	176.9	83.3	9.9	10.03

NOTE:
S.U. = standard pH units; mV = millivolts; µS/cm = microSiemens per centimeter;
ºC = 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 MW-12A	21-Apr-22	0.054	2.20	10 U	37	12	4.9	13.0	3.4	4.4	0.052	0.85	5.7
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-1 (Upstream)	21-Apr-22	0.050 U	0.59	10 U	37	4.7	3.8	7.0	2.100	2.7	0.034	0.59	5.2
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
SYR SW-2 (Downstream)	21-Apr-22	0.050 U	0.61	10 U	34	4.9	3.8	7.0	2.6	2.8	0.042	0.60	5.1

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 MW-12A	21-Apr-22	7.5	130	95	28	20 U	2.3	51	37
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-1 (Upstream)	21-Apr-22	8.0	79	61	29	20 U	1.6	36	37
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
SYR SW-2 (Downstream)	21-Apr-22	7.7	81	58	30	20 U	1.6	28	34

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 MW-12A	21-Apr-22	120	345	2.0 U	1.0 U	0.020 U	0.074	15 U
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-1 (Upstream)	21-Apr-22	108	119	2.0 U	1.0 U	0.020 U, H	0.050 U	16
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	22	2.0 U	0.50 U	0.020 U	0.020 U	15 U
SYR SW-2 (Downstream)	19-Apr-17	24	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
SYR SW-2 (Downstream)	21-Apr-22	108	206	2.0 U	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	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
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-09R	11-Mar-22	0.0

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

Sample Location	Date Measured	Methane (Percent)
CGP-09R	18-Apr-22	0.8
CGP-09R	18-Aug-22	0.2
CGP-09R	16-Nov-22	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
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-10R	11-Mar-22	0.0
CGP-10R	18-Apr-22	0.0
CGP-10R	18-Aug-22	0.0
CGP-10R	16-Nov-22	0.0

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

Sample Location	Date Measured	Methane (Percent)
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
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-11	11-Mar-22	0.0
CGP-11	0-Jan-00	0.0
CGP-11	18-Aug-22	0.0
CGP-11	16-Nov-22	0.0

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

Sample Location	Date Measured	Methane (Percent)
CGP-12	12-Jan-12	0.0
CGP-12	4-May-12	0.0
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-12	11-Mar-22	0.0
CGP-12	18-Apr-22	0.0
CGP-12	18-Aug-22	0.0
CGP-12	16-Nov-22	0.0

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

Sample Location	Date Measured	Methane (Percent)
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
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-13	11-Mar-22	0.0
CGP-13	18-Apr-22	0.0
CGP-13	18-Aug-22	0.0
CGP-13	16-Nov-22	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

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

Sample Location	Date Measured	Methane (Percent)
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
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
CGP-14	11-Mar-22	0.0
CGP-14	18-Apr-22	0.0
CGP-14	18-Aug-22	0.0
CGP-14	16-Nov-22	0.0
Facility Structures		
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

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

Sample Location	Date Measured	Methane (Percent)
Office	1-Mar-17	0.0
Office	17-Apr-17	0.0
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
Office	11-Mar-22	0.0
Office	18-Apr-22	0.0
Office	18-Aug-22	0.0
Office	16-Nov-22	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

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

Sample Location	Date Measured	Methane (Percent)
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
Scale House	12-Apr-21	0.0
Scale House	22-Jul-21	0.0
Scale House	16-Nov-21	0.0
Scale House	11-Mar-22	0.0
Scale House	18-Apr-22	0.0
Scale House	18-Aug-22	0.0
Scale House	16-Nov-22	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

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

Sample Location	Date Measured	Methane (Percent)
Maintenance Building	16-Nov-21	0.0
Maintenance Building	11-Mar-22	0.0
Maintenance Building	18-Apr-22	0.0
Maintenance Building	18-Aug-22	0.0
Maintenance Building	16-Nov-22	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
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
LFGTE Plant Building	11-Mar-22	0.0
LFGTE Plant Building	18-Apr-22	0.0
LFGTE Plant Building	18-Aug-22	0.0
LFGTE Plant Building	16-Nov-22	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

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

Sample Location	Date Measured	Methane (Percent)
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
Operations Building	12-Apr-21	0.0
Operations Building	22-Jul-21	0.0
Operations Building	16-Nov-21	0.0
Operations Building	11-Mar-22	0.0
Operations Building	18-Apr-22	0.0
Operations Building	18-Aug-22	0.0
Operations Building	16-Nov-22	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
2022 Monthly Pumping and Disposal Volumes of Leachate and LDS Liquid
Riverbend Landfill

Monitoring Location	Landfill Module or Area	2022 Monthly Liquid Pumping and Disposal Volumes (Gallons)												2022 Liquid Volume Totals (Gallons)
		January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	Septem-ber 2022	October 2022	Novem-ber 2022	Decem-ber 2022	
LCRS Pumping Volumes[a]														
1/5 P	Modules 1 through 5	1,152,628	621,952	741,828	781,664	731,196	493,688	313,104	208,980	159,776	131,360	616,756	841,176	**6,794,108**
6/7 P[b]	Modules 6 and 7	12,088	11,536	9,444	8,152	4,536	13,796	21,880	13,772	19,296	24,728	24,224	25,364	**188,816**
8 P	Module 8	270,416	151,072	269,940	249,024	197,464	128,844	81,564	77,908	88,228	120,040	116,188	147,184	**1,897,872**
9 P	Module 9	209,964	92,946	129,516	129,942	105,996	75,150	49,332	35,736	40,614	55,896	44,544	40,074	**1,009,710**
Total Module Sump Volumes		**1,645,096**	**877,506**	**1,150,728**	**1,168,782**	**1,039,192**	**711,478**	**465,880**	**336,396**	**307,914**	**332,024**	**801,712**	**1,053,798**	**9,890,506**
LDS Liquid Pumping Volumes														
4/5 S	Modules 4 and 5	20,850	15,307	19,204	19,087	20,501	16,109	12,320	9,200	7,150	5,637	5,439	10,759	**161,563**
6/7 S	Modules 6 and 7	0	508	1,835	1,333	1,395	1,084	1,030	934	935	1,418	1,044	1,148	**12,664**
8 S	Module 8	4,484	1,280	2,863	4,105	2,247	2,067	1,536	199	465	360	4,057	9,992	**33,654**
9 S	Module 9	26	34	5,314	8,972	1,843	1,416	23	0	0	4,104	0	13,297	**35,029**
Total Module LDS Sump Volumes		**25,360**	**17,129**	**29,216**	**33,497**	**25,986**	**20,676**	**14,909**	**10,333**	**8,550**	**11,519**	**10,540**	**35,196**	**242,910**
Leachate Pond	LDS	102	60	18	30	0	0	0	0	0	132	30	90	**462**
GCCS Liquid Pumping Volumes[c]														
North Tanks	GCCS	464,225	287,900	652,147	655,488	570,013	402,482	274,568	219,550	214,166	256,993	469,026	520,540	**4,987,098**
Con. Sumps	GCCS	15,883	15,441	17,019	16,296	17,412	14,458	10,917	9,572	9,755	27,040	31,225	42,914	**227,931**
	Total Volumes	**480,108**	**303,341**	**669,166**	**671,784**	**587,425**	**416,940**	**285,485**	**229,122**	**223,921**	**284,033**	**500,251**	**563,454**	**5,215,029**
Leachate Pond Freeboard Measurements[d]														
Freeboard from top of pond (feet)		5.80	5.70	5.06	4.70	4.61	4.87	5.70	6.70	8.68	10.50	11.48	10.50	NA
Freeboard from Compliance level (3')		2.80	2.70	2.06	1.70	1.61	1.87	2.70	3.70	5.68	7.50	8.48	7.50	NA
Disposal Volumes[e]														
Leachate Pond	Total Site Disposal Volumes	**1,104,710**	**1,410,392**	**1,268,879**	**1,666,362**	**1,994,831**	**2,182,863**	**1,631,607**	**2,567,200**	**2,532,241**	**2,367,154**	**1,827,814**	**1,696,572**	**22,250,625**
Precipitation[f]	NWS-McMinnville	4.25	2.6	2.91	5.39	3.34	2.93	0.07	0.04	0.38	1.78	6.03	6.00	35.72

Table 7-1
2022 Monthly Pumping and Disposal Volumes of Leachate and LDS Liquid
Riverbend Landfill

Monitoring Location	Landfill Module or Area	2022 Monthly Liquid Pumping and Disposal Volumes (Gallons)												2022 Liquid Volume Totals (Gallons)
		January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022	Septem-ber 2022	October 2022	Novem-ber 2022	Decem-ber 2022	

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 GCCS directly to the leachate pond.

[d] Freeboard must be at least 3.0 feet.

[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 2022.

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

Sample Location	Sample Date	Acetone	Benzene	2-Buta-none (MEK)	Carbon Disulfide	Chloro-ethane	Chloro-form	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Dibromo-chloro-methane	1,1-Di-chloro-ethane	1,2-Di-chloro-ethane	1,1-Di-chloro-ethene	cis-1,2-Dichloro-ethene	Ethyl-benzene	2-Hexa-none	Isopropyl-benzene	4-Isopropyl-toluene	Methylene Chloride	4-Methyl-2-pentanone	n-Propyl-benzene	Naph-thalene
1/5 P	1-May-12	**1,300**	ND	**1,400**	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND	ND	**14**	ND	ND	ND	ND	**21**	ND	ND
1/5 P	10-Apr-13	**71**	**2.6**	**64**	ND	ND	ND	ND	**2.7**	ND	ND	ND	ND	ND	**9.5**	ND	ND	**1.5**	ND	**11**	ND	**6.2**
1/5 P	5-May-14	**370**	**2.0**	**220**	ND	ND	ND	ND	**4.2**	ND	ND	ND	ND	**1.4**	**9.9**	ND	ND	**1.5**	ND	**20**	ND	**8.4**
1/5 P	8-May-15	**740**	**2.8**	**370**	ND	ND	ND	ND	**4.9**	ND	ND	ND	ND	**1.4**	**12**	ND	**1.8**	**1.6**	ND	**27**	ND	**8.2**
1/5 P	6-May-16	**43**	**3.7**	ND	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND	**1.4**	**13**	ND	**1.3**	**3.1**	ND	ND	ND	**4.7**
1/5 P (Dup)	6-May-16	**41**	**3.0**	ND	ND	ND	ND	ND	**2.0**	ND	ND	ND	ND	**1.7**	**9.7**	ND	ND	**2.5**	ND	ND	ND	**4.3**
1/5 P	18-Apr-17	**36**	**3.3**	**17**	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND	**2.8**	**13**	ND	**1.2**	**3.3**	ND	**6.2**	ND	**5.9**
1/5 P	12-Sep-17	**52**	**3.1**	**13**	ND	ND	ND	ND	**3.0**	ND	ND	ND	ND	**1.7**	**11**	ND	**1.2**	**2.3**	ND	7.7	ND	**6.3**
1/5 P	9-Nov-17	**220**	**2.4**	**160**	ND	ND	ND	ND	**3.2**	ND	ND	ND	ND	ND	**12**	ND	ND	**1.3**	ND	**8.9**	ND	**4.0**
1/5 P	2-May-18	**41**	**2.4**	ND	ND	ND	ND	ND	**2.5**	ND	ND	ND	ND	ND	**12**	ND	**1.2**	**2.3**	ND	ND	ND	**4.0**
1/5 P	24-Apr-19	**34**	**2.1**	ND	ND	ND	ND	ND	**2.3**	ND	ND	ND	ND	ND	**6.1**	ND	ND	ND	ND	ND	ND	**2.7**
1/5 P	22-Apr-20	**23**	**4.5**	**12**	ND	ND	ND	ND	**3.3**	ND	ND	ND	ND	**1.3**	**14**	ND	**1.3**	**2.2**	ND	**6.4**	ND	**4.7**
1/5 P	15-Apr-21	**24**	**2.7**	ND	ND	ND	ND	ND	**2.8**	ND	ND	ND	ND	**1.6**	**9**	ND	ND	**1**	ND	**5.9**	ND	**4.8**
1/5 P	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.5**	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
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
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
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
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
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
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
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
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
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
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
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
4/5 S	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P	1-May-12	**5,800**	ND	**8,600**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**290**	ND	ND
6/7 P	10-Apr-13	**34,000**	ND	**26,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**690**	ND	ND
6/7 P (Dup)	10-Apr-13	**34,000**	ND	**27,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**720**	ND	ND
6/7 P	5-May-14	**55**	**1.8**	**32**	ND	ND	ND	ND	**1.9**	ND	ND	ND	ND	ND	**2.7**	ND	ND	**1.4**	ND	ND	ND	**4.2**
6/7 P	8-May-15	**2,000**	ND	**1,100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P	28-Apr-16	**960**	**1.7**	**370**	ND	ND	ND	ND	**2.4**	ND	ND	ND	ND	ND	**6.7**	ND	ND	ND	ND	**17**	ND	**5.5**
6/7 P	18-Apr-17	**33**	**1.5**	**17**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND	ND	ND	**4.8**
6/7 P	12-Sep-17	**310**	**2.4**	**150**	ND	ND	ND	ND	**1.9**	ND	ND	ND	ND	ND	**7.2**	ND	**1.4**	ND	ND	**5.8**	ND	**11**
6/7 P	9-Nov-17	**1,100**	**1.9**	**870**	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	ND	**3.6**	ND	ND	ND	**7.6**	**33**	ND	**12**
6/7 P	1-May-18	**84**	**1.2**	**45**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.9**	ND	ND	ND	ND	ND	ND	**8.0**
6/7 P	24-Apr-19	**40**	ND	**8.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND	ND	ND	ND	**6.7**
6/7 P	22-Apr-20	**800**	**2.4**	**610**	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	ND	**7.6**	ND	**1.2**	**1.0**	ND	**26**	ND	**27**
6/7 P	15-Apr-21	**2900**	**13**	**2600**	ND	ND	ND	ND	**3.9**	ND	ND	ND	ND	ND	**16**	ND	ND	**7.6**	ND	**150**	ND	**34**
6/7 P	20-Apr-22	**1100**	**12**	**840**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.6**	ND	ND	**2.7**	ND	**160**	ND	**22**
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
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
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
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
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	**1.6**
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	**1.6**
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	**4.9**
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	**3.1**
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	**2.3**
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	**4.0**
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	**1.4**
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	**4.1**
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	**3.9**
6/7 S	22-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	Styrene	Tetra-chloro-ethene	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloro-ethane	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl chloride	Total Xylenes
1/5 P	1-May-12	ND	ND	**4.8**	ND	ND	ND	ND	**6.5**	ND	ND	**28**
1/5 P	10-Apr-13	ND	ND	**6.2**	ND	ND	ND	ND	**5.1**	**2.5**	ND	**21**
1/5 P	5-May-14	ND	ND	**5.6**	ND	ND	ND	ND	**4.4**	**1.6**	ND	**18**
1/5 P	8-May-15	ND	ND	**7.0**	ND	ND	ND	ND	**4.6**	**1.4**	ND	**19**
1/5 P	6-May-16	ND	ND	**7.3**	ND	ND	ND	ND	**5.0**	**1.8**	ND	**28**
1/5 P (Dup)	6-May-16	ND	ND	**7.0**	ND	ND	ND	ND	**3.5**	**1.4**	ND	**21**
1/5 P	18-Apr-17	ND	ND	**7.4**	ND	ND	ND	ND	**4.9**	**18**	ND	**26**
1/5 P	12-Sep-17	ND	ND	**9.3**	ND	ND	ND	ND	**3.8**	**1.4**	ND	**26**
1/5 P	9-Nov-17	ND	ND	**5.6**	ND	ND	ND	ND	**6.0**	**2.0**	ND	**28**
1/5 P	2-May-18	ND	ND	**5.9**	ND	ND	ND	ND	**6.2**	**2.4**	ND	**27**
1/5 P	24-Apr-19	ND	ND	**3.0**	ND	ND	ND	ND	**2.4**	ND	ND	**12**
1/5 P	22-Apr-20	ND	ND	**7.4**	ND	ND	ND	ND	**5.0**	ND	ND	**25**
1/5 P	15-Apr-21	ND	ND	**5.5**	ND	ND	ND	ND	**3.1**	ND	ND	**17**
1/5 P	20-Apr-22	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
4/5 S	11-Apr-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5 S	5-May-14	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
4/5 S	6-May-16	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
4/5 S	12-Sep-17	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
4/5 S	3-May-18	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
4/5 S	22-Apr-20	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
4/5 S	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P	1-May-12	ND	ND	**17**	ND	ND	ND	ND	**36**	ND	ND	**44**
6/7 P	10-Apr-13	ND	ND	**69**	ND	ND	ND	ND	ND	ND	ND	ND
6/7 P (Dup)	10-Apr-13	ND	ND	**75**	ND	ND	ND	ND	ND	ND	ND	**38**
6/7 P	5-May-14	ND	ND	**3.2**	ND	ND	ND	ND	**1.5**	**1.3**	ND	**8.4**
6/7 P	8-May-15	ND	ND	**4.3**	ND	ND	ND	ND	**3.0**	ND	ND	**13**
6/7 P	28-Apr-16	ND	ND	**4.4**	ND	ND	ND	ND	**2.0**	ND	ND	**8.3**
6/7 P	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.2**
6/7 P	12-Sep-17	ND	ND	**2.6**	ND	ND	ND	ND	**3.0**	ND	ND	**12**
6/7 P	9-Nov-17	ND	ND	**4.5**	ND	ND	ND	ND	ND	ND	ND	**4.8**
6/7 P	1-May-18	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	**4.0**
6/7 P	24-Apr-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.0**
6/7 P	22-Apr-20	ND	ND	**3.7**	ND	ND	ND	ND	**3.9**	ND	ND	**11**
6/7 P	15-Apr-21	ND	ND	**24**	ND	ND	ND	ND	**7.5**	ND	ND	**34**
6/7 P	20-Apr-22	ND	ND	**18**	ND	ND	ND	ND	**1.5**	ND	ND	**20**
6/7 S	1-May-12	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
6/7 S	5-May-14	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
6/7 S	28-Apr-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S (Dup)	28-Apr-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	12-Sep-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	9-Nov-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	1-May-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	24-Apr-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	22-Apr-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/7 S	22-Apr-22	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-Buta-none (MEK)	Carbon Disulfide	Chloro-ethane	Chloro-form	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Dibromo-chloro-methane	1,1-Di-chloro-ethane	1,2-Di-chloro-ethane	1,1-Di-chloro-ethene	cis-1,2-Dichloro-ethene	Ethyl-benzene	2-Hexa-none	Isopropyl-benzene	4-Isopropyl-toluene	Methylene Chloride	4-Methyl-2-pentanone	n-Propyl-benzene	Naph-thalene
8 P	1-May-12	**5,100**	ND	**9,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**290**	ND	ND
8 P	10-Apr-13	**3,700**	ND	**2,600**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**90**	ND	ND
8 P	5-May-14	**15,000**	ND	**6,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**26**	ND	**160**	ND	ND
8 P	8-May-15	**2,700**	**25**	**1,600**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**	ND	ND	**4.8**	ND	**43**	ND	**29**
8 P	28-Apr-16	**25,000**	ND	**1,800**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**470**	ND	ND
8 P	18-Apr-17	**14,000**	ND	**13,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**21**	ND	ND	**20**	**40**	**360**	ND	ND
8 P	2-May-18	**12,000**	ND	**8,300**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**20**	ND	ND	**35**	ND	**320**	ND	ND
8 P	24-Apr-19	**7,500**	ND	**6,700**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**200**	ND	ND
8 P	22-Apr-20	**11,000**	**13**	**8,500**	ND	ND	ND	ND	**5.9**	ND	ND	ND	ND	ND	**23**	ND	ND	**24**	ND	**280**	ND	**12**
8 P	15-Apr-21	**1,400**	**3.3**	**1,300**	**6.5**	ND	ND	ND	**1.8**	ND	ND	ND	ND	ND	**5.5**	ND	ND	**4.2**	ND	**44**	ND	**2.4**
8 P	22-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.5**	ND	ND	ND	ND	ND	ND	**2.2**
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
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
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
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
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
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
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
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
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
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
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
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
8 S	22-Apr-22	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	ND	ND	ND	ND	**140**	ND	ND
9 P	6-May-16	**31**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.7**	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	ND	ND	ND	ND	ND	**33**	**18**	**130**	ND	ND
9 P	2-May-18	**620**	ND	**1,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND
9 P	24-Apr-19	**250**	ND	**660**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.8**	ND	ND	ND	ND	ND	ND	ND
9 P	22-Apr-20	**28**	**2.7**	ND	ND	ND	ND	ND	**3.2**	ND	ND	ND	ND	ND	**17**	ND	ND	**10**	ND	ND	ND	ND
9 P	15-Apr-21	**18**	**1.5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.1**	ND	ND	ND	ND	ND	ND	ND
9 P	22-Apr-22	ND	**1.6**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.5**	ND	ND	ND	ND	ND	ND	**2.5**
9 S	8-May-15	**13**	ND	ND	ND	ND	ND	ND	ND	ND	**5.6**	**1.3**	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	ND	ND	ND	ND	ND	ND	**230**	ND	ND	ND
9 S	18-Apr-17	**12**	**2.1**	**11**	ND	ND	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	ND	ND	ND	ND	ND	ND	ND
9 S	2-May-18	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.2**	ND	ND	ND	ND	ND	ND	ND
9 S (Dup)	2-May-18	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.3**	ND	ND	ND	ND	ND	ND	ND
9 S	24-Apr-19	**100**	**2.1**	**94**	**5.7**	ND	ND	ND	ND	ND	ND	**1.1**	ND	**1.0**	**1.9**	ND	ND	ND	ND	**7.2**	ND	ND
9 S	22-Apr-20	ND	**2.3**	ND	ND	ND	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	ND	ND	ND	ND	**1.6**	ND	ND	ND	ND	ND	ND	ND
9 S	22-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	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	Styrene	Tetra-chloro-ethene	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloro-ethane	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl chloride	Total Xylenes
8 P	1-May-12	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND
8 P	10-Apr-13	ND	ND	**19**	ND	ND	ND	ND	ND	ND	ND	**11**
8 P	5-May-14	ND	ND	**37**	ND	ND	ND	ND	ND	ND	ND	ND
8 P	8-May-15	**5.0**	ND	**19**	ND	ND	ND	ND	ND	ND	ND	**12**
8 P	28-Apr-16	ND	ND	**86**	ND	ND	ND	ND	ND	ND	ND	ND
8 P	18-Apr-17	ND	ND	**64**	ND	ND	ND	ND	ND	ND	ND	ND
8 P	2-May-18	ND	ND	**63**	ND	ND	ND	ND	**15**	ND	ND	**55**
8 P	24-Apr-19	ND	ND	**39**	ND	ND	ND	**24**	ND	ND	ND	**23**
8 P	22-Apr-20	ND	ND	**55**	ND	ND	ND	**24**	**10**	**6.1**	ND	**60**
8 P	15-Apr-21	ND	ND	**11**	ND	ND	ND	ND	**1.9**	ND	ND	**12**
8 P	22-Apr-22	ND	ND	**2.6**	ND	ND	ND	ND	**1.3**	ND	ND	**7.1**
8 S	1-May-12	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
8 S	5-May-14	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
8 S	8-May-15	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
8 S	28-Apr-16	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
8 S	3-May-18	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
8 S	22-Apr-20	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
8 S	22-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9 P	8-May-15	ND	ND	**360**	ND	ND	ND	ND	ND	ND	ND	ND
9 P	6-May-16	ND	ND	**1.4**	ND	ND	ND	ND	ND	ND	ND	**11**
9 P	18-Apr-17	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND
9 P	2-May-18	ND	ND	**30**	ND	ND	ND	ND	ND	ND	ND	**7.3**
9 P	24-Apr-19	ND	ND	**4.9**	ND	ND	ND	ND	ND	ND	ND	**10**
9 P	22-Apr-20	ND	ND	**7.5**	ND	ND	ND	ND	**3.6**	**2.3**	**3.5**	**44**
9 P	15-Apr-21	ND	ND	**6.2**	ND	ND	ND	ND	ND	ND	ND	**12**
9 P	22-Apr-22	ND	ND	**2.6**	ND	ND	ND	ND	**1.2**	ND	ND	**8.3**
9 S	8-May-15	ND	ND	**2.6**	ND	ND	ND	ND	ND	ND	ND	ND
9 S	6-May-16	ND	ND	**9,500**	ND	ND	ND	ND	ND	ND	ND	ND
9 S	18-Apr-17	ND	ND	**8.5**	ND	ND	ND	ND	ND	ND	ND	ND
9 S (Dup)	18-Apr-17	ND	ND	**5.5**	ND	ND	ND	ND	ND	ND	ND	ND
9 S	2-May-18	ND	ND	**1.4**	ND	ND	ND	ND	ND	ND	ND	ND
9 S (Dup)	2-May-18	ND	ND	**1.3**	ND	ND	ND	ND	ND	ND	ND	ND
9 S	24-Apr-19	ND	ND	**11**	ND	ND	ND	ND	ND	ND	**1.6**	**5.3**
9 S	22-Apr-20	ND	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND
9 S	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.4**
9 S	22-Apr-22	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-Buta-none (MEK)	Carbon Disulfide	Chloro-ethane	Chloro-form	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Dibromo-chloro-methane	1,1-Di-chloro-ethane	1,2-Di-chloro-ethane	1,1-Di-chloro-ethene	cis-1,2-Dichloro-ethene	Ethyl-benzene	2-Hexa-none	Isopropyl-benzene	4-Isopropyl-toluene	Methylene Chloride	4-Methyl-2-pentanone	n-Propyl-benzene	Naph-thalene
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
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
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
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
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
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
Leachate Pond	28-Apr-16	**230**	ND	**180**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND
Leachate Pond	17-Nov-16	**25**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	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
Leachate Pond	9-Nov-17	**900**	ND	**470**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**11**	ND	ND
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
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
Leachate Pond	25-Apr-19	**1,100**	ND	**570**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.9**	ND	ND
Leachate Pond	20-Nov-19	ND	ND	ND	ND	ND	ND	ND	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
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
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
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
Leachate Pond	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	17-Nov-22	ND	ND	ND	ND	ND	**4.2**	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
Leachate Pond LDS	21-Nov-13	**12**	ND	ND	ND	ND	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	ND	ND	ND	ND	**8.0**	ND	ND
Leachate Pond LDS	20-Nov-14	**110**	**1.2**	**34**	ND	ND	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	ND	ND	ND	ND	**14**	ND	ND
Leachate Pond LDS	11-Nov-15	ND	**1.3**	ND	ND	ND	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	ND	ND	ND	ND	**31**	ND	ND	ND	**6.5**	ND	ND
Leachate Pond LDS	17-Nov-16	**200**	ND	**150**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**9.1**	ND	ND	ND	ND	ND	ND	**6.8**
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	**11**	ND	ND
Leachate Pond LDS	9-Nov-17	ND	ND	ND	ND	ND	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	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
Leachate Pond LDS	11-Nov-20	**27**	ND	**150**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.5**	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
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
Leachate Pond LDS	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	17-Nov-22	ND	ND	ND	ND	ND	**4.1**	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;
ND = not detected at or above the practical quantitation limit; µg/L = micrograms per liter.
VOC Data prior to 2012 is available in previous annual reports.

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

Sample Location	Sample Date	Styrene	Tetra-chloro-ethene	Toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,1,1-Trichloro-ethane	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Vinyl chloride	Total Xylenes
Leachate Pond	8-Apr-13	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
Leachate Pond	5-May-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	20-Nov-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-May-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-Nov-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	28-Apr-16	ND	ND	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	17-Nov-16	ND	ND	**1.6**	**1.7**	**1.3**	ND	ND	ND	ND	ND	ND
Leachate Pond	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	9-Nov-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	3-May-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	6-Nov-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	25-Apr-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	20-Nov-19	ND	ND	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND
Leachate Pond	22-Apr-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	11-Nov-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	15-Apr-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	18-Nov-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond	17-Nov-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-Apr-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	21-Nov-13	ND	ND	**10**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	5-May-14	ND	ND	**5.8**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	20-Nov-14	ND	ND	**5.9**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-May-15	ND	ND	**4.5**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	11-Nov-15	ND	ND	**3.0**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	28-Apr-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	17-Nov-16	ND	ND	**7.4**	ND	ND	ND	ND	**3.7**	ND	ND	**24**
Leachate Pond LDS	18-Apr-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	9-Nov-17	ND	ND	**3.9**	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	3-May-18	ND	ND	**3.2**	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
Leachate Pond LDS	11-Nov-20	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
Leachate Pond LDS	18-Nov-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	20-Apr-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Leachate Pond LDS	17-Nov-22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTE:
Detections are in **bold** type; LDS = secondary leak detection system;
ND = not detected at or above the practical quantitation limit; µg/L = micrograms per liter.
VOC Data prior to 2012 is available in previous 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)	30-Apr-12	155.30	23.35	131.95
MW-01A (Deep)	12-Nov-12	155.30	40.5	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	27.5	127.80
MW-01A (Deep)	10-Nov-15	155.30	32.9	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	27.8	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-01A (Deep)	18-Apr-22	155.30	20.01	135.29
MW-01A (Deep)	14-Nov-22	155.30	28.00	127.30
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-01B (Shallow)	18-Apr-22	155.00	6.13	148.87
MW-01B (Shallow)	14-Nov-22	155.00	8.55	146.45
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-02R (Shallow)	18-Apr-22	148.30	12.34	135.96
MW-02R (Shallow)	14-Nov-22	148.30	15.18	133.12
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	18.1	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-03A (Shallow)	18-Apr-22	140.81	17.84	122.97
MW-03A (Shallow)	14-Nov-22	140.81	18.51	122.30
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	17.8	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	23.5	117.07
MW-03B (Deep)	2-May-16	140.57	19	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	22.5	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-03B (Deep)	18-Apr-22	140.57	16.24	124.33
MW-03B (Deep)	14-Nov-22	140.57	23.39	117.18
MW-04A (Shallow)	30-Apr-12	142.31	25.73	116.58
MW-04A (Shallow)	12-Nov-12	142.31	28.5	113.81
MW-04A (Shallow)	8-Apr-13	142.31	26.8	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	27.1	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-04A (Shallow)	18-Apr-22	142.31	25.11	117.20
MW-04A (Shallow)	14-Nov-22	142.31	24.61	117.70
MW-04B (Deep)	30-Apr-12	141.80	25.49	116.31
MW-04B (Deep)	12-Nov-12	141.80	30.8	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	24.8	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-04B (Deep)	18-Apr-22	141.80	24.98	116.82
MW-04B (Deep)	14-Nov-22	141.80	25.09	116.71
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	21.1	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-05A (Shallow)	18-Apr-22	138.73	16.75	121.98
MW-05A (Shallow)[e]	14-Nov-22	138.73	22.26	116.47
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	23.1	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-05B (Deep)	18-Apr-22	138.88	24.94	113.94
MW-05B (Deep)[e]	14-Nov-22	138.88	31.05	107.83
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	9.2	119.75
MW-06A (Shallow)	10-Nov-15	128.95	6.88	122.07
MW-06A (Shallow)	2-May-16	128.95	8.1	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	7.1	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-06A (Shallow)	18-Apr-22	128.29	5.64	122.65
MW-06A (Shallow)	14-Nov-22	128.29	6.27	122.02
MW-06B (Deep)	30-Apr-12	128.59	12.97	115.62
MW-06B (Deep)	12-Nov-12	128.59	18.2	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-06B (Deep)	18-Apr-22	128.59	13.16	115.43
MW-06B (Deep)	14-Nov-22	128.59	19.38	114.23
MW-09A (Shallow)	30-Apr-12	128.42	8.7	119.72
MW-09A (Shallow)	12-Nov-12	128.42	12.17	116.25
MW-09A (Shallow)	8-Apr-13	128.42	8.6	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	12.2	116.22
MW-09A (Shallow)	9-Mar-15	128.42	8.82	119.60
MW-09A (Shallow)	5-May-15	128.42	9.3	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	13.7	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-09A (Shallow)	18-Apr-22	128.42	9.38	119.04
MW-09A (Shallow)	14-Nov-22	128.42	14.1	114.32
MW-09B(R)(Deep)	30-Apr-12	127.40	0.73	126.67
MW-09B(R)(Deep)	12-Nov-12	127.40	1.6	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	3.2	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	2.4	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-09B(R)(Deep)	18-Apr-22	127.40	0.61	126.79
MW-09B(R)(Deep)	14-Nov-22	127.40	5.32	122.08
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	18.5	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-10A (Shallow)	18-Apr-22	153.21	4.76	148.45
MW-10A (Shallow)	14-Nov-22	153.21	17.12	136.09
MW-10B (Deep)	30-Apr-12	152.87	17.5	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	23.4	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-10B (Deep)	18-Apr-22	152.87	16.15	136.72
MW-10B (Deep)	14-Nov-22	152.87	23.78	129.09

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)	30-Apr-12	126.00	11.02	114.98
MW-12A (Shallow)	12-Nov-12	126.00	10.74	115.26
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	14.9	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	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	5.6	121.21
MW-12A (Shallow)	18-Apr-22	126.81	10.18	116.63
MW-12A (Shallow)	14-Nov-22	126.81	13.52	113.29
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	21.3	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	16.7	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-12B (Deep)	18-Apr-22	126.05	16.00	110.05
MW-12B (Deep)	14-Nov-22	126.05	22.05	104.00

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-14A (Shallow)	30-Apr-12	121.87	15.21	106.66
MW-14A (Shallow)	12-Nov-12	121.87	18.65	103.22
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	21.6	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	12.1	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	21.6	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-14A (Shallow)	18-Apr-22	121.87	7.75	114.12
MW-14A (Shallow)	14-Nov-22	121.87	20.52	101.35
MW-14B (Deep)	30-Apr-12	123.32	16.22	107.10
MW-14B (Deep)	12-Nov-12	123.32	19.1	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	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	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-14B (Deep)	18-Apr-22	123.32	15.31	108.01
MW-14B (Deep)	14-Nov-22	123.32	20.11	103.21

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)	30-Apr-12	130.07	9.4	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
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	9.5	120.57
MW-15A (Shallow)	15-Nov-21	130.07	7.26	122.81
MW-15A (Shallow)	18-Apr-22	130.07	9.07	121.00
MW-15A (Shallow)	14-Nov-22	130.07	9.13	120.94
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	15.3	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	23.9	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-15B (Deep)	18-Apr-22	129.73	15.45	114.28
MW-15B (Deep)	14-Nov-22	129.73	17.46	112.27

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)	30-Apr-12	128.89	14.03	114.86
MW-16A (Shallow)	12-Nov-12	128.89	19.4	109.49
MW-16A (Shallow)	8-Apr-13	128.89	15.7	113.19
MW-16A (Shallow)	18-Nov-13	128.89	18.35	110.54
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	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-16A (Shallow)	18-Apr-22	128.89	14.81	114.08
MW-16A (Shallow)	14-Nov-22	128.89	21.07	107.82
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	14.2	114.75
MW-16B (Deep)	5-Nov-18	128.95	21.17	107.78
MW-16B (Deep)	22-Apr-19	128.95	15.4	113.55
MW-16B (Deep)	18-Nov-19	128.95	20.3	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-16B (Deep)	18-Apr-22	128.95	15.04	113.91
MW-16B (Deep)	14-Nov-22	128.95	20.4	108.55

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)	30-Apr-12	153.83	7.91	145.92
MW-17A (Shallow)	12-Nov-12	153.83	15.7	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
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	8.5	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	7.3	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-17A (Shallow)	18-Apr-22	153.83	8.1	145.73
MW-17A (Shallow)	14-Nov-22	153.83	17.97	135.86
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	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	13.8	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	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-18A (Shallow)	18-Apr-22	148.77	11.72	137.05
MW-18A (Shallow)	14-Nov-22	148.77	16.6	132.17

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)	30-Apr-12	148.57	13.75	134.82
MW-18B (Deep)	12-Nov-12	148.57	22.2	126.37
MW-18B (Deep)	8-Apr-13	148.57	14.4	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	16.1	132.47
MW-18B (Deep)	7-Nov-17	148.57	21.88	126.69
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	13.9	134.67
MW-18B (Deep)	18-Nov-19	148.57	20.28	128.29
MW-18B (Deep)	20-Apr-20	148.57	15.3	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-18B (Deep)	18-Apr-22	148.57	13.6	134.97
MW-18B (Deep)	14-Nov-22	148.57	24.21	124.36
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	19.9	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-19A (Shallow)	18-Apr-22	151.27	4.98	146.29
MW-19A (Shallow)	14-Nov-22	151.27	23.68	127.59

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)	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	8.6	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	3.3	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
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-20A (Shallow)	18-Apr-22	129.92	3.03	126.89
MW-20A (Shallow)	14-Nov-22	129.92	7.76	122.16
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	9.9	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	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-20B (Deep)	18-Apr-22	129.72	1.5	128.22
MW-20B (Deep)	14-Nov-22	129.72	8.89	120.83

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)	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	6.9	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
MW-21A (Shallow)	15-Nov-21	120.02	2.91	117.11
MW-21A (Shallow)	18-Apr-22	120.02	8.06	111.96
MW-21A (Shallow)	14-Nov-22	120.02	11.89	108.13
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	8.9	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-21B (Deep)	18-Apr-22	119.53	7.75	111.78
MW-21B (Deep)	14-Nov-22	119.53	12.3	107.23

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-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	22.2	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-22A (Shallow)	18-Apr-22	125.38	16.29	109.09
MW-22A (Shallow)	14-Nov-22	125.38	22.2	103.18
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	17.9	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-22B (Deep)	18-Apr-22	125.43	17.19	108.24
MW-22B (Deep)	14-Nov-22	125.43	28.01	97.42

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-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	114.79
MW-23A (Shallow)	15-Nov-16	131.79	16.56	115.23
MW-23A (Shallow)	17-Apr-17	131.79	14.6	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	21.1	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	17.1	114.69
MW-23A (Shallow)	15-Nov-21	131.79	8.82	122.97
MW-23A (Shallow)	18-Apr-22	131.79	14.54	117.25
MW-23A (Shallow)	14-Nov-22	131.79	19.85	111.94
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	107.60
MW-23B (Deep)	18-Nov-13	131.60	28.11	103.49
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	30.3	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	24.8	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	112.60
MW-23B (Deep)	18-Nov-19	131.60	25.3	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-23B (Deep)	18-Apr-22	131.60	17.85	113.75
MW-23B (Deep)	14-Nov-22	131.60	23.21	108.39

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-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	11.1	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	25.5	124.43
MW-24A (Shallow)	20-Apr-20	149.93	12.85	137.08
MW-24A (Shallow)	9-Nov-20	149.93	19.9	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-24A (Shallow)	18-Apr-22	149.93	9.59	140.34
MW-24A (Shallow)	14-Nov-22	149.93	10.32	139.61
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
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-25A (Shallow)	18-Apr-22	155.26	7.35	146.66
MW-25A (Shallow)	14-Nov-22	155.26	8.48	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
MW-25B (Deep)	18-Apr-22	155.54	21.47	132.81
MW-25B (Deep)	14-Nov-22	155.54	29.32	128.19

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-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	4.3	121.63
P-01	28-Apr-14	125.93	3.6	122.33
P-01	17-Nov-14	125.93	5.02	120.91
P-01	9-Mar-15	125.93	6.9	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	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	4.2	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	14.2	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-01	18-Apr-22	126.02	4.27	121.75
P-01	14-Nov-22	126.02	7.05	118.97
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	3.1	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
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	3.2	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	9.2	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-02	18-Apr-22	124.02	3.41	120.61
P-02	14-Nov-22	124.02	6.1	117.92

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-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	4.2	119.43
P-03[q]	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
P-03	18-Apr-22	123.89	6.87	117.02
P-03	14-Nov-22	123.89	10.41	113.48
PW-1	30-Apr-12	151.71	21.38	130.33
PW-1	12-Nov-12	151.71	41.8	109.91
PW-1	8-Apr-13	151.71	20.8	130.91
PW-1	18-Nov-13	151.71	22.47	129.24
PW-1	28-Apr-14	151.71	20.2	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	36.9	114.81
PW-1	7-Nov-17	151.71	56.8	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
PW-1	18-Apr-22	151.71	16.85	134.86
PW-1	14-Nov-22	151.71	24.92	126.79

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-05A	30-Apr-12	140.70	4.2	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	3.6	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	NR	---
P-05A	12-Apr-21	140.74	3.77	136.97
P-05A	15-Nov-21	140.74	NR	---
P-05A	18-Apr-22	140.74	2.83	137.91
P-05A	14-Nov-22	140.74	NR	---
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
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	11.6	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-06A	18-Apr-22	131.58	4.55	127.03
P-06A	14-Nov-22	131.58	6.13	125.45

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-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	21.2	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
P-07A	18-Apr-22	147.90	10.65	137.25
P-07A	14-Nov-22	147.90	8.07	139.83
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	1.4	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
GT10-1	15-Nov-16	145.56	9.6	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	14.8	130.76
GT10-1	22-Apr-19	145.56	1.07	144.49
GT10-1	18-Nov-19	145.56	10.8	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
GT10-1	18-Apr-22	145.56	1.4	144.16
GT10-1	14-Nov-22	145.56	11.48	134.08

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)
GT10-11	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	14.4	135.68
GT10-11	28-Apr-14	150.08	3.32	146.76
GT10-11	17-Nov-14	150.08	18	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	24.3	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
GT10-11	18-Apr-22	150.08	2.62	147.46
GT10-11	14-Nov-22	150.08	22.75	127.33
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	6.1	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	149.41
GT10-12	7-Nov-17	152.41	14.5	137.91
GT10-12	24-Apr-18	152.41	3.07	149.34
GT10-12	5-Nov-18	152.41	22.8	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
GT10-12	18-Apr-22	152.41	3.56	148.85
GT10-12	14-Nov-22	152.41	18.37	134.04

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-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	8.4	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-1	18-Apr-22	155.21	7.28	147.93
SA-BH-1	14-Nov-22	155.21	16.7	138.51
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
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-3	18-Apr-22	155.07	7.18	147.89
SA-BH-3	14-Nov-22	155.07	19.24	135.83

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-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	15.7	135.31
SA-BH-5	18-Nov-13	151.01	18.29	132.72
SA-BH-5	28-Apr-14	151.01	13.6	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	27.2	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	11.9	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-5	18-Apr-22	151.01	12.78	138.23
SA-BH-5	14-Nov-22	151.01	15.8	135.21
SA-BH-6	30-Apr-12	125.93	12.6	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
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
SA-BH-6	18-Apr-22	125.93	11.93	114.00
SA-BH-6	14-Nov-22	125.93	14.87	111.06

Table A-1
Groundwater Elevations
Riverbend Landfill

Monitoring Location	Date	Reference Elevation [a] (ft-msl)	Depth to Water (ft-bgs)	Groundwater Elevation (ft-msl)

NOTE:

This table includes the last 10 years of groundwater elevation data. Earlier data can be found in previous 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.

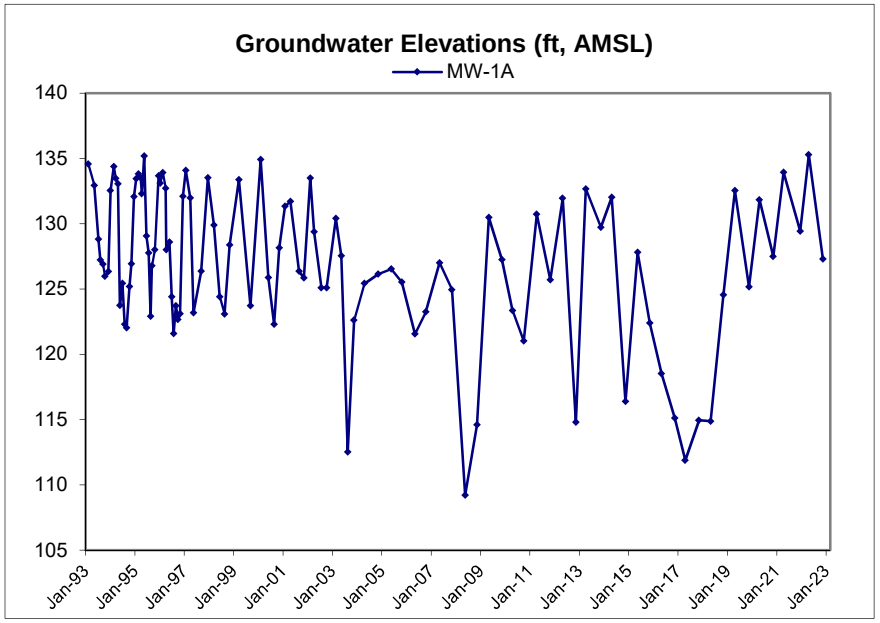
[c] MW-5B re-surveyed in October 2012 after repair to the well casing was completed.

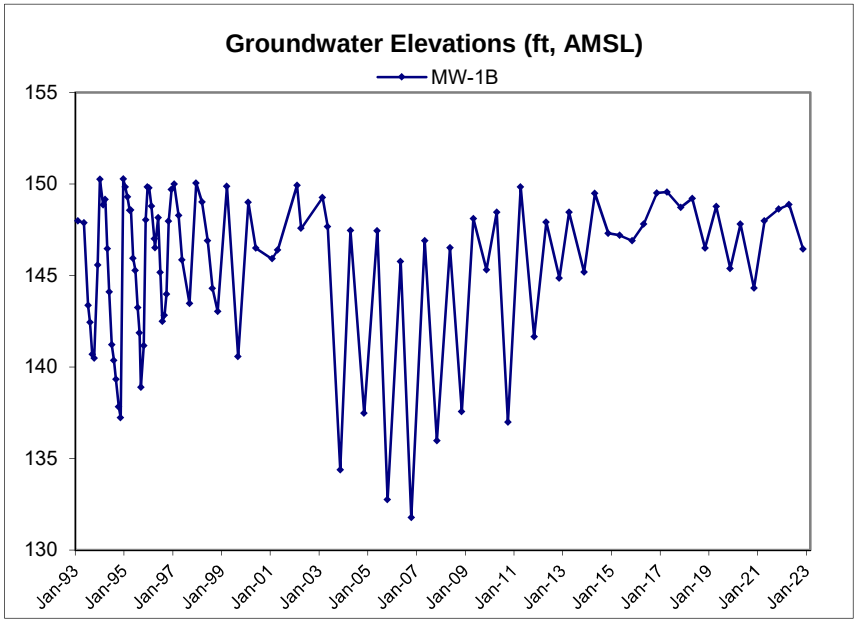
[d] MW-12A, MW-12B, MW-6A, P-01, P-02, and P-03 were re-surveyed in July 2017.

[e] Based on review of historical data, it appears that MW-5A and MW-5B water levels were switched on the field sheets during the fall 2022 monitoring event. The water levels were corrected prior to calculating elevations.

Hydrographs

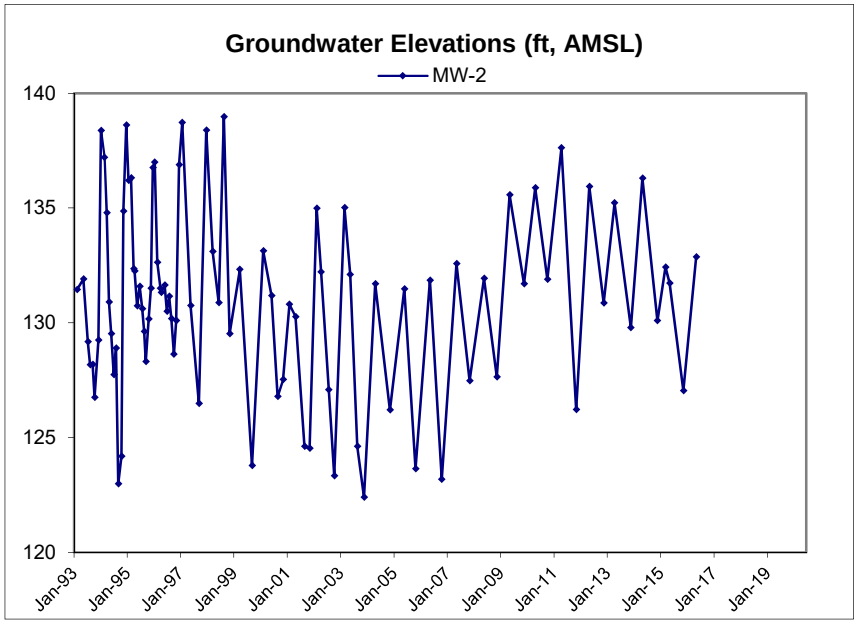
Appendix A - Hydrographs
Riverbend Landfill
(Groundwater elevations measured in feet above mean sea level.)

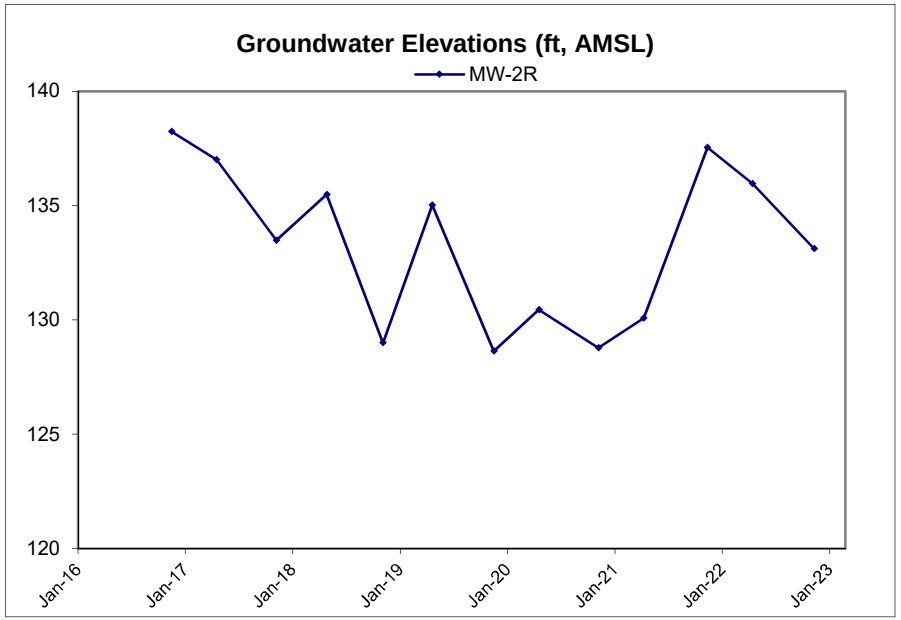


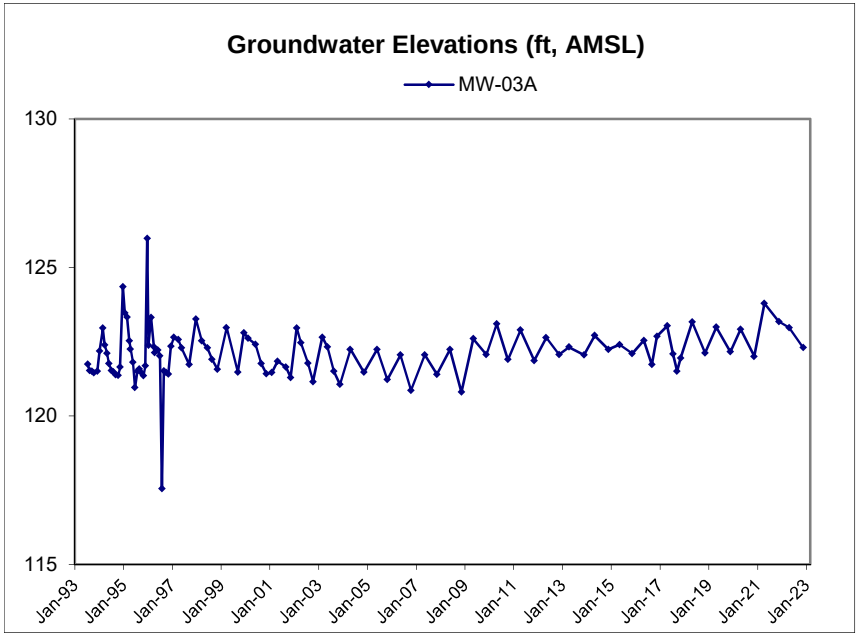


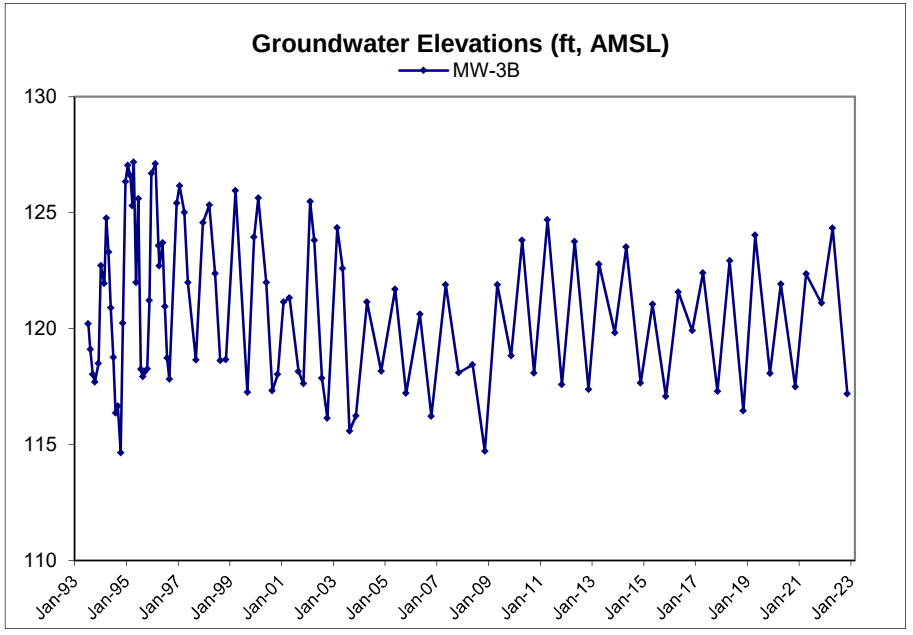
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)

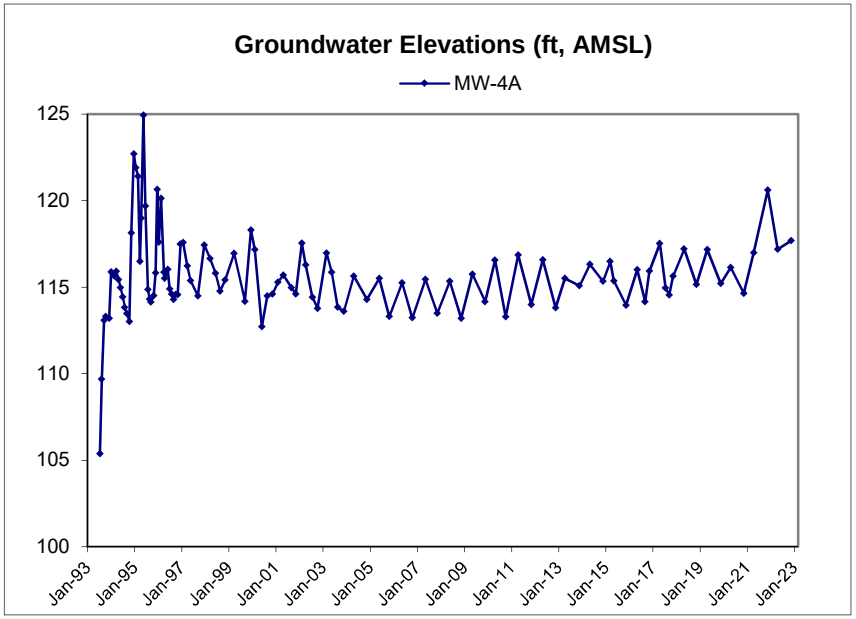


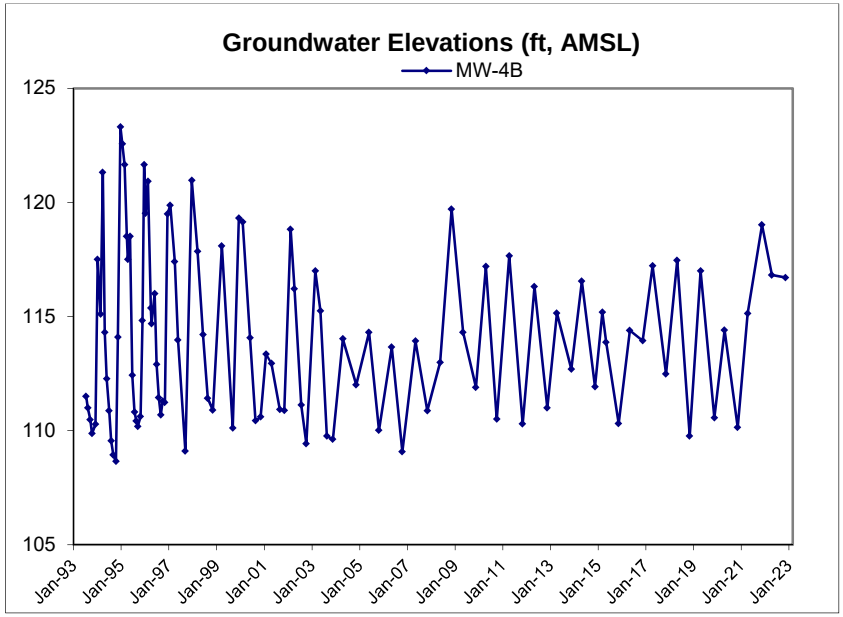


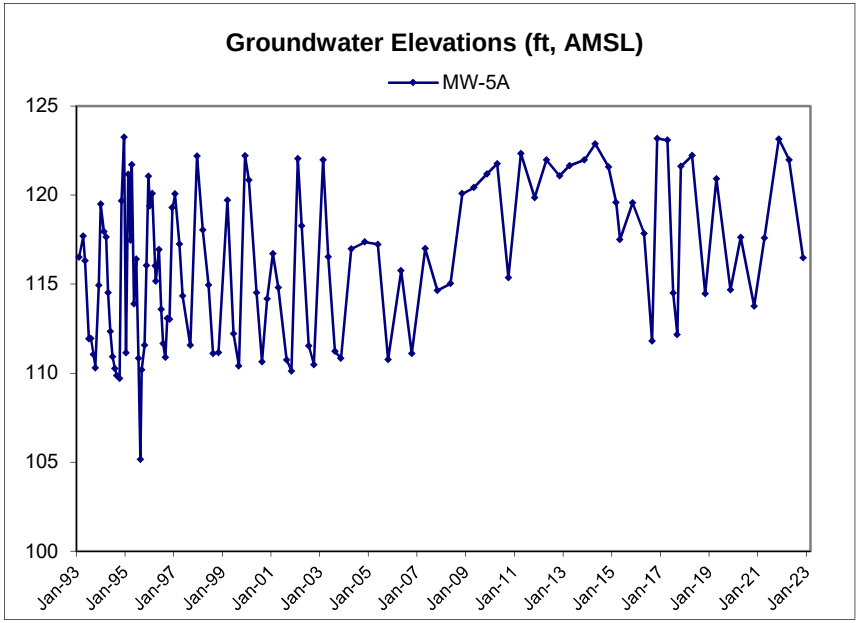


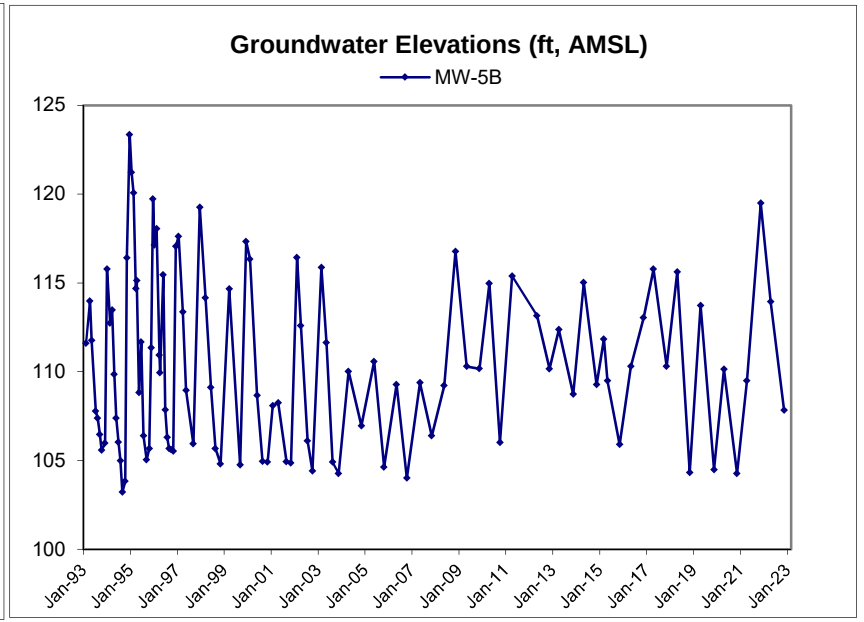


Appendix A - Hydrographs
Riverbend Landfill
(Groundwater elevations measured in feet above mean sea level.)



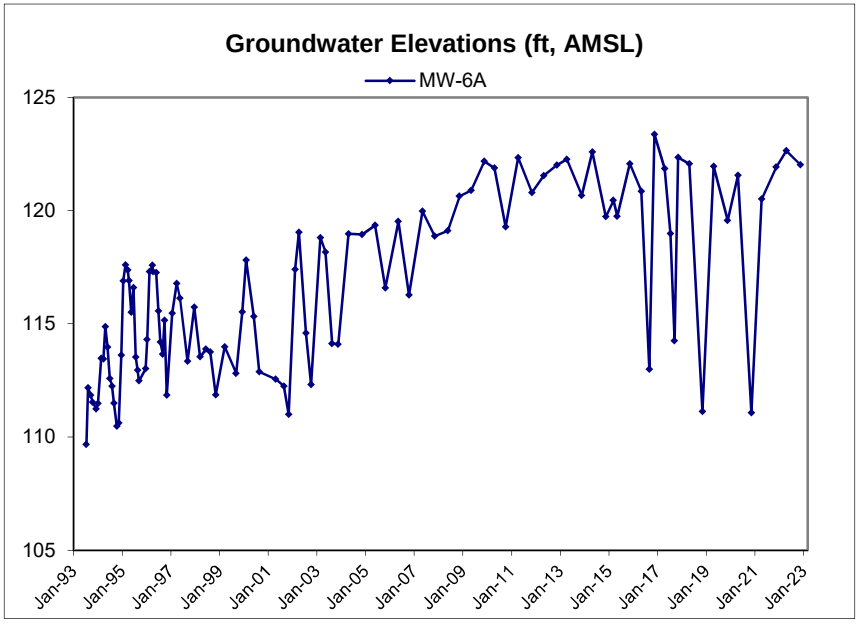


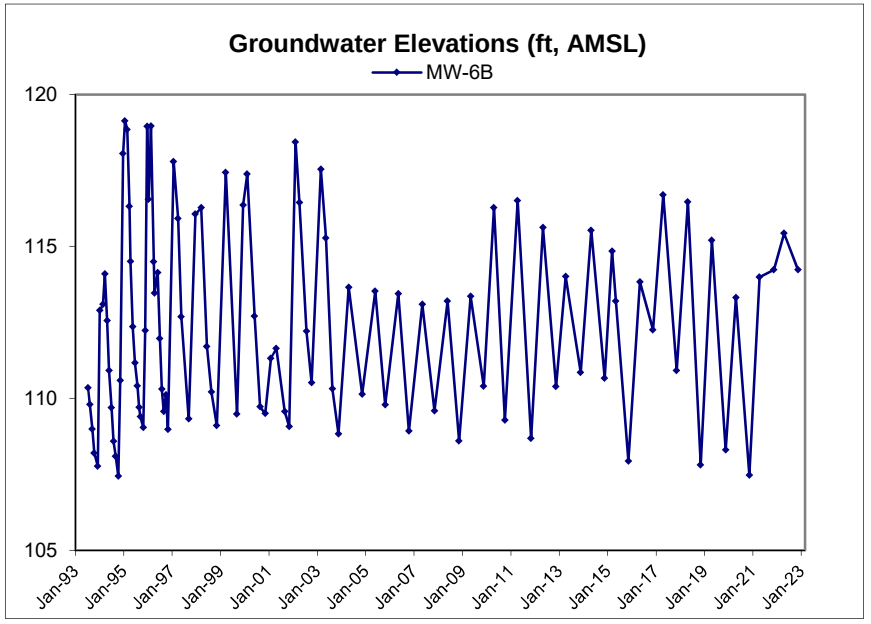


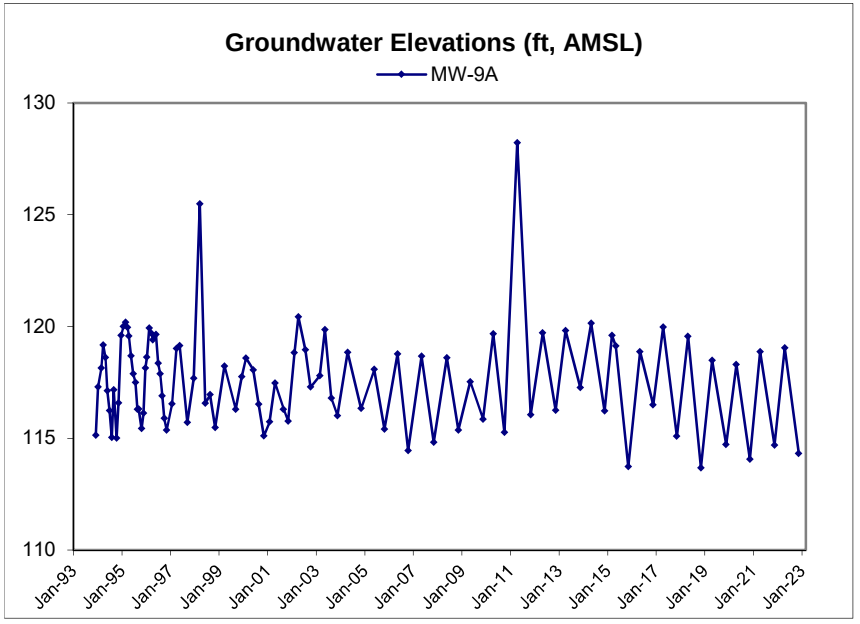


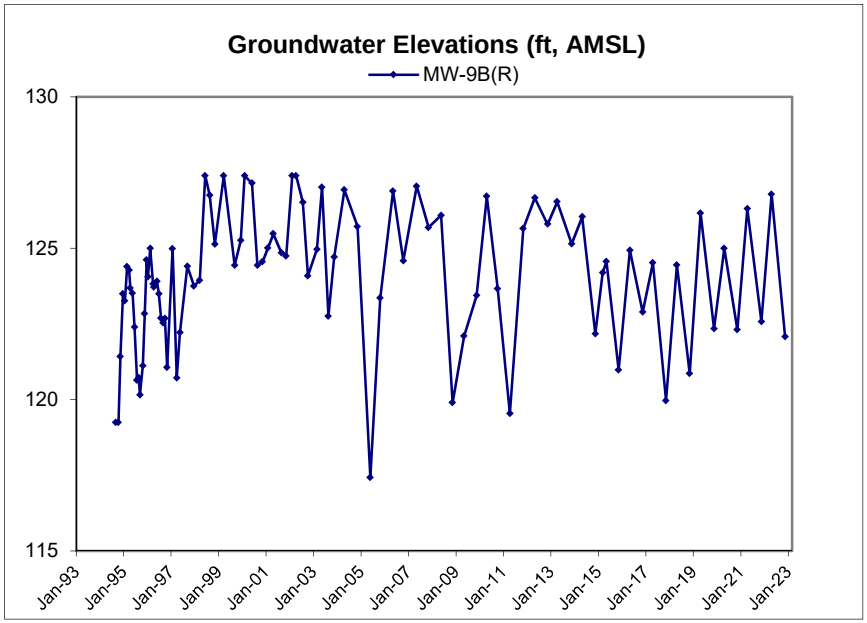
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)



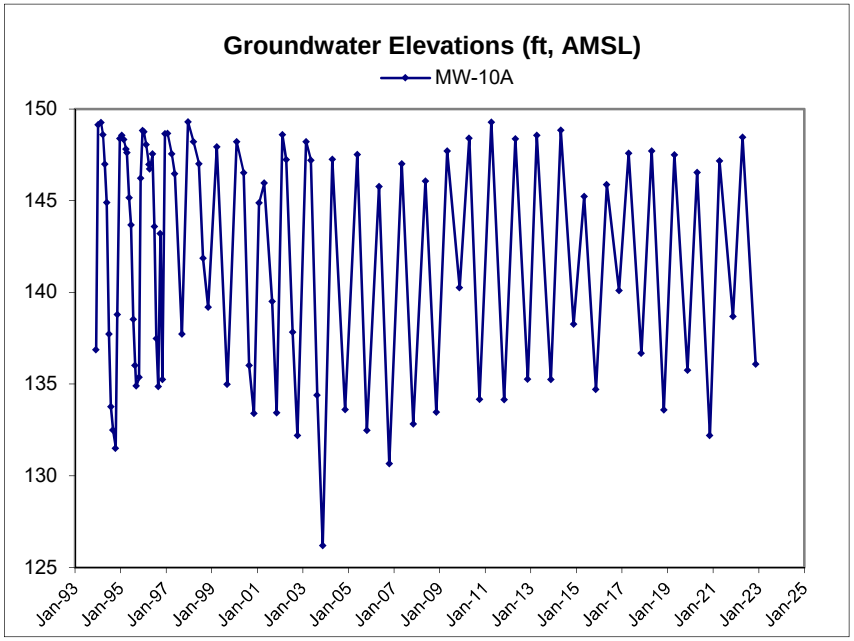


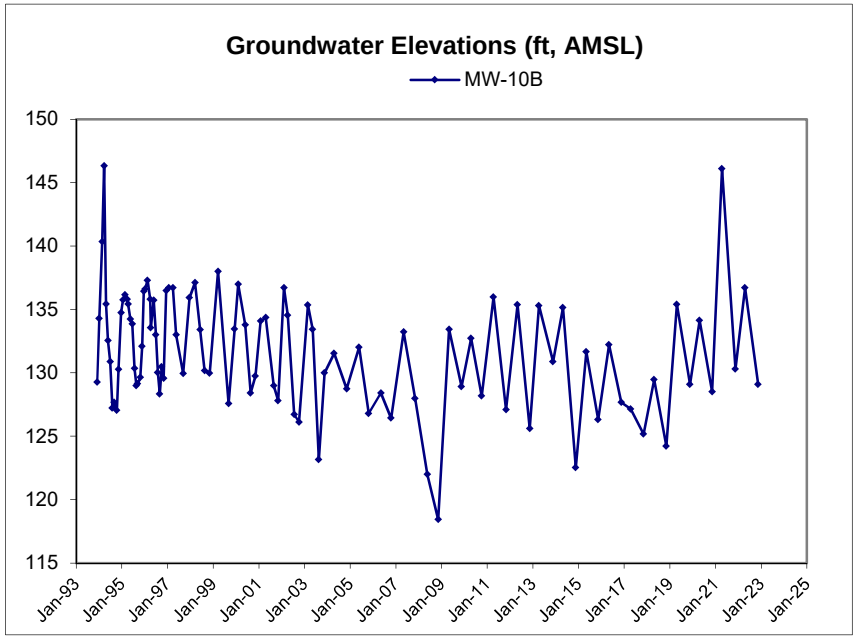


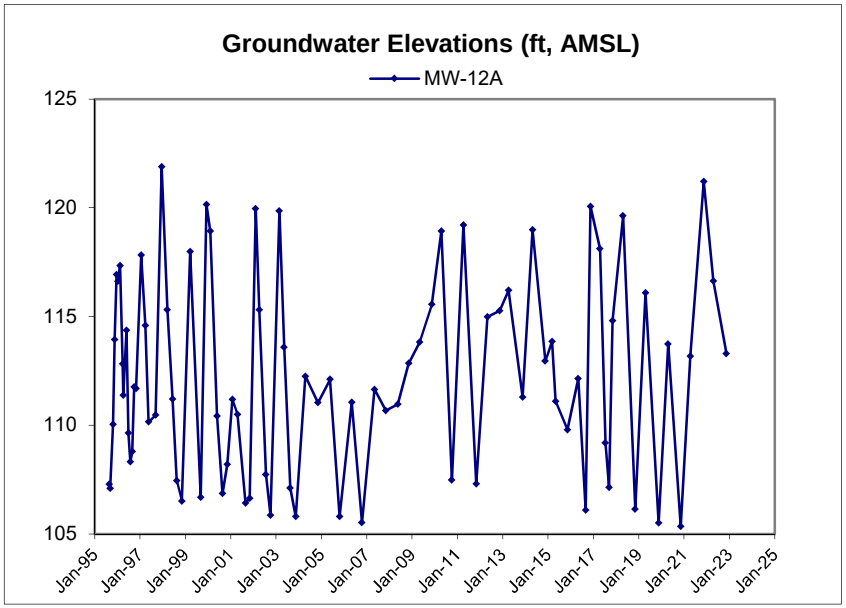


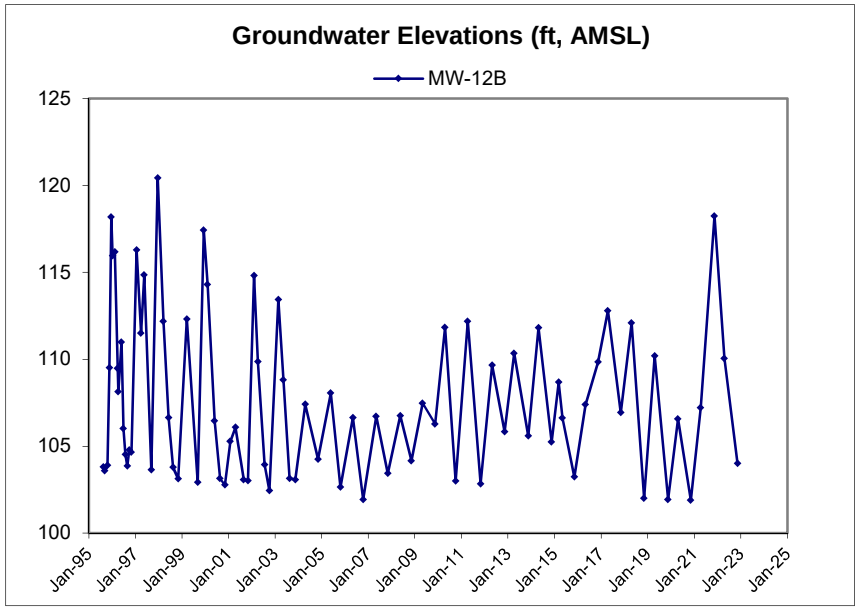
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)

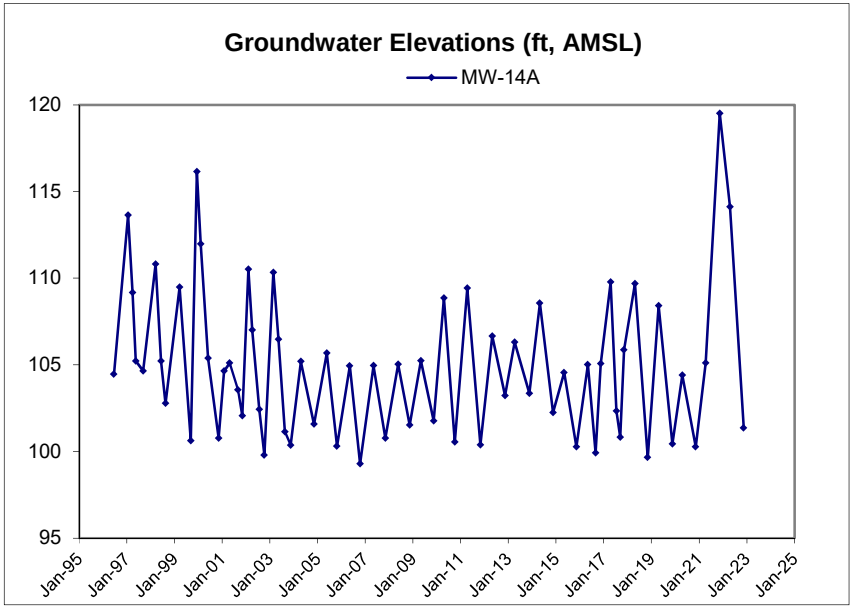


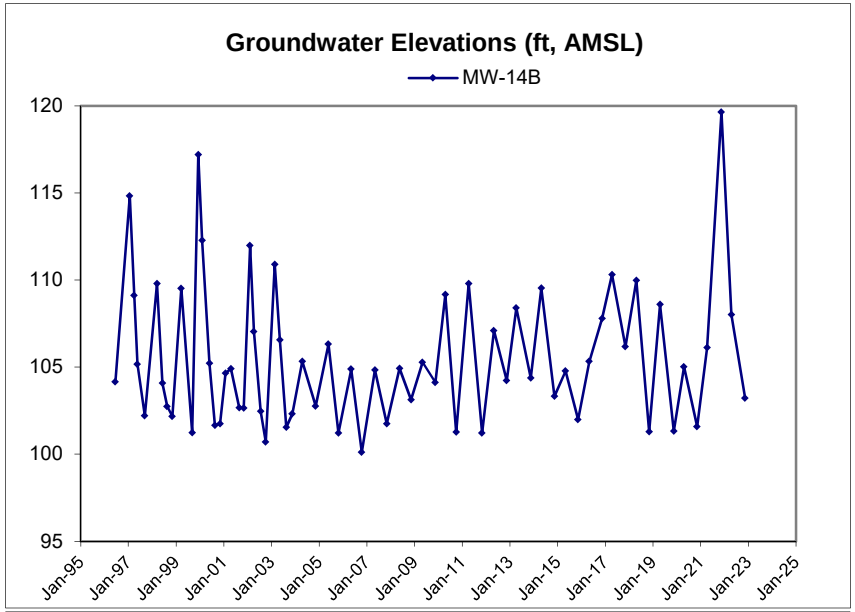


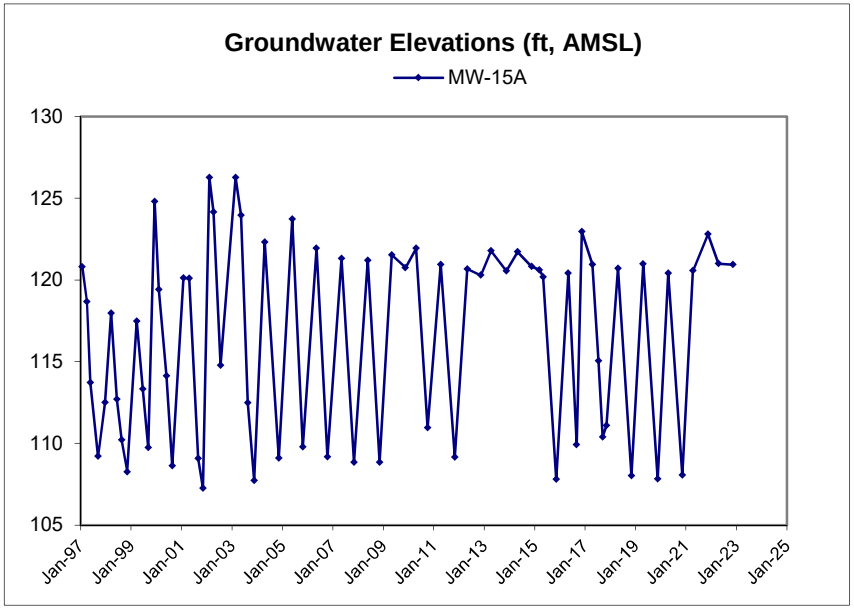


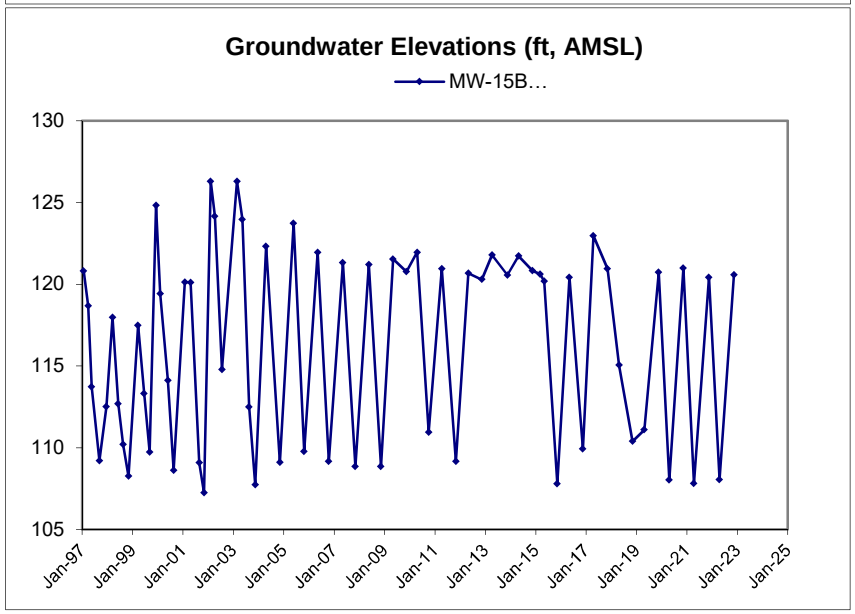


Appendix A - Hydrographs
Riverbend Landfill
(Groundwater elevations measured in feet above mean sea level.)



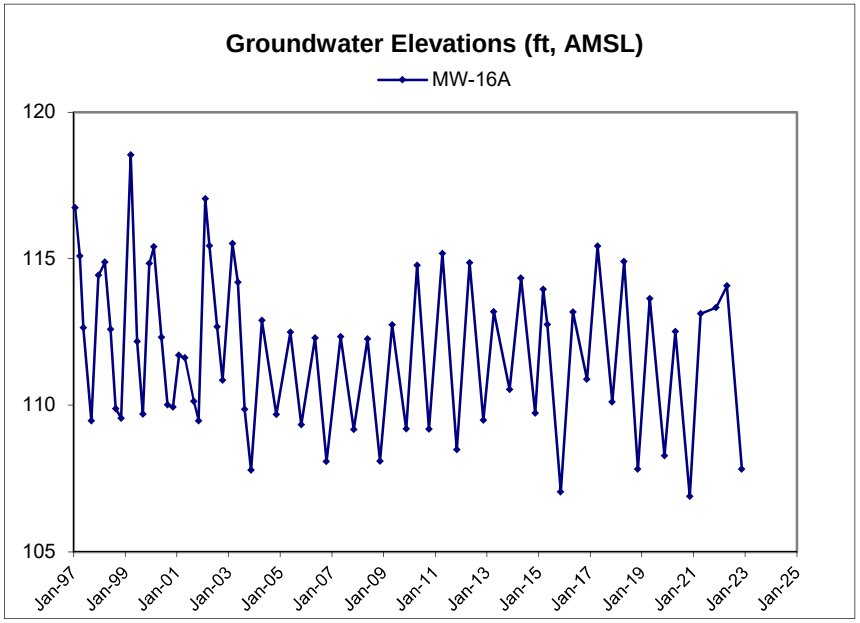


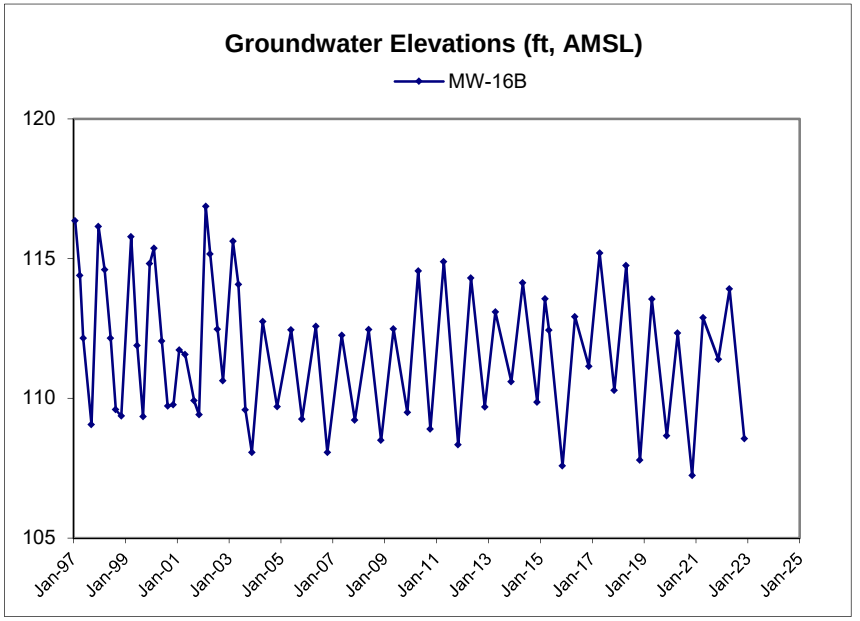


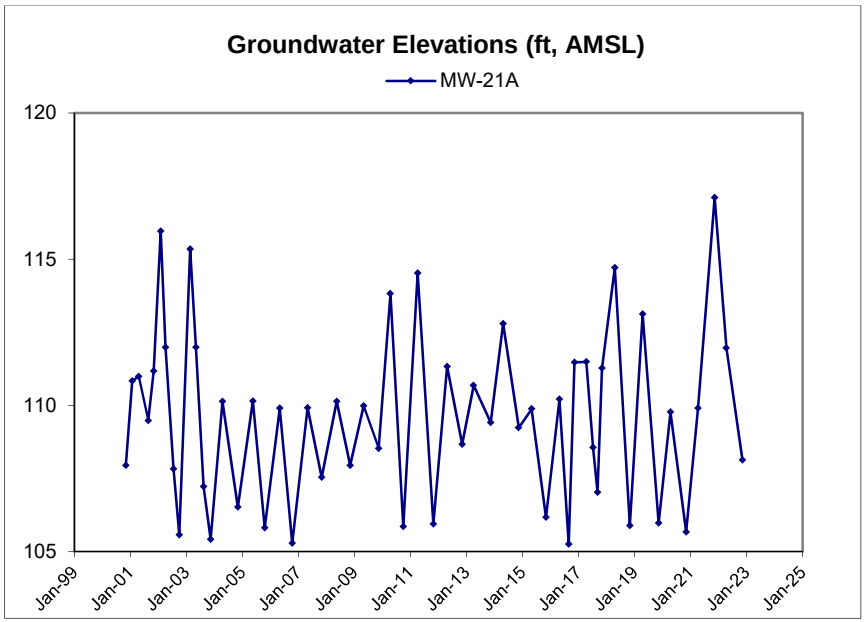


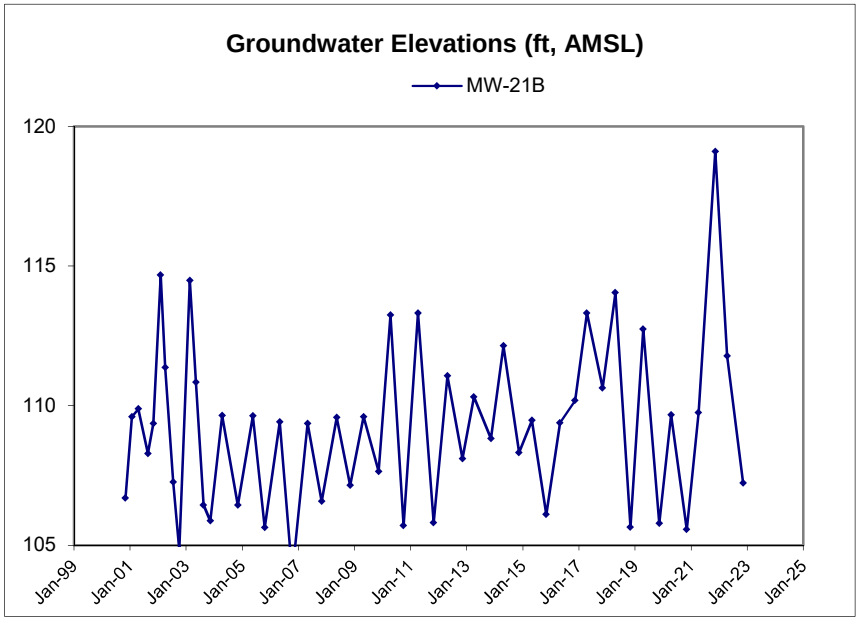
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)



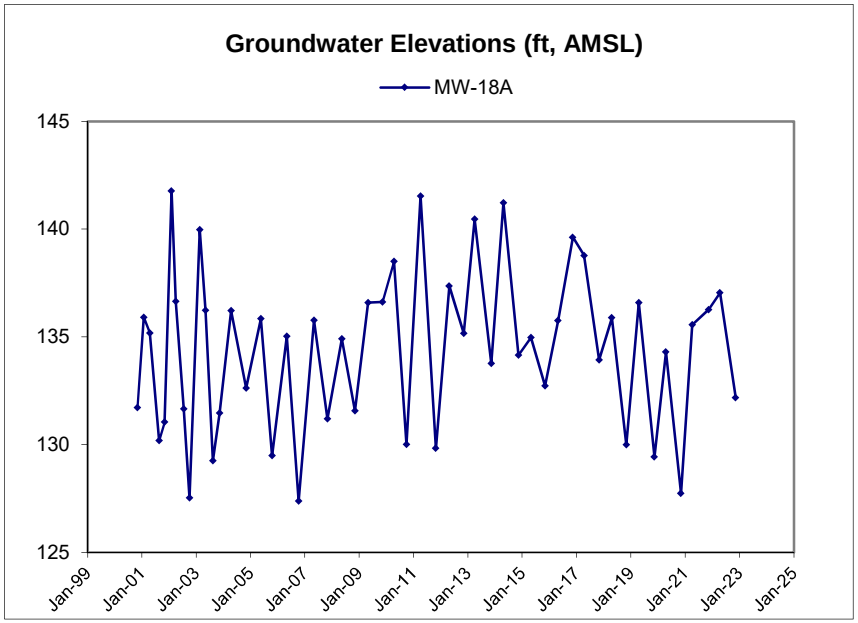


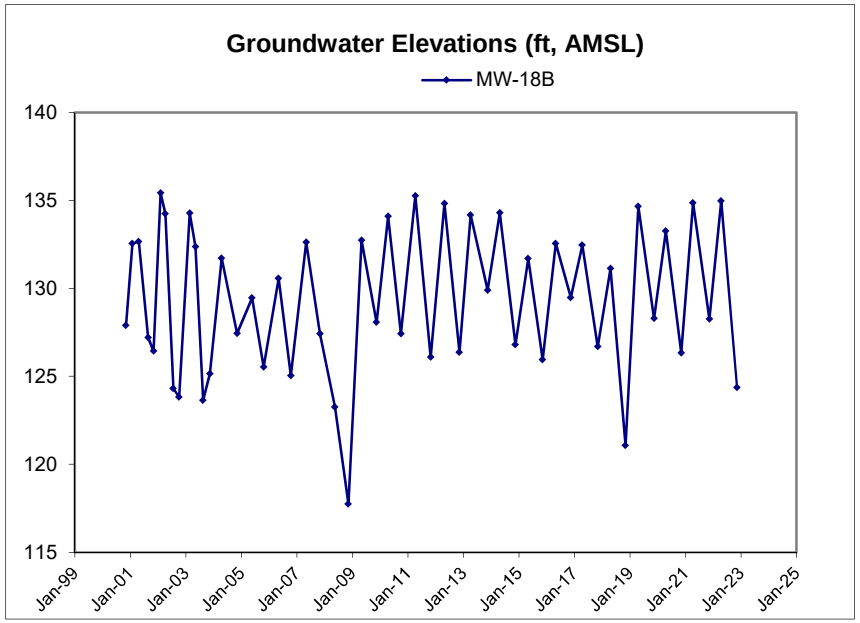


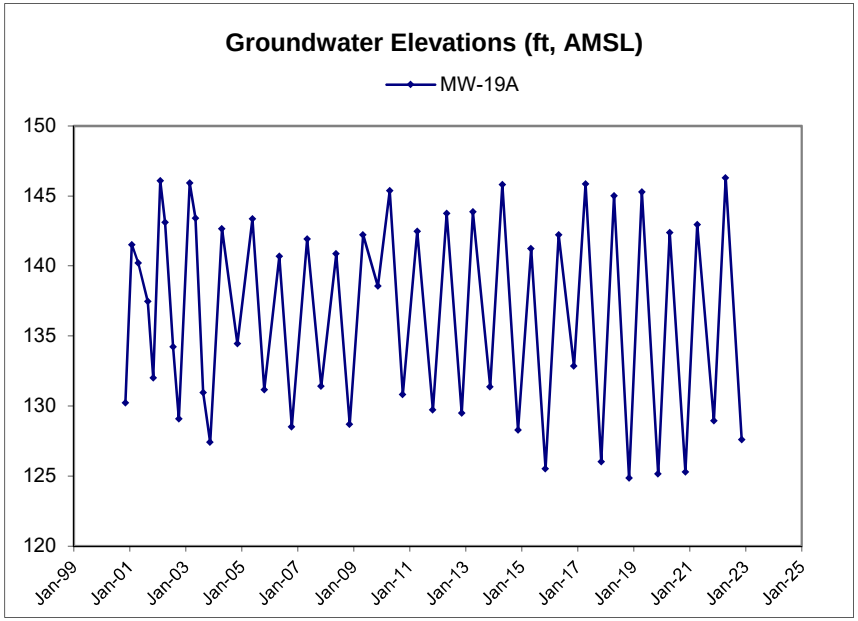


Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)

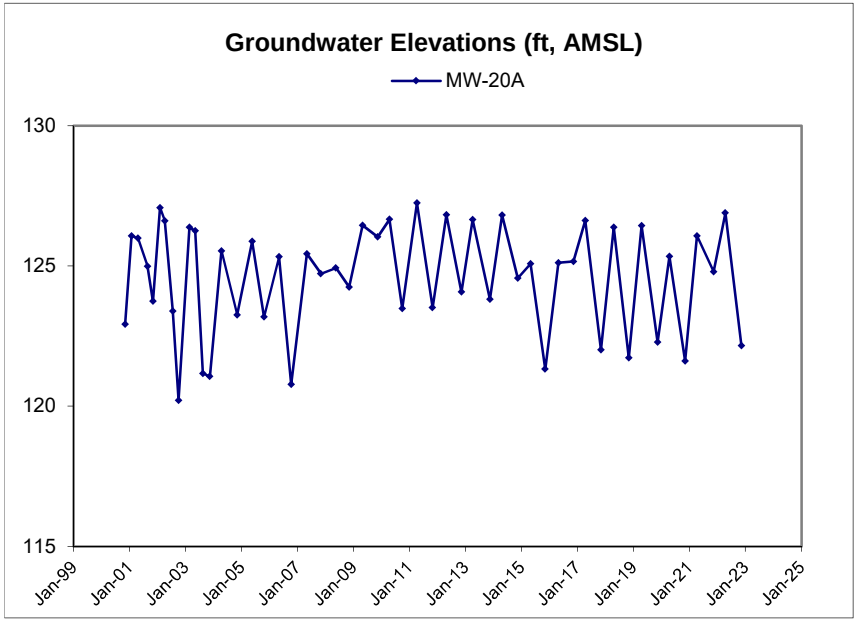


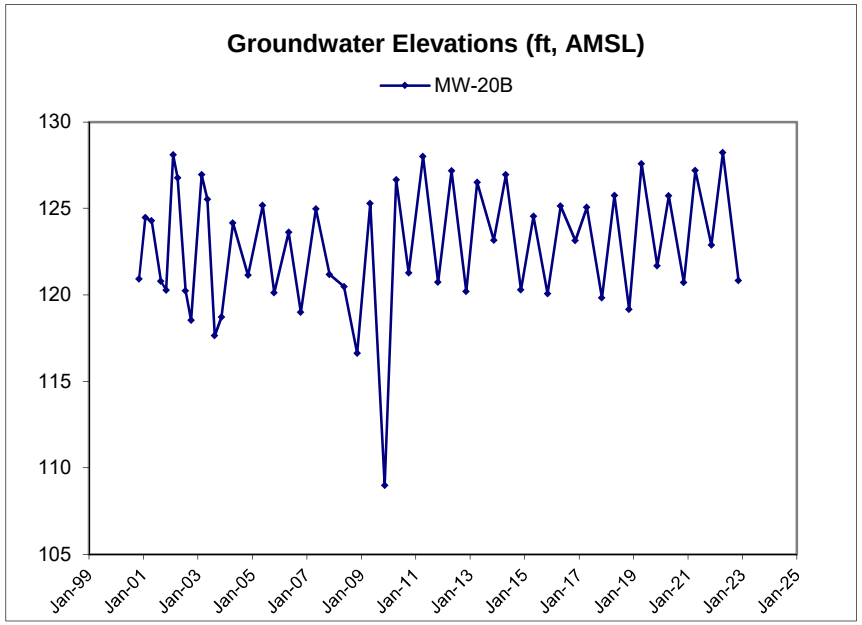


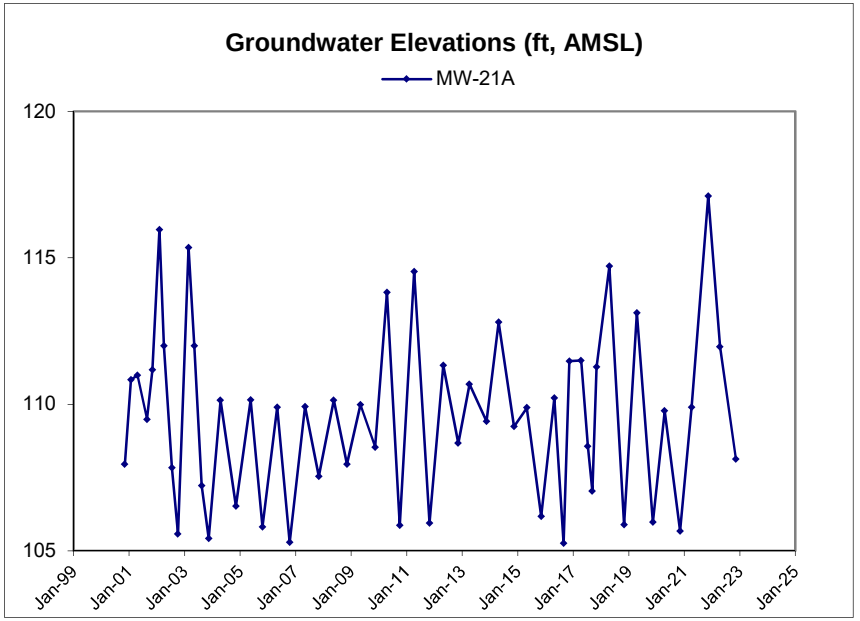


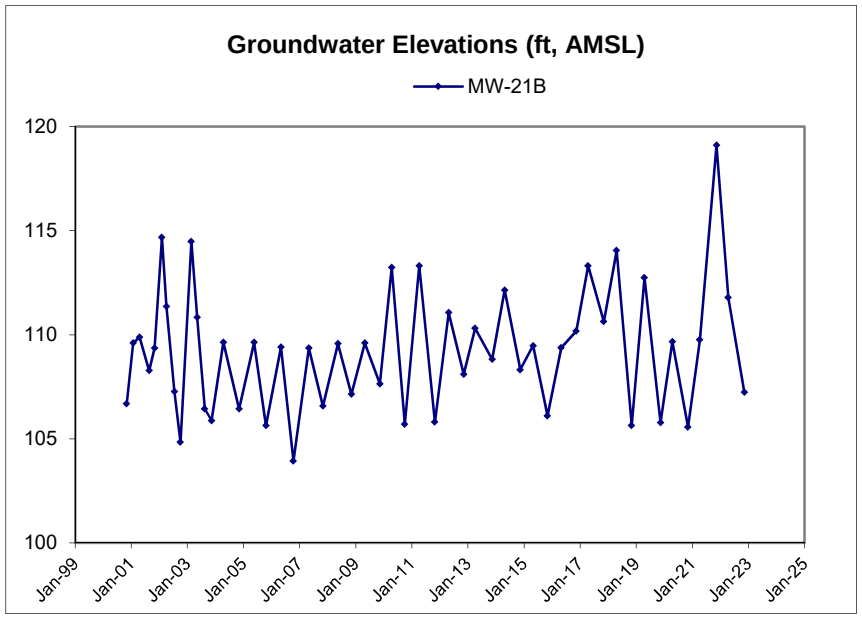
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)



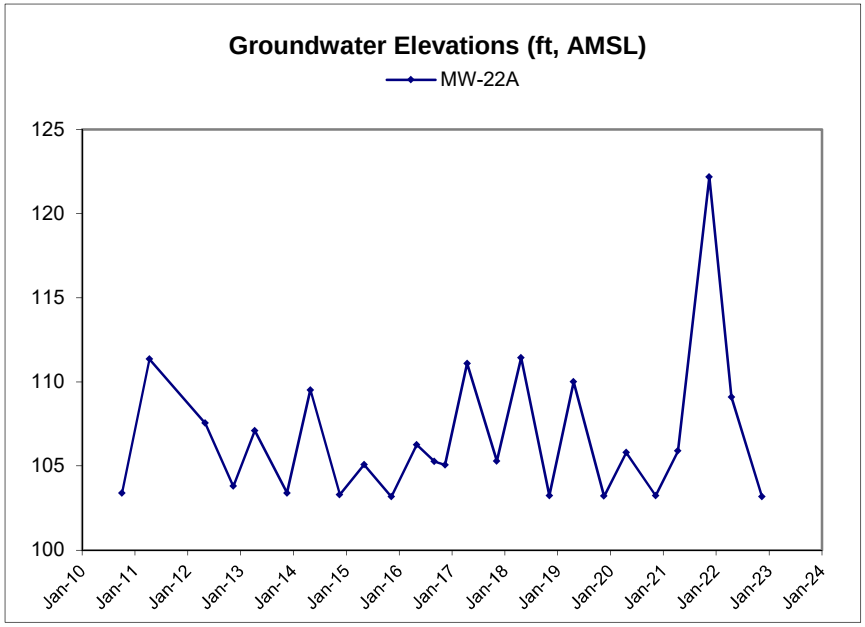


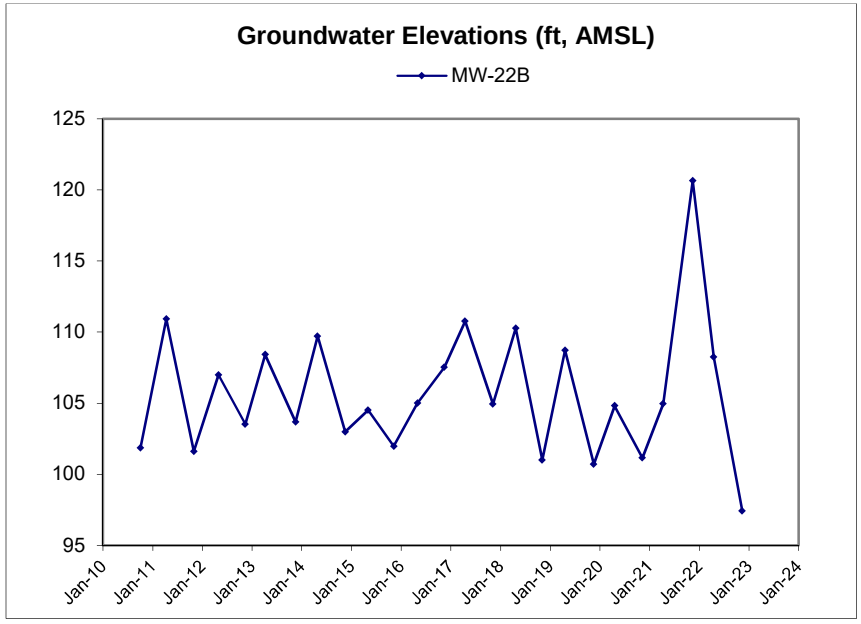


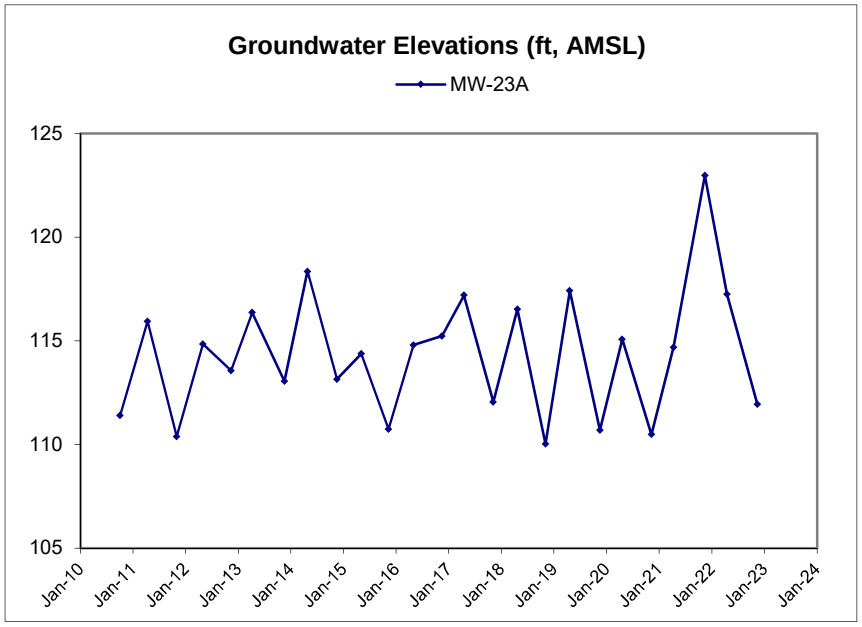


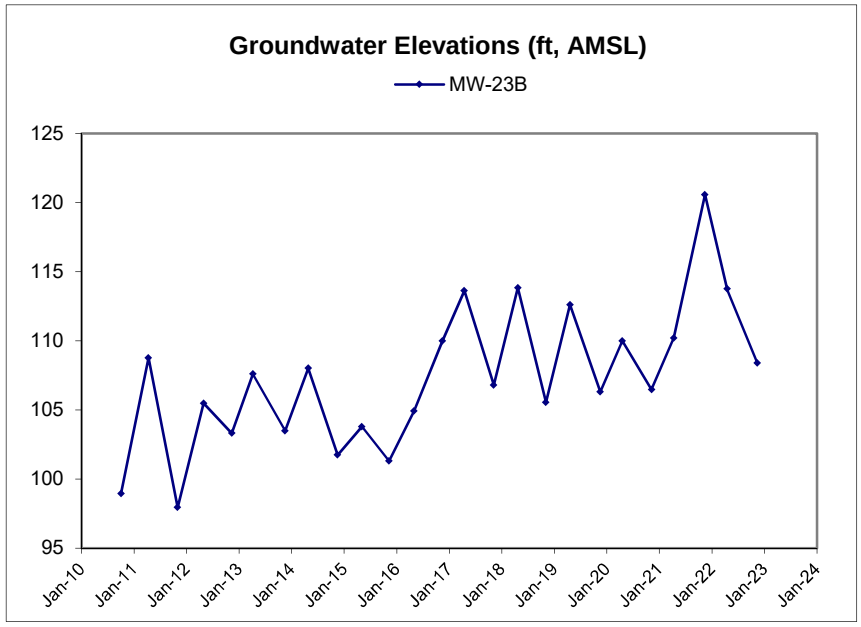
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)



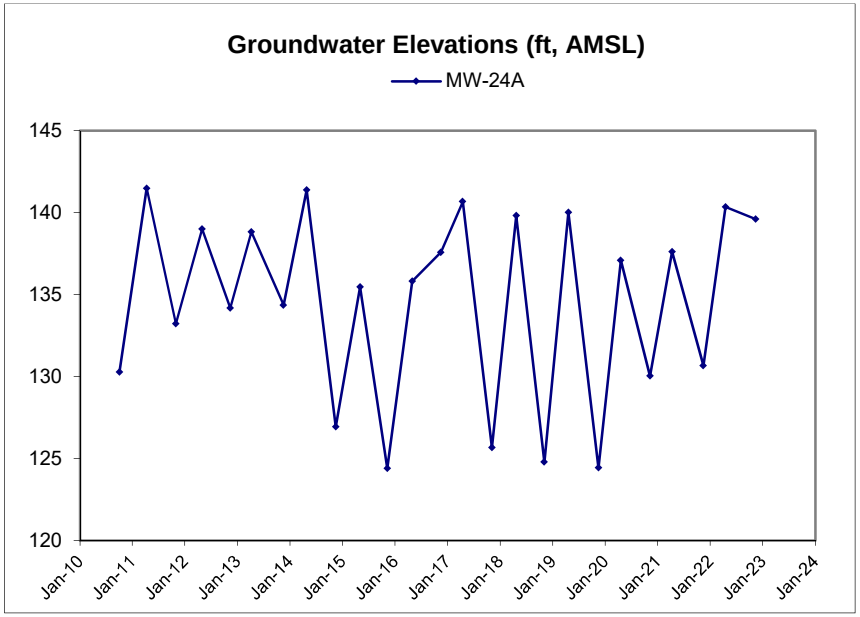


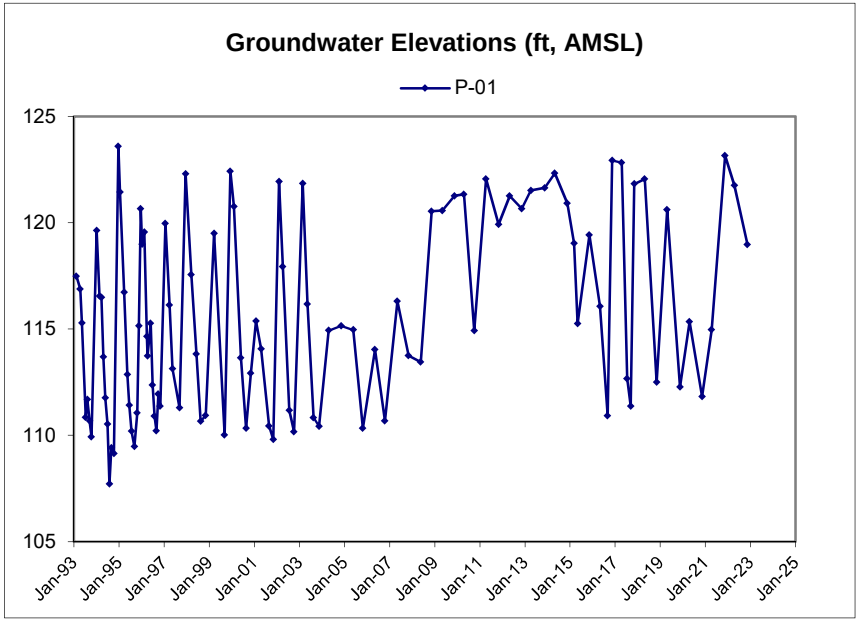


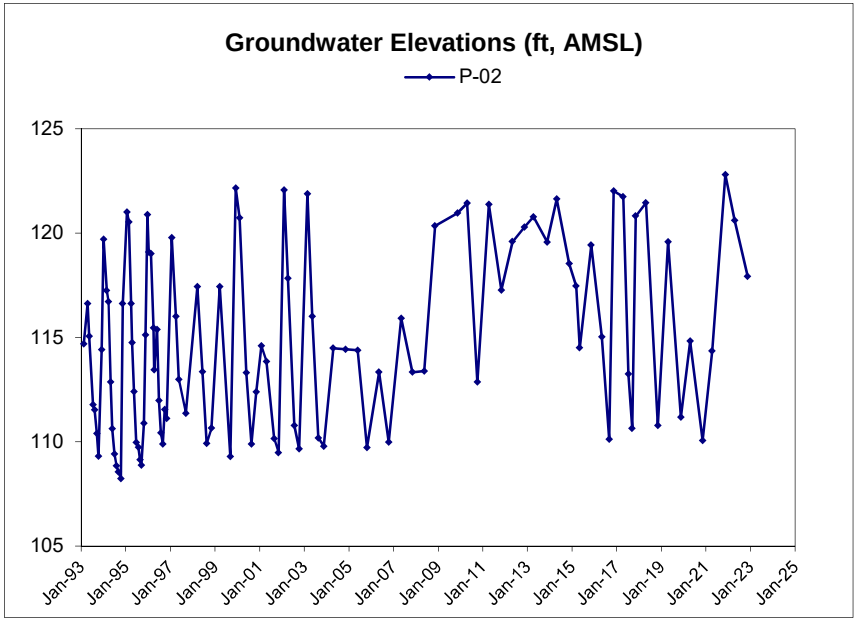


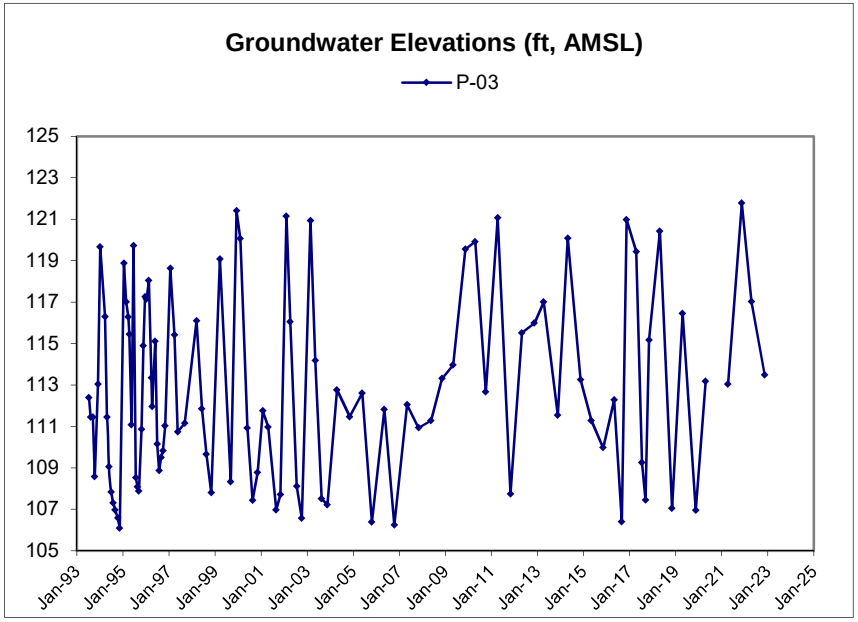
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)



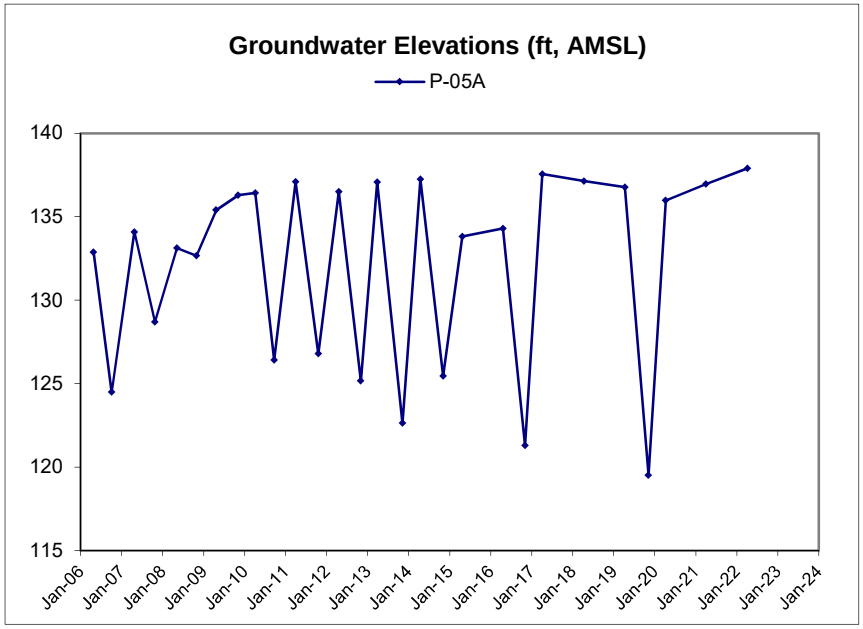


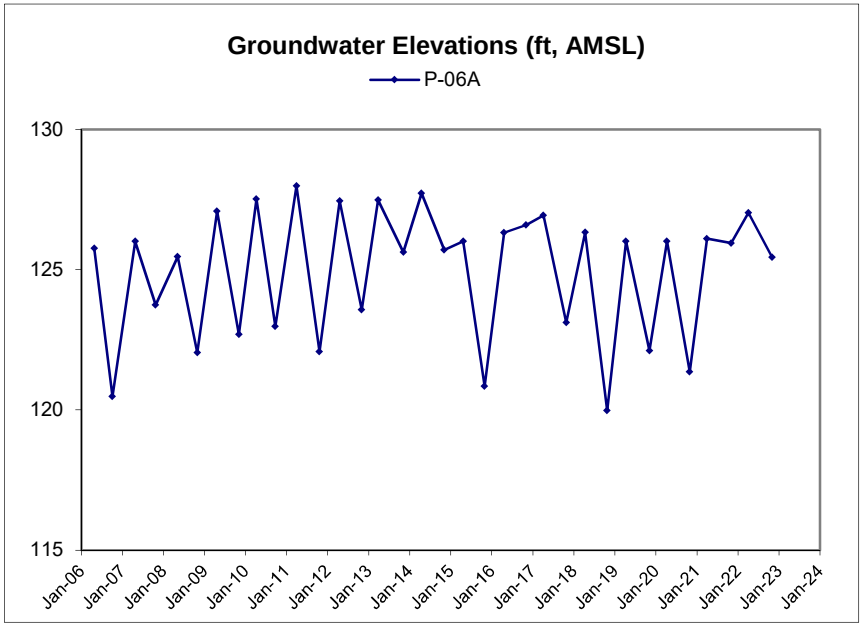


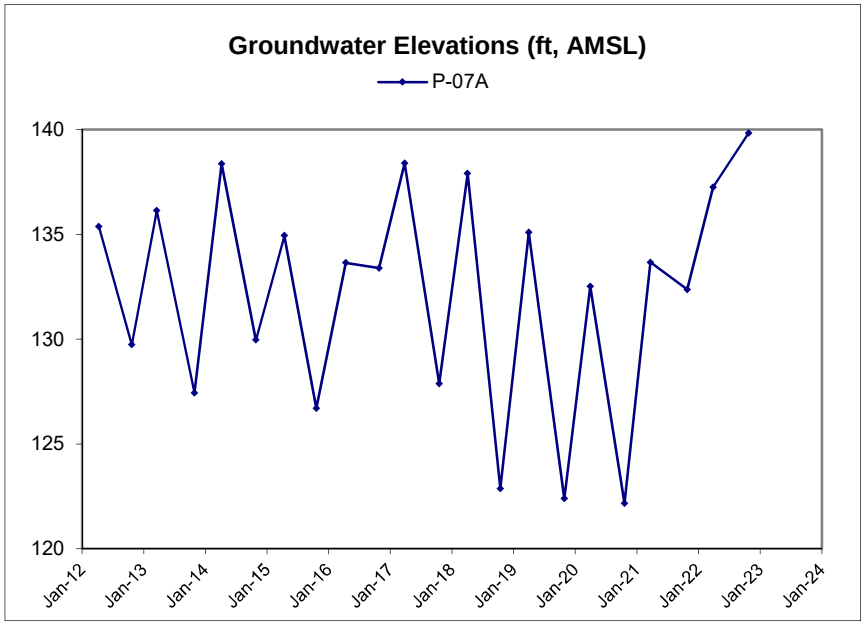


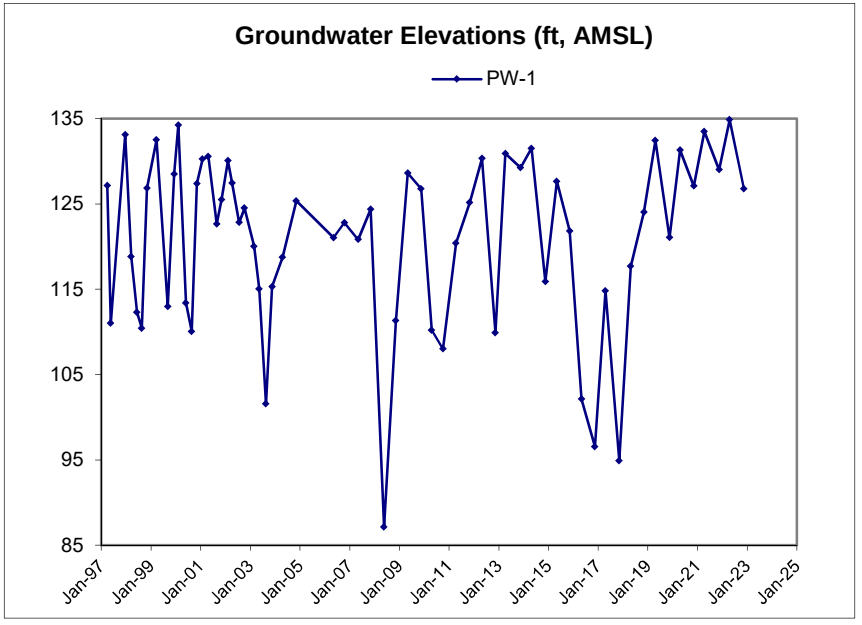
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)

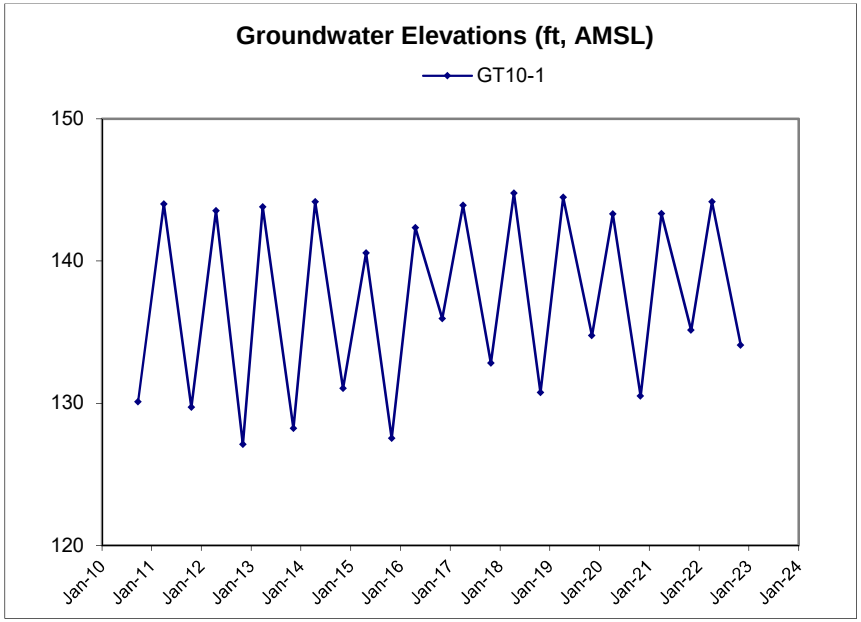


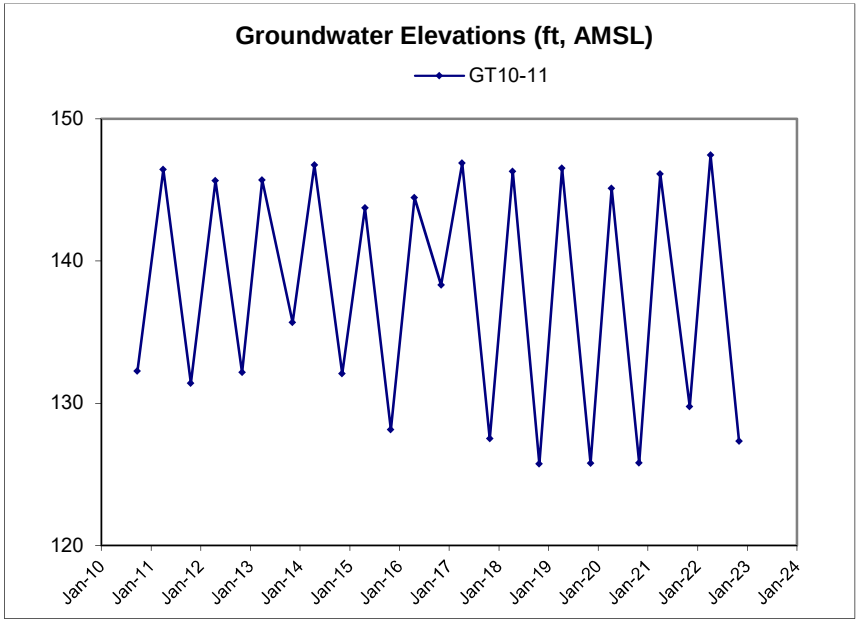


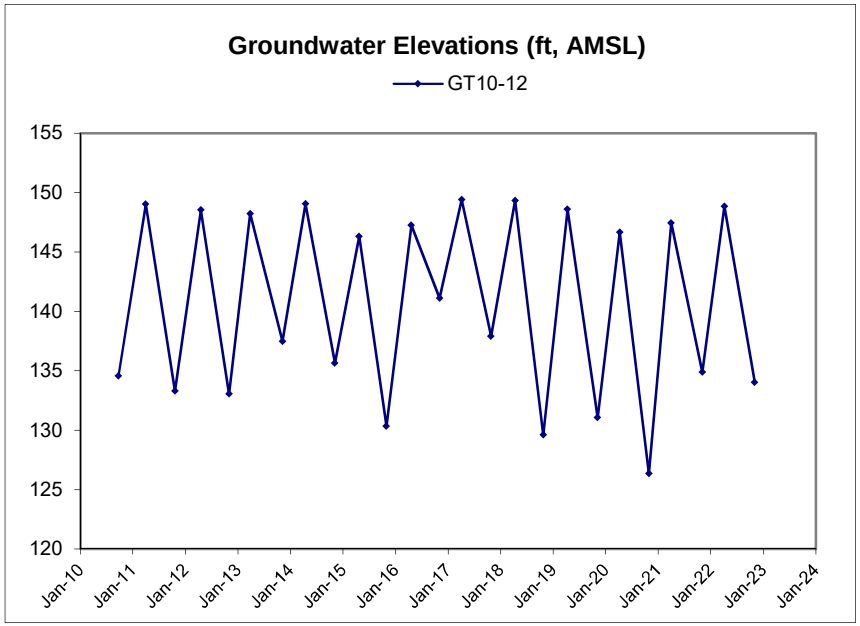




Appendix A - Hydrographs
Riverbend Landfill
(Groundwater elevations measured in feet above mean sea level.)

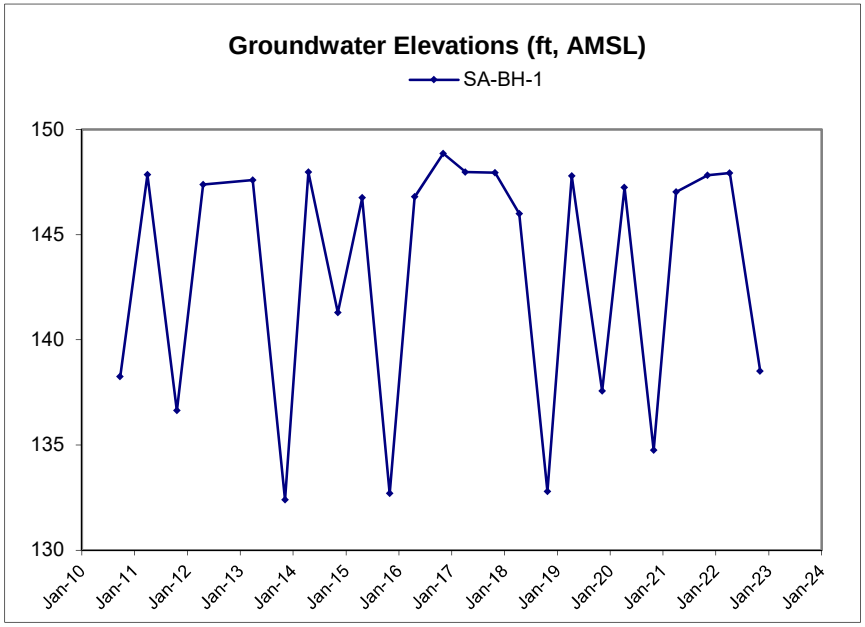


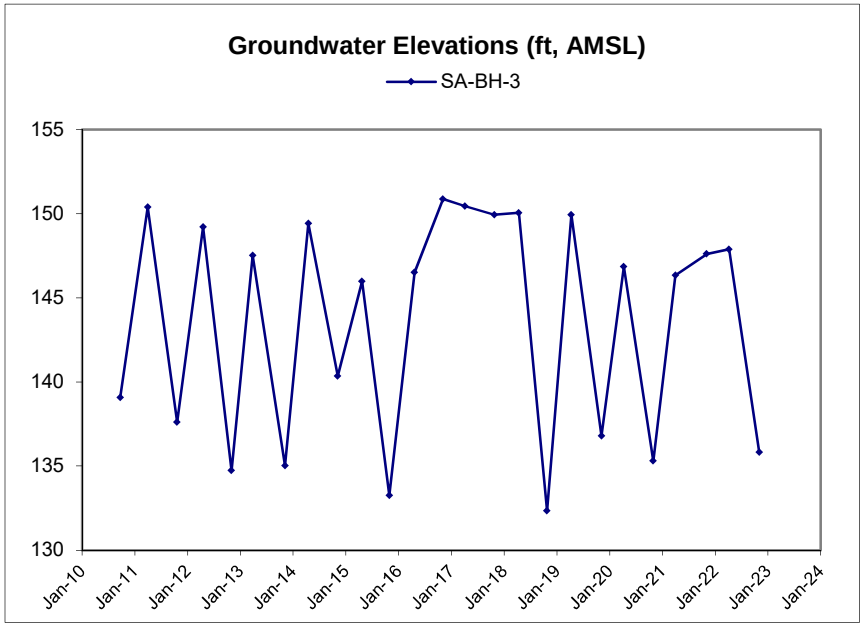


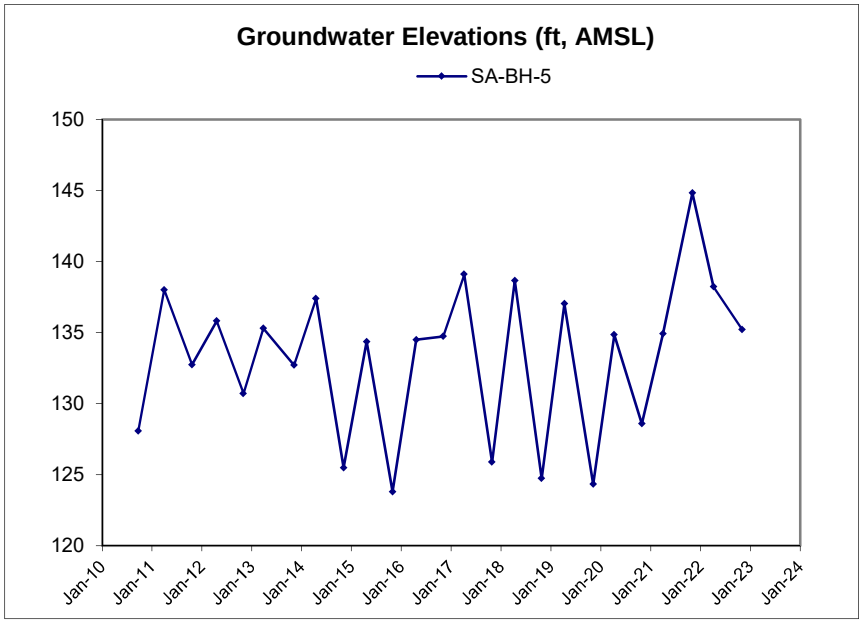


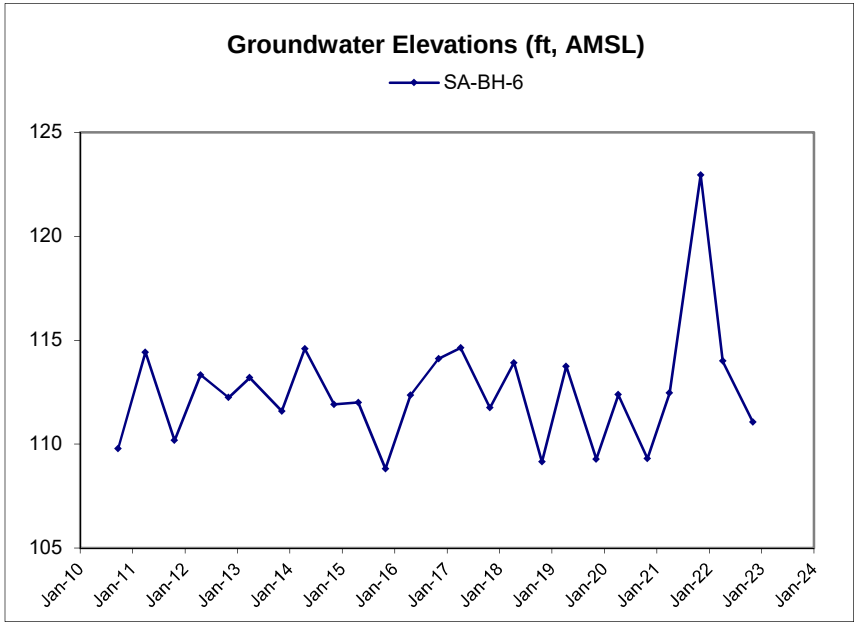
Appendix A - Hydrographs
Riverbend Landfill

(Groundwater elevations measured in feet above mean sea level.)









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 (oC)	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	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-5A	20-Apr-22	5.80	22.7	1,290	13.9	0.60
MW-5A[a]	17-Nov-22	7.17	26.5	614	14.1	2.11
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-5B	20-Apr-22	7.06	-54.7	615	14.0	0.78

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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 Re	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 Re	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 Re	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-12A	21-Apr-22	5.91	196.2	440.3	9.4	3.20
MW-12A	15-Nov-22	5.97	175.3	486.9	10.8	10.59
MW-12A Re	13-Jan-23	6.17	182.8	374.4	11.1	4.95
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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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	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
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-12B	21-Apr-22	7.06	-44.1	595	10.7	3.22
MW-12B	15-Nov-22	7.10	128.5	747	10.8	0.51
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 Re	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	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	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	17-Nov-21	6.17	197.8	300	11.6	6.70
MW-14A	22-Apr-22	6.02	96.3	325	10.2	1.40
MW-14A	5-Jan-23	5.90	260.9	308.6	10.5	4.83
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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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	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
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-14B	22-Apr-22	7.22	-16.3	543.5	10.9	0.80
MW-14B	15-Nov-22	7.15	158.4	525.3	10.7	0.63
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 Re	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 Re	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	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	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	17-Nov-21	6.21	201.5	197	14.8	9.63
MW-15A	19-Apr-22	6.15	177.2	149.8	12.3	7.11
MW-15A	5-Jan-23	6.07	262.5	167.1	13.4	8.08
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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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	24-Apr-19	6.93	242.9	583	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
MW-15B	15-Apr-21	6.71	19.8	642	13.4	0.45
MW-15B	17-Nov-21	6.98	13.7	865	13.5	0.59
MW-15B	20-Apr-22	6.73	16.7	537	12.2	0.71
MW-15B	15-Nov-22	6.98	144.1	707	13.1	0.48
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 Re	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	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	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	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	17-Nov-21	6.44	180.2	448	12.4	9.54
MW-16A	19-Apr-22	6.18	117.4	326.8	12.0	9.42
MW-16A	16-Nov-22	6.03	169.4	404.2	11.3	6.08
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 Re	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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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	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
MW-16B	17-Nov-21	7.00	-1.3	1,281	11.9	1.48
MW-16B	19-Apr-22	6.82	-10.3	1,135	12.0	0.71
MW-16B	15-Nov-22	6.95	224.1	1,052	12.1	0.74
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-19A	22-Apr-22	7.42	-60.6	341.4	11.6	0.78
MW-19A	17-Nov-22	7.53	28.0	299.9	11.4	3.30
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
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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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	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-20A	19-Apr-22	6.64	-3.8	1,017	10.5	0.35
MW-20A	16-Nov-22	6.71	88.0	955	12.3	0.37
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-20B	19-Apr-22	7.05	131.7	651.4	10.8	0.50
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 Re	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	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	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	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-21A	21-Apr-22	6.12	223.3	316.5	11.6	0.91
MW-21A	15-Nov-22	6.08	134.7	318.6	13.9	10.46
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 (oC)	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-21B[b]	1-Jun-22	6.72	250.1	524.1	13.1	0.66
MW-21B	15-Nov-22	6.75	127.9	472.9	13.1	0.39
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-22A	21-Apr-22	6.04	181.3	288.9	9.9	3.54
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
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-05A	19-Apr-22	6.81	60.7	946	9.8	0.51
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

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

Monitoring Location	Sample Date	pH (S.U.)	ORP (mV)	Specific Conductance (µS/cm)	Temperature (oC)	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-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-06A	20-Apr-22	6.56	80.3	931	11.3	2.70
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
P-07A	19-Apr-22	5.93	112.8	181.7	11.6	3.77
P-07A	30-Nov-22	6.83	99.6	314.9	11.1	8.01

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.
Re = resampling event

[a] MW-5B was inadvertently sampled instead of MW-5A in the fall of 2022. The resulting data are consistent with past results from MW-5B.

[b] Delayed sampling of MW-21B during 2Q2022 due to malfunctioning pump in the well. The pump was pulled, fixed, reinstalled and the well sampled.

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.

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 (^{o}C)	Dissolved Oxygen (mg/L)
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
1/5 P	20-Apr-22	7.24	75.2	9,524	20.1	0.74
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
4/5 S	20-Apr-22	6.44	3.7	1,552	27.6	2.76
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 P	20-Apr-22	7.32	-20.9	11,177	21.6	1.12
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
6/7 S	22-Apr-22	6.65	-22.1	2,614	25.5	2.21
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 P	22-Apr-22	7.10	50.2	5,426	14.0	4.04
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
8S	22-Apr-22	6.76	63.9	2,258	22.2	1.37
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 P	22-Apr-22	8.10	39.6	9,741	16.4	10.51
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
9 S	22-Apr-22	7.01	-14.6	4,578	25.6	1.45

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	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
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	20-Apr-22	8.23	273.0	8,237	10.0	2.95
Leachate Pond	17-Nov-22	8.35	121.6	10,475	12.2	3.89
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
Leachate Pond LDS	20-Apr-22	7.60	338.3	2,600	11.7	2.96
Leachate Pond LDS	17-Nov-22	6.91	10.5.8	5,573	11.5	1.55

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;
ORP = oxidation -reduction potential; mg/L = milligrams per liter; ºC = degrees Celsius
LDS = secondary leak detection system; .

APPENDIX B

Field Documentation

(on CD)

Groundwater Elevation Survey Forms

Riverbend Landfill
Groundwater Elevation Survey

Project #: 04228022.22

Quarter: 1 (2) 3 4

Sampler: T. Hultquist

Date: 4/18/22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1A (Deep)	155.30	62.50	20.01	0919	
MW-1B (Shallow)	155.00	27.50	6.13	0917	
MW-2R (Shallow)	147.02	32.52	12.34	1337	
MW-3A (Shallow)	140.81	37.30	17.84	1133	
MW-3B (Deep)	140.57	57.91	16.24	1130	
MW-4A (Shallow)	142.31	38.81	25.11	1144	
MW-4B (Deep)	141.81	65.03	24.98	1141	
MW-5A (Shallow)	138.73	34.40	16.75	1220	
MW-5B (Deep)	138.82	42.40	24.94	1226	
MW-6A (Shallow)		23.28	5.64	1242	
MW-6B (Deep)	128.59	48.90	13.16	1241	
MW-9A (Shallow)	128.42	26.93	9.38	1320	
MW-9BR (Deep)	127.40	36.25	0.61	1326	
MW-10A (Shallow)	153.21	29.71	4.76	0934	
MW-10B (Deep)	152.87	55.83	~~16.75~~	0932	16.15 DTW
MW-12A (Shallow)	126.00	27.60	10.18	1212	
MW-12B (Deep)	126.54	46.20	16.00	1210	
MW-14A (Shallow)	121.87	23.60	7.75	1150	
MW-14B (Deep)	123.32	44.60	15.31	1152	
MW-15A (Shallow)	130.07	24.00	9.07	1251	
MW-15B (Deep)	129.73	45.95	15.45	1249	
MW-16A (Shallow)	128.89	25.00	14.81	1305	
MW-16B (Deep)	128.95	46.00	15.04	1308	
MW-17A (Shallow)	153.83	27.90	8.40	1543	
MW-18A (Shallow)	148.77	27.05	11.72	1555	
MW-18B (Deep)	148.57	56.10	13.60	1550	
MW-19A (Shallow)	151.27	32.00	4.98	1512	
MW-20A (Shallow)	129.92	23.60	3.03	1004	
MW-20B (Deep)	129.72	37.85	1.50	1007	
MW-21A (Shallow)	120.02	15.42	8.06	1158	
MW-21B (Deep)	119.53	30.40	7.75	1159	
MW-22A (Shallow)	125.38	22.50	16.29	1109	
MW-22B (Deep)	125.43	40.15	17.19	1111	
MW-23A (Shallow)	131.79	28.95	14.54	1119	
MW-23B (Deep)	131.60	44.49	17.85	1119	
MW-24 (Shallow)	149.93	27.81	4.59	1520	
MW-25A (Shallow)	155.26	28.22	7.35	1346	
MW-25B (Deep)	155.54	87.95	21.47	1351	

Riverbend Landfill
Groundwater Elevation Survey

Project #: 04708022.22

Quarter: 1 (2) 3 4

Sampler: I. Hultquist

Date: 4/18/22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Piezometers					
P-01	125.93	20.00	4.27	1222	
P-02	123.88	18.80	3.41	1220	
P-03	123.63	21.83	6.87	1216	
P-05A	140.70	21.44	2.83	1018	
P-06A	131.60	21.82	4.55	1012	
P-07A	147.90	28.45	10.165	1029	
SA-BH-1	155.21	25.09	7.28	1458	
SA-BH-3	155.07	25.33	7.18	1450	
SA-BH-5	151.01	30.70	12.78	1515	
SA-BH-6	125.93	26.30	11.93	1523	
GT10-1	145.46	27.29	1.40	0948	
GT10-11	150.08	27.17	2.62	1040	
GT10-12	152.41	26.06	3.56	1050	
Production Wells					
MB-1	149.10	---	—	—	Inaccessible
PW-1	151.71	---	16.85	1425	

Notes: Rain 50%

Probe decon'ed between locations

Riverbend Landfill
Groundwater Elevation Survey

Project #: ~~4702-033.22~~

Quarter: 1 2 3 (4)

Sampler: ET

Date: 11/14/22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Monitoring Wells					
MW-1A (Deep)	155.30	62.50	28.0	1152	
MW-1B (Shallow)	155.00	27.50	8.55	1148	
MW-2R (Shallow)	147.02	32.52	15.18	1134	
MW-3A (Shallow)	140.81	37.30	18.51	0927	
MW-3B (Deep)	140.57	57.91	23.39	0931	
MW-4A (Shallow)	142.31	38.81	24.01	0938	
MW-4B (Deep)	141.81	65.03	25.09	0942	
MW-5A (Shallow)	138.73	34.40	~~15.93~~	1035	Dtw - 31.05
MW-5B (Deep)	138.82	42.40	~~5.32~~	1039	Dtw - 22.26
MW-6A (Shallow)		23.28	10.27	1047	
MW-6B (Deep)	128.59	48.90	19.38	1050	
MW-9A (Shallow)	128.42	26.93	12.10	1120	
MW-9BR (Deep)	127.40	36.25	5.32	1118	
MW-10A (Shallow)	153.21	29.71	17.12	1210	
MW-10B (Deep)	152.87	55.83	23.28	1207	
MW-12A (Shallow)	126.00	27.60	13.52	1016	
MW-12B (Deep)	126.54	46.20	22.05	1018	
MW-14A (Shallow)	121.87	23.60	20.52	1008	Liquid Btop
MW-14B (Deep)	123.32	44.60	20.11	1005	
MW-15A (Shallow)	130.07	24.00	9.13	1039	
MW-15B (Deep)	129.73	45.95	17.46	1041	
MW-16A (Shallow)	128.89	25.00	21.07	1109	Liquid BTOP
MW-16B (Deep)	128.95	46.00	20.40	1114	
MW-17A (Shallow)	153.83	27.90	11.97	1238	
MW-18A (Shallow)	148.77	27.05	16.60	1220	
MW-18B (Deep)	148.57	56.10	24.21	1226	
MW-19A (Shallow)	151.27	32.00	23.06	1244	
MW-20A (Shallow)	129.92	23.60	7.76	0933	
MW-20B (Deep)	129.72	37.85	9.89	0830	
MW-21A (Shallow)	120.02	15.42	11.89	0950	
MW-21B (Deep)	119.53	30.40	12.30	0955	
MW-22A (Shallow)	125.38	22.50	22.20	0903	Liquid BTOP ; DTB 22.20
MW-22B (Deep)	125.43	40.15	28.01	0907	Thicket obscuring wells
MW-23A (Shallow)	131.79	28.95	19.85	0917	
MW-23B (Deep)	131.60	44.49	23.21	0920	
MW-24 (Shallow)	149.93	27.81	10.32	1331	
MW-25A (Shallow)	155.26	28.22	8.48	1140	
MW-25B (Deep)	155.54	87.95	29.32	1143	

Riverbend Landfill
Groundwater Elevation Survey

Project #: 04202022.22

Sampler: E. Taylor

Quarter: 1 2 3 (4)

Date: 11/14/22

Monitoring Point Designation	Reference Elevation (ft. msl)	DTB (ft. btoc)	DTW (ft. btoc)	Time	Comments
Piezometers					
P-01	125.93	20.00	7.06	1017	
P-02	123.88	18.80	6.19	1031	
P-03	123.63	21.83	10.41	1022	
P-05A	140.70	21.44	Dry	0861	Path overgrown
P-06A	131.60	21.82	6.13	0846	
P-07A	147.90	28.45	9.07	0856	
SA-BH-1	155.21	25.09	16.70	1424	
SA-BH-3	155.07	25.33	19.24	1408	
SA-BH-5	151.01	30.70	15.80	1341	
SA-BH-6	125.93	26.30	14.87	1325	
GT10-1	145.46	27.29	11.48	0828	
GT10-11	150.08	27.17	22.75	13:03	Hard to find
GT10-12	152.41	26.06	18.37	~~1213~~ 1218	
Production Wells					
MB-1	149.10	---	—	—	Inaccessible
PW-1	151.71	---	24.92	1202	

Notes: 38°F sunny

Probe decon'ed between each reading

Barometric pressure: 30.13 in hg

Spring 2022

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-15BR~~ ~~MW-12A~~ 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) 50 . °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)
4/12/22	13 : 04	27 . 60	.	8 . 65	.	18 . 95	X 1	3 . 00
/ /	:	.	.	.	.		X 3	9 . 25

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	4/12/22	14 : 30	F	3	(40 ml) HCl	(YES)	(NO)		
VOA Glass	4/12/22	14 : 30	F	3	(40 ml) $Na_2S_2O_3$	(YES)	(NO)		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/12/22	14 : 30	F	2	(250) 500, (1L) None	(YES)	(NO)	NA	
Yellow Glass	4/12/22	14 : 30	F	2	(250) 500, 1L H_2SO_4	(YES)	(NO)		
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/12/22	14 : 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_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	1309 F	0.00	5.36	165.1	421.7	9 . 8	9 . 01	~~9 . 13~~ 8 . 01	C/C
1	1332 F	3 . 1	5.87	176.5	442.2	9 . 7	~~9 . 40~~ 6 . 74		C/C DTW 9.40
2	1358 F	6 . 35	5.91	182.0	440.6	9 . 4	9 . 50	2 . 25	C/C
3	1418 F	9 . 30	5.89	196.4	440.6	9 . 3	9 . 40	3 . 50	C/C
4	1420 F	9 . 45	5.90	196.3	440.4	9 . 3	9 . 40	3 . 17	C/C
5	1422 F	9 . 60	5.98	196.3	440.4	9 . 2	9 . 39	3 . 16	C/C
6	1424 F	9 . 75	5.91	196.2	440.3	9 . 4	9 . 39	3 . 20	C/C

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

Standard Purge (20/10/20 psi) ~ 500mL/min

Brandon Rapozo
(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 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)
4/21/22	13:00	44.20	.	14.6	.	31.6	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	4/21/22	13:40	F	3	40 ml	(HCl)	(YES)	NO		
VOA Glass	4/21/22	13:49	F	3	40 ml	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	13:40	F	2	250, 500, 1L	(None)	(YES)	NO	NA	
Yellow Glass	4/21/22	13:40	F	2	250, 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	13:40	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 [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: 13 : 01 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(1302)	0.00	6.45	245.2	567.1	10.1	14.6	5.18	C/C ~~tan~~
1	F(1312)	0.5	6.47	229.6	562.9	10.1	14.6	4.97	C/C
2	F(1314)	0.75	7.05	2.3	596.6	10.7	14.6	3.23	C/C
3	F(1316)	0.85	7.07	-10.7	593.7	10.6	14.6	3.21	C/C
4	F(1318)	0.95	7.02	-23.1	598.1	10.7	14.6	3.24	C/C
5	F(1320)	1.10	7.06	-37.7	594.7	10.7	14.6	3.20	C/C
6	F(1322)	1.20	7.06	-44.1	594.9	10.7	14.6	3.22	C/C

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

C/C = Clear / Colorless

low flow 20/10/20 psi ~ 200 mL/min

SAMPLER: EDAN T (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) 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)
4/22/22	11:24	23.60	.	13.32	.	10.28	X 1	1.67
/ /	:	.	.	.	.		X 3	5.01

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	4/22/22	12:00	F	3	(40 ml)	HCl	YES	NO	✓
VOA Glass	4/22/22	12:00	F	3	(40 ml)	$Na_2S_2O_3$	YES	NO	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/22/22	12:00	F	2	(250, 500, 1L)	None	YES	NO	NA ✓
Yellow Glass	4/22/22	12:00	F	2	(250, 500, 1L)	H_2SO_4	YES	NO	✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/22/22	12:00	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: : 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(1127)	0.00	5.68	92.5	420.1	10.6	13.62	3.66	clear/colorless
1	F(1137)	1.70	6.05	85.5	341.1	10.1	13.78	1.57	clear/colorless
2	F(1147)	3.40	6.00	90.9	327.8	10.2	13.81	1.38	clear/colorless
3	F(1157)	5.10	6.02	95.9	325.7	10.2	13.83	1.39	clear/colorless
4	F(1159)	5.25	6.02	96.3	325.0	10.2	13.84	1.40	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Standard purge (20/10/20psi) ~ 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:** 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) 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)
4/22/22	12:19	44.00	.	12.80	.	—	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	4/22/22	12:45	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/22/22	12:45	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	12:45	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/22/22	12:45	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	12:45	1	1 F,H	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(1221)	0.00	6.87	111.5	476.6	10.9	12.83	3.65	clear/colorless
1	F(1233)	0.75	7.21	13.8	543.6	10.8	12.83	0.88	clear/colorless
2	F(1235)	0.85	7.21	-5.6	543.5	10.8	12.83	0.89	clear/colorless
3	F(1237)	0.95	7.20	-9.3	543.3	10.8	12.83	0.83	clear/colorless
4	F(1239)	IH 1.05	7.22	-11.4	543.3	10.8	12.83	0.81	clear/colorless
5	F(1241)	1.15	7.22	-16.3	543.5	16.9	12.83	0.80	clear/colorless
6			.			.	.	.	

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

Low flow purge method (20/10/20psi) ~250ml/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-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:**	(°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)
4/19/22	13:20	24.00	.	8.79	.	15.21	X 1	2.42
/ /	:	.	.	.	.		X 3	7.43

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	4/19/22	14:45	F	3	(40 ml)	(HCl)	(YES)	(NO)	√
VOA Glass	4/19/22	14:45	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)	√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/19/22	14:45	F	2	(250), 500, 1L	(None)	YES	NO	NA
Yellow Glass	4/19/22	14:45	F	2	(250), 500, 1L	(H_2SO_4)	YES	NO	√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/19/22	14:45	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) (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	(1340)F	0.00	5.74	172.6	159.6	12.50	9.45	8.83	BRWN Cloudy/tan
1	(1357)F	2.50	6.24	169.3	185.4	12.10	15.02	5.12	Clearing, light tan
2	(1417)F	5.00	6.27	171.0	183.6	12.1	15.58	4.10	clearing / light tan
3	(1434)F	27.50	6.15	174.8	152.6	12.1	17.12	4.65	Turbid, tan
4	(1431)F	7.75	6.15	175.6	151.6	12.2	17.26	7.37	tan, cloudy
5	(1438)F	8.00	6.16	176.0	150.8	12.2	17.40	7.86	tan, cloudy
6	(1440)F	8.25	6.15	177.2	149.8	12.3	17.53	7.11	cloudy

[Casing] [Select A-G] [Cumulative Totals] [Circle units] 500mL/min [Clarity, Color]

Standard purge (20/10/20psi) ~ 1100 ml

SAMPLER: Ethan 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:** 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:**	(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)
4/20/22	~~15:15~~ 10:14	45.95	.	15.26	.	~	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	4/20/22	11:35	F	3	(40 ml)	(HCl)	~~YES~~	(NO)	✓
VOA Glass	4/20/22	11:35	F	3	~~40 ml~~	$Na_2S_2O_3$	(YES)	~~NO~~	✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/20/22	11:35	F	2	~~250~~, 500, (1L)	(None)	~~YES~~	(NO)	NA ✓
Yellow Glass	4/20/22	11:35	F	2	(250), 500, 1L	(H_2SO_4)	~~YES~~	~~NO~~	✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/20/22	11:35	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: : 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(1104)	0.00	6.60	85.9	676	11.20	15.45	3.64	Light tan, Clear
1	F(1111)	0.5	6.70	56.4	491.7	12.2	15.50	0.95	clear, colorless
2	F(1115)	0.75	6.72	44.9	496.2	12.1	15.51	0.79	clear/colorless
3	F(1117)	0.85	6.72	37.9	502.1	12.1	15.46	0.82	clear/colorless
4	F(1119)	0.95	6.72	35.4	515.1	12.1	15.48	0.80	clear/colorless
5	F(1121)	1.05	6.72	30.7	520.1	12.1	15.56	0.79	clear/colorless
6	F(1123)	1.15	6.72	29.6	527.6	12.1	15.54	0.78	clear/colorless

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

Low flow purge method (20/10/20psi) ~ 400ml/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:** ~~MW-15B~~ ~~15B~~ MW-15B 2H
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)
4/20/22	11:01	45.95	.	15.26	.	—	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	4/20/22	11:35	F	3	(40 ml)	(YES)	(NO)		✓
VOA Glass	4/20/22	11:35	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/20/22	11:35	F	2	(250) 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/20/22	11:35	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	11:35	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: : 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(1125)	1.25 ~~0.00~~	6.72	24.1	532.9	12.2	15.55	0.78	clear, colorless
1	F(1127)	1.35	6.73	23.6	535.6	12.2	15.47	0.77	clear/colorless
2	F(1129)	1.45	6.73	22.7	536.0	12.2	15.53	0.72	clear/colorless
3	F(1131)	1.65	6.73	18.2	536.2	12.2	15.53	0.71	clear/colorless
4	F(1133)	1.75	6.73	16.7	536.8	12.2	15.53	0.71	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low flow purge method (20/10/20psi) ~400ml/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-11eA

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) 43 . °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)
4/19/22	11:38	25.00	.	14.90	.	10.10	X 1	1.64
/ /	:	.	.	.	.		X 3	4.93

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	4/19/22	12:49	f3 → 3	(40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	4/19/22	12:49	f3 → 3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	12:49	f2 → 2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	4/19/22	12:49	f2 → 2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12:49	f1 → 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	f(1152)	0.00	6.27	84.3	323.1	12.0	14.91	9.96	C/C
1	f(1208)	1.5	6.21	103.6	333.7	11.9	15.06	9.86	tan / cloudy
2	f(1215)	3.0	6.18	111.3	335.0	11.9	17.02	9.41	tan / clear
3	f(1220)	5.0	6.16	115.8	329.6	11.9	17.81	9.42	clear / darker
4	f(1228)	5.2	6.18	117.0	327.9	12.0	18.69	9.50	C/C
5	f(1230)	5.5	6.18	118.0	327.4	12.0	18.72	9.47	C/C
6	f(1232)	5.8	6.18	117.4	326.8	12.0	18.72	9.42	C/C

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

standard purge 20/10/20 psi 400 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:** Dup 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) 45 .	° 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	4/19/22	12:45	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/19/22	12:45	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	12:45	F	2	250, 500 (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/19/22	12:45	F	1	250, 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12:45	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 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_x/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 (1245)	0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected at MW-16A

SAMPLER: EDAN TAYLOR (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	° 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)
4/19/22	13:30	46.80	.	15.10	~~31.70~~	31.90	X 1	~~5.19~~
/ /	:	.	.	.	.		X 3	~~15~~ .

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	4/19/22	14:10	F	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/19/22	14:10	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	14:10	F	2 (250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/19/22	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	4/19/22	14:10	F	1 250, (500,) L	(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) (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	F(1338)	0.00	6.68	57.1	1160	12.0	15.10	1.23	C/C
1	F(1346)	0.75	6.78	20.4	1144	12.1	15.10	0.97	C/C
2	F(1348)	0.95	6.81	6.0	1139	12.0	15.10	3.14	tan/clear
3	F(1350)	1.15	6.82	-0.6	1137	12.0	15.10	0.71	C/C
4	F(1352)	1.35	6.82	-5.6	1136	12.0	15.10	0.74	C/C
5	F(1354)	1.55	6.82	-8.4	1135	12.0	15.10	0.74	C/C
6	F(1356)	1.75	6.82	-10.3	1135	12.0	15.10	0.71	C/C

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

Low flow 20/10/30 psi 400 mL/min

SAMPLER: EDAN TAYLOR (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) 53.	°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)
4/21/22	11:31	15.42	.	7.41	.	8.01	X 1	1.30
/ /	:	.	.	.	.		X 3	3.90

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	4/21/22	12:15	F	3	40 ml	(HCl)	(YES)	NO		✓
VOA Glass	4/21/22	12:15	F	3	40 ml	$Na_2S_2O_3$	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	12:15	F	2	(250, 500, 1L)	None	YES	NO	NA	
Yellow Glass	4/21/22	12:15	F	2	250, 500, 1L	H_2SO_4	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	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 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	F(1132)	0.00	6.16	230.6	304.0	11.7	7.41	2.14	C/C
1	F(1138)	1.00	6.14	229.7	315.0	11.7	8.20	1.23	C/C
2	F(1144)	2.20	6.15	228.2	316.6	11.6	8.28	0.96	C/C
3	F(1200)	3.90	6.13	225.6	317.0	11.6	8.28	0.94	C/C
4	F(1202)	4.10	6.12	225.7	316.6	11.6	8.28	0.92	C/C
5	F(1204)	4.40	6.12	225.4	317.0	11.6	8.28	0.94	C/C
6	F(1206)	4.65	6.12	225.3	316.5	11.6	8.28	0.91	C/C

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

Standard Purge method (10/5/25 psi) ~ 600 mL/min C/C = clear and colorless

SAMPLER: EDAN TAYLOR (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:** FB5

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 66 .	°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	6/1/22	09:45	F	3	40ml	HCl	YES	NO	✓
VOA Glass	6/1/22	09:45	P	3	40ml	$Na_2S_2O_3$	YES	NO	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	6/1/22	09:45	F	2	250, 500, 1L	None	YES	NO	NA ✓
Yellow Glass	6/1/22	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	6/1/22	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		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

collected near MW-21B using lab supplied DI water

SAMPLER: B. Rapozo (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-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:**	66 .	°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)
6/1/22	09:47	30.40	.	8.87	.	.	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	6/1/22	10:15	F	3	40 ml HCl	YES	NO		✓
VOA Glass	6/1/22	10:15	F	3	40 ml $Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	6/1/22	10:15	F	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	6/1/22	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	6/1/22	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 [✓] 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: 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(0950)	0.00	6.63	247.6	508.0	13.1	9.20	2.08	Clear, light tan
1	F(1001)	1.0	6.74	250.0	521.8	13.2	9.05	0.87	clear, light tan
2	F(1005)	1.15	6.73	251.2	522.7	13.1	9.07	0.79	" "
3	F(1005)	1.30	6.73	251.3	523.0	13.1	9.07	0.69	" "
4	F(1007)	1.50	6.71	250.9	523.4	13.1	9.08	0.66	" "
5	F(1009)	1.65	6.72	250.1	524.1	13.1	9.08	0.66	" "
6			.			.		.	

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

Low flow purge method: (7/3/15) ~360 mL/min

SAMPLER: B. Rapozo (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:** DUP5
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 66 .	°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	6/1/22	10:26	F	3	40ml	HCl	YES NO		√
VOA Glass	6/1/22	10:20	F	3	40ml	$Na_2S_2O_3$	YES NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	6/1/22	10:20	F	2	250, 500, 1L	None	YES	NO	NA √
Yellow Glass	6/1/22	10:20	F	2	250, 500, 1L	H_2SO_4	YES	NO	√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	6/1/22	10:20	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: : 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-21B

SAMPLER: B. Rapozo
(PRINTED NAME) (SIGNATURE)

Spring 2022

Detection Groundwater and Piezometers

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 45 .	°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)
4/20/22	12:17	34.40	.	16.09	.	18.31	X 1	2.98
/ /	:	.	.	.	.		X 3	8.95

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	4/20/22	13:30	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/20/22	13:30	E	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: : 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	5.74	38.4	1263	12.1	16.50	4.69	clear / colorless
1	F(1243)	3.00	5.82	27.1	1234	13.6	24.94	1.18	C/C
2	F(1304)	6.00	5.80	23.8	1254	13.8	25.81	0.09	C/C
3	F(1325)	9.00	5.80	23.0	1287	13.9	26.76	0.64	C/C
4	F(1327)	9.30	5.80	22.7	1292	13.9	26.97	0.62	C/C
5	F(1329)	9 60	5.80	22.7	1290	13.9	27.11	0.60	C/C
6			.			.	.	.	

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

Ran out of CO2 before filling bottles. Purged ~0.5 gal before filling bottles. Standard Purge 450 mL/min (11/9/25 psi)

SAMPLER: + [illegible] (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) 48 .	° 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	4/20/22	13:35	F	3 (40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/20/22	13:35	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 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(1335)	0.00	:	—	—	— .	.	:	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected at MW-5A

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-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 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)
4/20/22	14:55	42.40	.	24.74	.	—	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	4/20/22	14:45	F	3	40 ml HCl	YES	NO		✓
VOA Glass	4/20/22	14:45	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 [ ] 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	1425	0.00	7.12	2.8	625.26	13.2	24.88	4.55	C/C
1	1432	0.70	7.06	-38.2	611.30	13.7	25.15	2.13	tan, clear
2	1434	1.0	7.07	-50.2	613.60	13.8	25.25	0.80	tan/clear
3	1437	1.25	7.07	-55.5	613.40	13.9	25.25	0.82	
4	1439	1.35	7.06	-54.7	614.40	14.0	25.26	0.78	
5		.	.			.	.	.	
6			.			.	.	.	

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

Low flow Purge method: ~280 mL/min (20/10/20 psi)

SAMPLER: J. Holtzworth (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) 50.0	°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)
4/22/22	08:04	32.00	.	4.79	.	27.21	X 1	4.43
/ /	:	.	.	.	.		X 3	13.29

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	4/22/22	09:25	F	3	(40 ml)	(HCl)	YES	(NO)		✓
VOA Glass	4/22/22	09:25	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	09:25	F	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/22/22	09:25	F	1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	09:25	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 [ ] 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	F(0807)	0.00	6.10	218.3	165.6	11.2	5.36	7.78	clear/colorless
1	F(0825)	4.50	7.22	38.0	362.7	11.5	~~6.88~~	4.70	cloudy/tan DTW 5.89
2	F(0857)	9.00	7.36	31.2	346.9	11.6	~~6.84~~	0.72	clear/colorless DTW 6.04
3	F(0922)	13.50	7.41	-59.2	343.0	11.6	6.06	0.76	clear/colorless
4	F(0924)	13.90	7.42	-60.6	341.4	11.6	6.07	0.78	clear/colorless
5		.	.			.	.	.	
6			.				.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle (in. s)] [Clarity, Color]

Standard purge method (7.5/25 psi) ~ 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:** 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	4/22/22	09:10	G	3	(40 ml) HCl	(YES)	(NO)		✓
VOA Glass	4/22/22	09:10	G	3	(40 ml) $Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	4/22/22	09:10	G	2	(250, 500, 1L) None	(YES)	(NO)	NA	✓
Yellow Glass	4/22/22	09:10	G	2	(250), 500, 1L H_2SO_4	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/22/22	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 | 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) (0910)	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. 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 50.0	°C

J.H

[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	4/22/22	09:30	F	3	~~40 ml~~	HCl	~~YES~~	NO		√
VOA Glass	4/22/22	09:30	F	3	~~40 ml~~	$Na_2S_2O_3$	~~YES~~	NO		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	09:30	F	2	~~250~~, 500, 1L	None	~~YES~~	NO	NA	√
Yellow Glass	4/22/22	09:30	F	1	250, ~~500~~, 1L	H_2SO_4	~~YES~~	NO		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	09:30	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: : 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 (0930)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected @ MW-19A

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-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) 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)
4/19/22	07:41	23.60	.	2.81	.	20.87	X 1	3.39
/ /	:	.	.	.	.		X 3	10.17

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	4/19/22	10:30	F	3 (40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/19/22	10:30	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	10:30	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/19/22	10:30	F	21	250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	4/19/22	10:30	F	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

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)
YELLOW - Glass	(COD) (TOC) (NH_3) (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 (0748)	0.00	6.30	98.2	1603.0	10.5	4.51	2.71	c/c
1	F (0956)	2.30	6.58	40.2	1012.0	10.5	6.56	0.39	very tan / cloudy
2	F (1008)	5.0	6.64	17.7	1017.0	10.5	8.60	0.37	tan / clear
3	F (1020)	10.20	6.65	-0.04	1017.0	10.5	10.42	0.32	c/c
4	F (1022)	11.0	6.63	-2.0	1017.0	10.5	10.82	0.36	c/c
5	F (1024)	12.0	6.67	-4.1	1017.0	10.5	10.82	0.34	c/c
6	F (1026)	12.9	6.64	-3.8	1017.0	10.5	10.82	0.35	c/c

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

Standard Purge 9/11/20 PSI ~ 1L/min c/c = clear / colorless

SAMPLER: Edan Taylor
(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 . ° 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]
4/19/22	8:31	37.85	.	1.56	.	36.29	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	4/19/22	9:15	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/19/22	9:15	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	9:15	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/19/22	9:15	F	1	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	4/19/22	9:15	F	1	250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

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)
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 (0851)	0.00	5.82	184.6	658.2	10.3	1.56	11.2	C/C
1	F (0859)	0.75	6.98	140.8	653.0	10.7	1.58	0.58	C/C
2	F (0901)	0.95	7.01	139.6	651.5	10.8	1.58	0.52	C/C
3	F (0903)	1.15	7.05	129.4	651.4	10.8	1.59	0.53	C/C
4	F (0905)	1.35	7.01	134.6	651.4	10.8	1.59	0.54	C/C
5	F (0907)	1.55	7.03	132.9	651.4	10.8	1.59	0.54	C/C
6	F (0909)	1.65	7.05	131.7	651.4	10.8	1.59	0.50	C/C

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

low flow purge method 20/10/20 PSI ~ 250 mL/min C/C = clear/colorless

SAMPLER: Edan Taylor (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
WEATHER: (SUNNY) | CLOUDY | RAIN | ?
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (F) 46 . °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)
4/21/22	08:22	22.12	.	16.08	.	6.1	X 1 0.99
/ /	:	.	.	.	.		X 3 2.98

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	4/21/22	09:15	F	3 (40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	4/21/22	09:15	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	09:15	F	2 (250, 500, 1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	4/21/22	09:15	F	2 (250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	09:15	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)
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_4) (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: 08:25

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 (0826)	0.00	6.06	175.9	300.6	10.1	16.08	2.70	clear / colorless
1	F (0832)	1.00	6.07	171.9	292.7	9.9	16.23	2.76	clear / colorless
2	F (0850)	2.00	6.05	168.3	289.3	10.0	17.00	3.70	clear / colorless
3	F (0906)	3.00	6.02	179.1	288.4	9.7	17.38	3.59	clear / colorless
4	F (0908)	3.10	6.02	180.1	288.7	9.9	17.40	3.58	clear / colorless
5	F (0910)	3.20	6.03	181.5	289.1	9.7	17.42	3.53	clear / colorless
6	F (0912)	3.30	6.04	181.3	288.9	9.9	.	3.54	clear / colorless

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

Standard Purge (12/8/20 psi) → 12/8/15 psi ~ 200 mL/min

SAMPLER: E TAYLOR (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:** Dup 3
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 .	°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	4/21/22	09:20	F	3	40 ml HCl	YES	NO		
VOA Glass	4/21/22	09:20	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	4/21/22	09:20	F	2	250, 500, 1L None	YES	NO	NA	
Yellow Glass	4/21/22	09:20	F	2	250, 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/21/22	09:20	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-22A

SAMPLER: EDAN TAYLOR (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:** FB 3

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)
/ /	:	.	.	.	.	.	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	4/12/22	10 : 39	G	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/12/22	10 : 30	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/12/22	10 : 30	G	2	(250) 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/12/22	10 : 39	G	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
~~Red Total Poly~~	~~4/12/22~~	~~10 : 30~~	~~G~~	~~ET~~	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/12/22	10 : 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)
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 (1030)	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: EDAN TAYLOR (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 . ° 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)
4/19/22	09:00	21.44	.	2.53	.	18.91	X 1	0.77
/ /	:	.	.	.	.		X 3	2.31

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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
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	4/19/22	9:50	B	2	(250), 500, 1L (None)	(YES)	(NO)	NA	✓
Yellow Glass	4/19/22	9:50	B	1	250, (500), 1L (H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/19/22	9:50	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 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	9:00	0.00	6.30	189.6	961.0	10.1	4.71	3.0	C/C
1	9:15	0.8	6.77	122	950.0	9.60	11.11	0.99	C/C
2	9:25	1.50	6.81	85.2	946.0	9.70	12.11	0.72	C/C
3	9:39	2.30	6.81	63.1	947.0	9.70	12.65	0.51	C/C
4	9:41	2.45	6.80	61.40	947.0	9.7	12.64	0.49	C/C
5	9:43	2.60	6.81	60.70	946.0	9.8	12.94	0.51	C/C
6			.			.	.	.	C/C

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

Standard Purge ~ (250mL/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:** P-06A
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.	°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]
4/19/22	10:20	21.82	.	4.56	.	17.36	X 1	0.70
4/20/22	10:28	21.82	.	18.86	.		X 3	2.10

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	4/20/22	10:30	B	2 250, 500, (1L)	None	YES	NO	NA	✓
Yellow Glass	4/20/22	10:30	B	1 250, 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 — 3 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
4/19/22 0	B(1030)	0.00	6.90	57.3	91.1	10.2	6.54	0.54	clear/colorless
1	B(1042)	0.73	6.85	21.07	97.1	10.2	17.56	0.73	Clear/colorless
2	B(1057)	1.45	7.03	-45.3	900.0	10.8	19.50	0.81	clear/colorless
3	B(1102)	1.60	7.04	-56.0	915.0	10.8	21.66	1.86	tan, cloudy
4/20/22 4	B(1025)	1.70	6.56	-80.3	931.0	11.3	18.86	2.70	tan, cloudy
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Standard purge (~200ml/min) Well dewatered on 4/19/22 @ 1102, will return on 4/20/22 to sample.

Returned on 4/20/22, WL 18.86. Began to sample, insufficient water to fill all bottles.

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

Filled partial of 1L unpreserved, Returned at 1300, finished filling 1L. Returned at 1520 and filled 250ml/unpreserved

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:**	° 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)
4/29/22	11 :30	28.48	.	10.91	.	17.97	X 1	2.92
/ /	:	.	.	.	.		X 3	8.78

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	/ /	:			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	4/19/22	12 :30	B	2	(250), 500, (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	4/19/22	12 :30	B	1	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12 :30	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 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	(1138)B	0.00	6.20	-12.3	182.1	11.20	10.93	5.44	clear/colorless
1	(1146)B	1.60	5.93	48.8	180.0	11.50	14.01	5.19	c/c
2	(1154)B	2.0	5.93	64.9	180.3	11.5	14.76	4.43	c/c
3	(1208)B	5.0	5.91	89.8	181.0	11.6	15.09	4.35	c/c
4	(1223)B	8.80	5.92	109.8	181.0	11.6	15.01	3.84	c/c
5	(1225)B	9.00	5.93	111.4	182.1	11.6	15.05	3.78	c/c
6	(1227)B	9.30	5.93	112.8	181.7	11.6	15.04	3.77	c/c

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

Standard Purge ~ (1L/min)

SAMPLER: E. Hultgerst (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:**	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)
/ /	:	.	.	.	.	.	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	/ /	:			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	4/19/22	12:20	G	2	~~250~~, 500, 1L	None	~~YES~~	~~NO~~	NA	✓
Yellow Glass	4/19/22	12:20	G	FB 1	250, ~~500~~, 1L	H_2SO_4	~~YES~~	~~NO~~		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	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 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.) (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: : 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 P-07A using lab supplied DI water

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

Spring 2022

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:**	@ 48.	°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 = Stainless steel 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	4/21/22	10 : 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	4/21/22	10 : 30	G	4	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/21/22	10 : 30	G	3	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/21/22	10 : 30	G	2	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/21/22	10 : 30	G	1	250, 500, 1L	None	YES	YES		
Clear Poly	4/21/22	10 : 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(1030)	0.00	6.43	79.3	87.9	9.70	—	15.66	Cloudy tan
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Grab with Stainless steel Bailer

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:** 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 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 = Stainless steel 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	4/21/22	08:35	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	4/21/22	08:35	G	4	250, 500, (1L)	(None)	(YES)	NO	NA	✓
Yellow Glass	4/21/22	08:35	G	3	250, (500), 1L	(H_2SO_4)	YES	NO		
Red Total Poly	4/21/22	08:35	G	2	125, 250, (500)	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/21/22	08:35	G	1	(250), 500, 1L	(None)	(YES)	YES		✓
Clear Poly	4/21/22	08:35	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 [ ] 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(0835)	0.00	6.36	176.9	83.3	9.9	—	10.03	clear, light tan
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Grab with Stainless steel Dipper

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:** SGR ~~MW-12A~~ 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 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 = Stainless Steel 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	4/21/22	09:35	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	4/21/22	09:35	G	4	(250, 500, 1L)	~~None~~	~~YES~~	~~NO~~	NA	✓
Yellow Glass	4/21/22	09:35	G	3	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	4/21/22	09:35	G	IH32	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/21/22	09:35	G	1	250, 500, 1L	None	YES	YES		
Clear Poly	4/21/22	09:35	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	(0935)	0.00	6.75	156.3	133.0	10.7	—	7.54	Tan, clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Grab with ~~Stainless~~ Steel bailer

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

Spring 2022

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) 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)
4/20/22	:	.	.	.	.	.	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	4/20/22	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	4/20/22	09:45	G	2	250, 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/20/22	09:45	G	2	250, (500) 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/20/22	9 :45	G	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	4/20/22	9 : 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 — 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: : 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	(E-0945)	0.00	8.23	273	8237	10.0	-	2.95	DARK Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected from base of truck hauler tree.

SAMPLER: EDAN TAYLOR
(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:** L 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) 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 /	:	.	.	.	.	.	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	4/20/22	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	4/20/22	10 : 30	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/20/22	10 : 30	A	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/20/22	10 : 30	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	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 — 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) (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	338.3	2600	11.7	~	2.96	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Liquid level lead

SAMPLER: EDAN TAYLOR (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:** 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 . ° 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	4/20/22	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	4/20/22	11 :30	A	2	250, 500, 1L	(None)	(YES)	NO	NA	
Yellow Glass	4/20/22	11 : 30	A	4	250, 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/20/22	11 : 30	A	1	125, 250, 500	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/20/22	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 [ ] 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 (1130)	0.00	7.24	75.2	4524	20.1	—	0.74	Black / Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Liquid level - 20.9"

SAMPLER: EDAN TAYLOR (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/SS

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 =

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	4/20/22	12:15	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	4/20/22	12:15	A	2	250, 500, (1L)	None	(YES)	NO	NA	
Yellow Glass	4/20/22	12:15	A	4	(250) 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/20/22	12:15	A	1	125, 250, (500)	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/20/22	12:15	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 (1215)	0.00	6.44	3.7	1552	27.6	-	2.76	clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

liquid level 16.3"

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:** 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) 49.0	°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	4/20/22	12:40	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	4/20/22	12:40	A	2	250, 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/20/22	12:40	A	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	4/20/22	12:40	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	12:40	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 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 (12:40)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected @ 4/55 ET

Collected near 4/55 using lab supplied DI water

SAMPLER: EDAN TAYLOR
(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:** 17P
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) [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	4/20/22	13 : 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	4/20/22	13 : 30	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/20/22	13 : 30	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/20/22	13 : 30	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	13 : 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) (NO_3) (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(1330)	0.00	7.32	-20.9	11177	21 .10	/	1.12	Very DArk
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Liquid lvl ~ 10.8'

SAMPLER: EDAN TAYLOR
(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:** 0175
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 .	°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	4/22/22	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	4/22/22	11 : 00	A	2	250, 500, (1L)	None	YES	NO	NA	
Yellow Glass	4/22/22	11 : 00	A	4	(250) 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/22/22	11 : 00	A	1	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	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) (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	A(1100)	0.00	6.65	-22.1	2614	25.5	-	2.21	Green / Clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

liquid level 2.7'

SAMPLER: EDAN TAYLOR
(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:** &S
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) 54.0 °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	4/20/22	10 : 15	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	4/20/22	10 : 15	A	2	250, 500, (1L)	(None)	YES	NO	NA	
Yellow Glass	4/20/22	10 : 15	A	4	(250), 500, 1L	(H_2SO_4)	YES	NO		
Red Total Poly	4/20/22	10 : 15	A	1	125, 250, (500)	(HNO_3)	YES	NO		
Red Diss. Poly	4/20/22	10 : 15	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) (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(10:15)	0.00	6.76	63.9	2258	22.2	-	1.37	Clear/greenish
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level - 12.4'

SAMPLER: EDAN TAYLOR (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) 58 .	°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	4/22/22	7:45	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	4/22/22	7:45	A	2	250, 500 (1L) None	YES	NO	NA	
Yellow Glass	4/22/22	7:45	A	4	(250, 500, 1L) (H_2SO_4)	YES	NO		
Red Total Poly	4/22/22	7:45	A	1	125, 250, (500) (HNO_3)	YES	NO		
Red Diss. Poly	4/22/22	7:45	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 [ ] 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 (0745)	0.00	7.10	50.2	5426	14.0	—	4.04	DARK Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level 11.41'

SAMPLER: EDAN TAYLOR (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:** 9P
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 .	°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	4/22/22	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	4/22/22	12 :00	A	2	250, 500, (1L)	None	YES	NO	NA	
Yellow Glass	4/22/22	12 :00	A	4	(250), 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/22/22	12 :00	A	1	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	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) (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	A(1200)	0.00	8.10	39.6	9741 (REF)	16.4	✓	10.51	Dark Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level -23.5"

SAMPLER: EDAN TAYLOR (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:** 95
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	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 1/22/22	12 :20	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 1/22/22	12 :20	A	2	250, 500, (1L)	None	YES	NO	NA	
Yellow Glass	4 1/22/22	12 :20	A	4	(250) 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4 1/22/22	12: 20	A	1	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	4 1/22/22	12 : 20	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 (1220)	0.00	7.91	-14.6	4578	25 . 6	✓	1 . 45	Dark Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

liquid level - 14.7"

Water color lightened as water was sampled

SAMPLER: EDAN TAYLOR
(PRINTED NAME) (SIGNATURE)

Fall 2022

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) 47. °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)
1/5/22	14:30	27.60	.	13.51	.	14.09	X 1	2.29
/ /	:	.	.	.	.		X 3	6.89

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	1/5/22	15:25	F	3 (40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	1/5/22	15:25	F	3 (40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/22	15:25	F	2 (250, 500, 1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	1/5/22	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	1/5/22	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) (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(1430)	0.00	6.02	135.0	444.1	11.0	13.51	10.52	
1	F(1446)	2.30	5.95	145.1	449.8	10.6	14.03	10.55	
2	F(1502)	4.60	5.94	153.2	471.4	10.8	14.05	10.52	
3	F(1518)	6.90	5.96	170.4	484.1	10.8	10.05	10.56	
4	F(1521)	7.30	5.97	173.6	484.2	10.8	14.05	10.58	
5	F(1522)	7.65	5.97	175.3	486.9	10.8	14.05	10.54	
6			.			.	.	.	

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

STANDARD PURGE (10/5/22) ~850 ML/MIN

SAMPLER: E. TAYLOR for ET
(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) . °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)
/ /	:	46.20	.	22.04	.	.	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	11/15/22	15:50	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/15/22	15:~~50~~	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	15:50	F	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	11/15/22	15:50	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	15:50	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: : 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(1530)	0.00	6.68	174.8	618.0	16.7	22.04	0.70	TAN/CLOUDY
1	F(1534)	0.50	6.93	169.3	715.0	10.8	22.31	0.59	TAN/CLOUDY
2	F(1539)	1.00	7.05	151.7	742.0	10.8	22.31	0.51	TAN/CLEAR
3	F(1540)	1.20	7.08	125.6	743.0	10.8	22.31	0.50	TAN/CLEAR
4	F(1545)	1.40	7.10	128.4	747.0	10.8	22.31	0.50	TAN/~~CLEAR~~ CLOUDY
5	F(1548)	1.60	7.10	128.3	742.0	10.8	22.31	0.51	TAN/CLOUDY
6	F(—)		.			.	.	.	

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

LOW FLOW PURGE METHOD (11/9/22 PSI) ~ 1400 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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) 53.	°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)
1/5/23	11:06	23.60	.	7.55	.	16.05	X 1	2.61
/ /	:	.	.	.	.		X 3	7.83

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	1/5/23	11:50	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	11:50	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	11:50	F	2	(250), 500, 1L	None	YES	NO	NA	
Yellow Glass	1/5/23	11:50	F	2	(250), 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	11:50	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: 11 : 06 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(1110)	0.00	5.77	259.3	317.7	10.4	7.55	4.86	clear/color/TSS
1	F(1121)	2.65	5.84	259.6	318.1	10.4	7.49	5.13	C/C
2	F(1133)	5.30	5.90	260.8	316.7	10.5	7.51	4.79	C/C
3	F(1147)	7.85	5.90	260.9	310.4	10.5	7.51	4.82	C/C
4	F(1149)	7.90	5.90	260.9	308.6	10.5	7.51	4.83	C/C
5		.	.			.	.	.	
6			.			.	.	.	

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

C/C = clear / color / TSS

Standard Purge (11/9/20 psi) w 1000 mL/min

SAMPLER: EDAN TAYLOR
(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:** Dup 105231

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 .	° 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)
1/5/23	:	.	.	.	.	.	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	1/5/23	11 : 55	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	11 : 55	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	11 : 55	F	2	(250) 500, (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	11 : 55	F	2	(250), 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	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 — 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-14A

SAMPLER: Edan Taylor (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)	. °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)
11/15/22	11:50	44.60	.	20.38	.	.	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	11/15/22	12:15	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/15/22	12:15	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	12:15	F	2	(250) 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	12:15	F	2	(250), 500, 1L	H_2SO_4	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	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 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(1150)	0.00	6.80	201.4	528.2	10.7	20.38	0.68	TAN/CLOUDY
1	F(1159)	0.50	6.93	198.5	524.2	10.7	20.44	0.66	CLEAR/CLOUDY
2	F(1206)	1.00	7.14	161.3	524.5	10.7	20.44	0.64	CLEAR/CLOUDY
3	F(1209)	1.20	7.15	159.1	524.7	10.7	20.44	0.64	CLEAR/CLOUDY
4	F(1212)	1.40	7.15	158.4	525.3	10.7	20.44	0.63	CLEAR/CLOUDY
5		.	.			.	.	.	
6		.	.			.	.	.	

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

LOW FLOW PURGE METHOD (11/19/25 PSI) ~ 350 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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:**	(°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)
1/5/23	12:40	24.00	.	8.17	.	15.83	X 1	2.58
/ /	:	.	.	.	.		X 3	7.74

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	1/5/23	13:20	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	13:20	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	13:20	F	2	(250), 500, (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	13:20	F	2	(250), 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:20	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: : 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	6.13	263.3	179.0	13.6	8.16	9.39	Clr [B] Cloudy
1	F(1251)	2.60	6.22	265.2	174.5	13.2	14.93	9.05	cloudy / tan
2	F(1302)	5.30	6.07	263.1	171.2	13.4	15.41	8.01	Slt [Brn] Cloudy / tan
3	F(1314)	7.80	6.07	262.9	167.8	13.4	16.48	8.05	Cloudy / tan
4	F(1316)	8.10	6.07	262.5	167.4	13.4	16.71	8.06	Cloudy / tan
5	F(1318)	8.35	6.07	262.4	167.1	13.4	17.32	8.08	Cloudy / tan
6			.			.	.	.	

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

Standard Purge Method (11/4/25 psi) ~1L/min

SAMPLER: E. Taylor (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:** FB 1052301

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	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		[Water Column x Gal/ft] Volume (gal)
1/5/23	:	.	.	.	.	.	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	1/5/23	13:25	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	13:25	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	13:25	F	2	(250) 500 (1L)	None	YES	NO	NA	
Yellow Glass	1/5/23	13:25	F	2	250 (500) 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:25	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) (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]

Taken near MW-16A using lab-supplied DI water

SAMPLER: E. TAYLOR (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) 43.	°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)
11/15/22	09:59	45.95	.	17.46	.	.	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	11/15/22	10:25	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/15/22	10:25	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	10:25	F	2	(250, 500, 1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	10:25	F	2	(250, 500, 1L)	H_2SO_4	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	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 — 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(1000)	0.00	6.97	159.6	662	13.0	17.48	0.60	BROWN/CLOUDY
1	F(1007)	0.50	6.98	1583	672	13.1	17.48	0.48	CLEAR/CLOUDY
2	F(1014)	1.00	6.98	145.7	680	13.1	17.48	0.48	CLEAR/CLOUDY
3	F(1017)	1.25	6.98	144.9	684	13.1	17.48	0.48	CLEAR/COLORLESS
4	F(1020)	1.50	6.98	144.1	707	13.1	17.48	0.48	CLEAR/COLORLESS
5		.	.			.	.	.	
6			.			.	.	.	

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

LOW FLOW PURGE METHOD (11/9/25 PSI) ~ 450 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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:** DUP 11152201
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) 43.	°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	11/15/22	10:30	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/15/22	10:30	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	10:30	F	2	(250), 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	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	11/15/22	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) (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-15B

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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) 41.	°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)
11/15/22	08:15	25.00	.	21.06	.	3.94	X 1	0.64
/ /	:	.	.	.	.		X 3	1.92

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	11/16/22	08:25	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/16/22	08:25	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/22	08:25	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/16/22	08:25	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/22	08:25	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) (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(0815)	0.00	7.32	220.2	328.1	11.6	BTOP	7.38	BROWN
1	F(0820)	0.65	7.30	221.2	322.5	11.6	BTOP	6.27	BROWN/CLEAR
2	F(0825)	1.30	7.28	222.4	322.4	11.5	BTOP	6.25	TAN/CLEAR
3	F(0830)	1.95	6.30	223.1	331.8	11.5	BTOP	6.24	CLEAR/COLORLESS
4	F(0815)	2.15	6.03	170.3	414.1	11.4	BTOP	6.10	TAN/CLOUDY
5	F(0818)	2.35	6.03	169.4	414.2	11.3	BTOP	6.08	TAN/CLOUDY
6	F(0821)	2.50	6.03	169.4	414.2	11.3	BTOP	6.08	TAN/CLOUDY

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

STANDARD PURGE 20/10/20 PSI ~ 500 ML/MIN
WELL PURGED DRY TO RESUME SAMPLING THE FOLLOWING DAY

SAMPLER: E TAYLOR for ET
(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:** DUP 11162201

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) 41 . °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)
11/16/22	:	.	.	.	.		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:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/16/22	08:30	F	3	(40 ml)	(HCl)	(YES)	(NO)		√
VOA Glass	11/16/22	08:30	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/22	08:30	F	2	(250) 500, (1L)	(None)	(YES)	(NO)	NA	√
Yellow Glass	11/16/22	08:30	F	2	(250) 500, 1L	(H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/22	08:30	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: : 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(0830)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

COLLECTED AT MW-16A

SAMPLER: E. TAYLOR (PRINTED NAME)

(SIGNATURE) for ET

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) 41.	°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)
11/15/22	08:46	46.00	.	20.39	.	25.61	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	11/15/22	09:10	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/15/22	09:10	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	09:10	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	09:10	F	2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	09:10	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_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(0846)	0.00	6.76	230.3	1053	12.1	20.39	0.99	CLEAR/CLOUDY
1	F(0854)	0.50	6.87	228.4	1052	12.1	20.39	0.76	CLEAR
2	F(0900)	1.00	6.92	226.7	1053	12.1	20.39	0.75	CLEAR
3	F(0903)	1.25	6.94	223.6	1053	12.1	20.39	0.74	CLEAR
4	F(0906)	1.50	6.95	224.1	1052	12.1	20.39	0.74	CLEAR
5		.	.			.	.	.	
6		.	.			.	.	.	

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

LOW FLOW PURGE (11/9/25 PSI) ~ 450 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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:** FB 11152201
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)
11/15/22	:	.	.	.	.	.	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	11/15/22	09 : 20	G	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/15/22	09 : 20	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	09 : 20	G	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	09 : 20	G	2	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	09 : 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 [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(0920)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

COLLECTED NEAR MW-1613

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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) 46 .	°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]
11/15/22	12 : 50	15.42	.	11.87	.	3.55	X 1	0.57
/ /	:	.	.	.	.		X 3	1.73

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	11/15/22	13 : 20	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/15/22	13 : 20	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	13 : 20	F	2	(250, 500, 1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/15/22	13 : 20	F	2	(250), 500, 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	13 : 20	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(1250)	0.00	6.15	99.4	322.6	13.6	11.85	10.40	CLEAR/CLOUDY
1	F(1259)	0.60	6.11	107.9	323.8	13.9	12.28	10.42	CLEAR/COLORLESS
2	F(1308)	1.20	6.09	128.9	319.7	13.8	12.28	10.44	CLEAR/COLORLESS
3	F(1315)	1.80	6.09	130.4	319.4	13.8	12.28	10.44	CLEAR/COLORLESS
4	F(1318)	1.95	6.08	134.7	318.6	13.8	12.28	10.46	CLEAR/COLORLESS
5		.	.			.	.	.	
6		.	.			.	.	.	

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

STANDARD PURGE METHOD (10/5/25 PSI) ~ 600 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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) 46 . °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)
11/15/22	13:30	30.40	.	12.28	.	.	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	11/15/22	14:15	F	3	40 ml	HCl	YES	NO		✓
VOA Glass	11/15/22	14:15	F	3	40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/15/22	14:15	F	2	250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	11/15/22	14:15	F	2	250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/15/22	14:15	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(1330)	0.00	6.44	116.7	464.5	13.4	12.28	1.69	CLEAR/COLORLESS
1	F(1342)	0.50	6.61	168.8	461.4	13.2	12.40	0.62	CLEAR/COLORLESS
2	F(1354)	1.00	6.73	150.1	468.7	13.1	12.40	0.42	CLEAR/COLORLESS
3	F(1405)	1.50	6.75	129.7	471.4	13.1	12.40	0.40	CLEAR/CLOUDY
4	F(1408)	1.60	6.75	128.4	472.0	13.1	12.40	0.39	CLEAR/CLOUDY
5	F(1411)	1.70	6.76	128.2	472.4	13.1	12.40	0.39	CLEAR/COLORLESS
6	F(1414)	1.80	6.75	127.9	472.9	13.1	12.40	0.39	CLEAR/COLORLESS

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

LOW FLOW PURGE METHOD (12/8/20 PSI) ~ 250 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

Fall 2022

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) 43.	°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)
11/17/22	11:50	34.40	.	31.05	.	3.35	X 1	0.54
/ /	:	.	.	.	.		X 3	1.63

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	11/17/22	12:25	F	3 (40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/22	12:25	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: : 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 (1204)	0.00	7.22	44.5	605.5	13.8	31.05	9.48	C/C
1	F (1208)	0.54	7.17	31.6	610.7	14.1	31.15	2.85	C/C
2	F (1212)	1.10	7.18	28.4	610.8	14.1	31.65	2.49	C/C
3	F (1216)	1.65	7.17	27.8	610.4	14.1	31.89	2.14	C/C
4	F (1219)	1.80	7.17	27.7	613.2	14.1	31.89	2.13	C/C
5	F (1221)	1.95	7.17	26.5	613.6	14.1	31.90	2.11	C/C
6			.			.	.	.	

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

Standard purge (11/9/25 PSI) ~600 mL/min

SAMPLER: EDAN TAYLOR (PRINTED NAME) B. Lapoca for ET (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:** FB 1117220I
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) 43 . °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)
11/17/22	:	.	.	.	.	.	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	11/17/22	12:30	F	3 (40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/17/22	12:30	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 [ ] 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(1230)	0.00	.	—	—	—	—	.	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

COLLECTED NEAR MW-5A USING LAB SUPPLIED DI WATER

SAMPLER: EDAN TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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) 38 .	°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)
11/17/22	09:00	32.06	.	23.75	.	8.25	X 1	1.34
/ /	:	.	.	.	.		X 3	4.03

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	11/17/22	10:25	F	3	(40 ml)	HCl	(YES)	(NO)		✓
VOA Glass	11/17/22	10:25	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/22	10:25	F	2	(250), 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	11/17/22	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	11/17/22	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) 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(0900)	0.00	6.19	188.6	300.9	8.8	23.75	7.45	CLEAR/CLOUDY
1	F(0935)	1.35	7.35	156.5	299.2	10.9	23.83	3.21	CLEAR/CLOUDY
2	F(0957)	2.70	7.48	89.3	298.2	11.0	23.89	2.62	CLEAR/CLOUDY
3	F(1014)	4.05	7.50	29.7	299.3	11.3	23.90	3.33	CLEAR/COLORLESS
4	F(0943)	4.15	7.51	28.1	299.7	11.4	23.90	3.31	CLEAR/COLORLESS
5	F(1020)	4.25	7.53	28.0	299.9	11.4	23.90	3.30	CLEAR/COLORLESS
6			.			.	.	.	

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

STANDARD PURGE METHOD (10/5/25 PSI) ~ 300 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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:** DUP 111722O1 (EB)
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) 38 .	° 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)
11/17/22	:	.	.	.	.	.	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:

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	[√ if used] √
VOA Glass	11/17/22	10 :30	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/17/22	10 :30	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/22	10 :30	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/17/22	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	11/17/22	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 [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-19A

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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 .	°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)
11/16/22	10 :10	23 .60	.	7 .95	.	15 .65	X 1	2 .55
/ /	:	.	.	.	.		X 3	7 .65

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	11/16/22	10 :40	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/16/22	10 :40	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/22	10 :40	F	2	(250, 500, 1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/16/22	10 :40	F	1	(250, 500, 1L)	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/22	10 :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 — 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(1010)	0.00	6.63	202.3	946	12 .5	7 .95	2 .75	TAN/CLEAR
1	F(1017)	2 .55	6.67	182.5	956	12 .4	13 .22	1 .62	CLEAR/CLOUDY
2	F(1025)	5 .10	6.70	135.5	951	12 .4	13 .93	1 .31	CLEAR/COLORLESS
3	F(1033)	7 .65	6.71	87.8	954	12 .3	14 .13	0 .38	CLEAR/COLORLESS
4	F(1036)	7 .80	6.71	88.1	954	12 .3	14 .14	0 .37	CLEAR/COLORLESS
5	F(1039)	7 .95	6.71	88.0	955	12 .3	14 .14	0 .37	CLEAR/COLORLESS
6			.			.	.	.	

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

STANDARD PURGE METHOD 20/10/25 PSI @ 850 ML/MIN

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

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:** FB 11162201
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) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
11/16/22	:	.	.	.	.	.	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	11/16/22	10 : 50	G	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	11/16/22	10 : 50	G	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/16/22	10 : 50	G	2	(250) 500 1L	(None)	(YES)	(NO)	NA	✓
Yellow Glass	11/16/22	10 : 50	G	1	250 (500) 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	11/16/22	10 : 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 — 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(1050)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

COLLECTED NEAR MW-20A

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE) for ET

Fall 2022

MW-12A Resample

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) 54 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] X5 = 17.80 [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
1/13/23	11:30	27.60	.	5.70	.	21.90	X 1	3.56
/ /	:	.	.	.	.		X 3	10.70

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	/ /	:			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	1/13/23	13:45	F	1	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	1/13/23	13:45	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 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(1114)	0.00	5.37	140.0	465.7	10.7	6.10	5.16	clear/colorless
1	F(1204)	3.56	6.09	146.0	387.0	10.9	6.42	5.54	c/c
2	F(1226)	7.10	6.13	157.5	383.1	11.0	6.50	4.99	c/c
3	F(1247)	10.70	6.15	167.5	374.3	11.0	6.50	4.96	c/c
4	F(1310)	14.30	6.16	173.6	377.4	11.0	6.52	4.97	c/c
5	F(1350)	17.80	6.18	181.0	379.8	11.1	6.52	4.96	c/c
6	F(1532)	18.00	6.17	182.8	~~374.4~~ 374.4	11.1	6.52	4.95	c/c

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

20/10/20 psi ~ 500 NTU/mi

SAMPLER: B. Rupert (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:** DUP0113231
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)
/ /	:	.	.	.	.	.	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	/ /	:		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	1 /13/23	13:50	F	1	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	1 /13/23	13:50	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 — 2 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(1350)	0.00	.				.		
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected @ MW-12A

SAMPLER: B. Rogers (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:** FB0113231

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	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 = B/L

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	/ /	:			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	1/13/23	12:50	B	1	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	1/13/23	12:50	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 — 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 [ ] 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	B (1250)	0.00							
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Collected near MW-12A

SAMPLER: E. Rago 20 (PRINTED NAME) (SIGNATURE)

Fall 2022

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:** FB 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 .	°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	11/17/22	13:40	A	3	(40 ml)	HCl	(YES)	(NO)		√
VOA Glass	/ /	:		3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	11/17/22	13:40	A	2	(250) 500 1L	None	(YES)	(NO)	NA	√
Yellow Glass	11/17/22	13:40	A	2	(250, 500, 1L	H_2SO_4	(YES)	(NO)		√
Red Total Poly	11/17/22	13:40	A	1	125, (250), 500	HNO_3	(YES)	(NO)		√
Red Diss. Poly	11/17/22	13:40	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 — 7 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) Nota
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 (13:40)	0.00	8.37	121.6	10475	12.2	/	3.89	Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Liquid level

Collected from sample port on truck loading pipe

SAMPLER: E. Taylor
(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:** DUP (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) 48 .	°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)
11/17/22	:						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:

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	[√ if used]
VOA Glass	11/17/22	13 : 10	A	3	40 ml HCl	YES	NO		√
VOA Glass	/ /	:			40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:	A		250, 500, 1L H_2SO_4	YES	NO		
White Poly	11/17/22	13 : 10	A	2	250, 500, 1L None	YES	NO	NA	√
Yellow Glass	11/17/22	13 : 10	A	2	250, 500, 1L H_2SO_4	YES	NO		√
Red Total Poly	11/17/22	13 : 10	A	1	125, 250, 500 HNO_3	YES	NO		√
Red Diss. Poly	11/17/22	13 : 10	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 [ ] 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) NOXA
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 (1310)	0.00	6.91	104.8	5573	11.5	—	1.56	Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Liquid level 9.6"

SAMPLER: EDAN TAYLOR
(PRINTED NAME) (SIGNATURE)

Landfill Site Inspection Checklists

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 4/18/22
Reason for inspection
1st, (2nd), 3rd, or 4th groundwater monitoring event
Other

Notes:

Rain 50°F

Monitoring well labels fading

WASTE MANAGEMENT, INC.
GROUNDWATER SAMPLING INSPECTION CHECKLIST

Facility Name: Riverbend Landfill — Facility No/Location: Mcminnville OR
Inspection Date: 4-18-22 — Time of Day: Daylight hours
Weather Conditions: Rain 50°F

Facility Type: ( ) MSW ( ) Industrial ( ) C & D ( ) Other _____
( ) Detection ( ) Assessment ( ) Other _____
( ) Quarterly (X) 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: Some labels beginning to fade.
Groundwater Monitoring Well(s) Condition:
COMMENTS: Wells in good condition.

II. Well Monitoring Procedures

Were water levels made prior to purging? (X) Yes or ( ) No
DESCRIBE BRIEFLY: Solinist water level meter, decontned between readings
Were purge volumes measured? (X) Yes or ( ) No
DESCRIBE HOW: Calibrated 5gal bucket
Purge Method: (X) Stabilization (X) 3 Volumes ( ) Other _____
DESCRIBE BRIEFLY:

What field parameters were used to determine representative samples?
DESCRIBE BRIEFLY: Temp, Conductivity, pH, DO, water level
Did Well sampling require more than one day? (X) Yes or ( ) No Provide Dates: 4/19-22/22

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:

Any observed inappropriate techniques or procedures: ( ) Yes or (X) No
COMMENTS:

Inspected By:		Signature:		Date:	
Sampler:	I. Huttquist	Signature:		Date:	4/22/22
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 EDAN TAYLOR
Date 11/14/22
Reason for inspection 4Q22 monitoring event
1st, 2nd, 3rd, or (4th) groundwater monitoring event
Other

Notes: Sunny/Cloudy, light wind 42°F

WASTE MANAGEMENT, INC.
GROUNDWATER SAMPLING INSPECTION CHECKLIST

Facility Name: Riverbend Landfill — Facility No/Location: McMinnville, OR
Inspection Date: 11/16/22 — Time of Day: Daylight hours
Weather Conditions: Cloudy 43°F

Facility Type: (X) MSW ( ) Industrial ( ) C & D ( ) Other
(X) Detection ( ) Assessment ( ) Other
( ) Quarterly (X) Semiannual ( ) Other/Special
( ) Appendix I ( ) Appendix II ( ) Additional (y or n)

Number of Wells Sampled: 11 — No. Alt. Pts Sampled (e.g. springs) leach pond / LDS
Wells Inspected: All wells and Peizometers

I. General Monitoring Well Condition

Well(s) Labeled? (X) Yes or ( ) No
COMMENTS:

Groundwater Monitoring Well(s) Condition:
COMMENTS: Good

II. Well Monitoring Procedures

Were water levels made prior to purging? (X) Yes or ( ) No
DESCRIBE BRIEFLY: Water levels measured on 11/14/22 using solinst WL meter

Were purge volumes measured? (X) Yes or ( ) No
DESCRIBE HOW: Measured in calibrated 5 gallon bucket

Purge Method: (X) Stabilization (X) 3 Volumes ( ) Other
DESCRIBE BRIEFLY: Both standard and low flow

What field parameters were used to determine representative samples?
DESCRIBE BRIEFLY: Ph + cond, DO, ORP, and temperature

Did Well sampling require more than one day? (X) Yes or ( ) No Provide Dates: 11/16/22 - 11/17/22

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): ( ) Yes or ( ) No
COMMENTS: Dedicated pumps in the GWP; Probe decanned between each reading

Any observed inappropriate techniques or procedures: ( ) Yes or (X) No
COMMENTS:

Inspected By:		Signature:		Date:
Sampler:	E. Taylor	Signature:		Date: 11/17/22
Sampler:		Signature:		Date:
Facility Rep:		Signature:		Date:

(Use Back side for additional Comments. Provide copies to sampler and facility)

Field Report Forms

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Rain 50°F
Project: 04208022.22 / Riverbend Landfill		
Event: 2022 Semiannual monitoring		Date: 4-18-22
Prepared By: J. Hultquist	Address: McMinnville OR	Arrival: 0900
		Departure: 1600

- Loaded up trucks, departed for site
- ET calibrated Gem 5000 and began LFG survey
- IH + BR began WL Survey.
- IH calibrated YSI and sampled stormwater. Helped ET sample flare
- ET completed LFG survey and departed site with bacteria (E. Col.) Stormwater samples to drop off at Alexin.
- IH + BR completed WL Survey and departed from site
- IH + ET Shipped Flare sample via FedEx to Simi Valley ALS

Signed:

SCS ENGINEERS

Field Report Form

Page 1 of 1

Client: Waste Management		Weather: Light Rain 48°F
Project: 04208022.22 / Riverbend LF		
Event: 2Q22 Semiannual Event		Date: 4-19-22
Prepared By: Ethan Hagquist	Address: McMinnville, OR	Arrival: 0645
		Departure: 1615

- Loaded up trucks and departed for site
- Arrived onsite, checked in with Dennis (wm)
- Calibrated YSI at office before departing for site
- Began sampling ~~Groundwater~~ IH Groundwater
- ET sampled MW-20A, MW-20B, MW-16A, DUP1 (MW-16A), MW-16B
- IH + BR Sampled P-05A, deviated P-06A, P-07A, FB1 (P-07A), MW-15A, ~~and~~ IH AAW
- Departed from site

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste management		Weather: cloudy 50°F
Project: 04208022.22 / RVB		
Event: 2Q22 Monitoring		Date: 4/20/22
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0700
		Departure: 1630

- Loaded up trucks, calibrated YSIs, Departed for site
- Checked in with Dennis (wm)
- ET began sampling the leachate pond / annual leachate monitoring at sumps.
- BR + IH Sampled P-06A (limited volume), MW-15B, MW-05A, DUP2 (MW-05A), MW-5B. Returned to P-06A to pull additional volume recovered since morning.

ET Sampled LPOBD LDS, Leachpond, 1/5 D, 4/55, FB2 (4/55) 6/7D, ~~6/75~~ IH

- Checked out Departed from Site

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: partly Cloudy 550
Project: 04208022.22 / Riverbend LF		
Event: 2Q22 Semi annual monitoring		Date: 11/21/22
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0700
		Departure: ~~1500~~ 1500

- Loaded up truck, calibrated YSI
- Arrived onsite checked in with Dennis, grabbed offsite keys.
- IH + BR began Sampling Surface water
- ET began sampling GW

ET sampled MW-22A, DUP3 (MW-22A), FB3 (MW-22A) MW-21A, and ~~MW-12B~~ MW-12A

IH + BR sampled SYR SW-1, SYR MW-12A, and SYR SW-2

IH departed with Surface water Samples to drop backeria and buy ice

BR attempted to sample MW-21B, pump not functioning properly (insufficient flow), pulled pump

BR Sampled MW-12B.

Departed from site

all Groundwater and Surface water samples Shipped to Eurofins - Denver Via FedEx

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Sunny 60°F
Project: 04208022.22 / RVB		
Event: 2Q2022 Semiannual Monitoring		Date: 4/22/22
Prepared By: I. Hultquist	Address: McMinnville OR	Arrival: 0700
		Departure: 1430

- Loaded up truck with equipment
- Calibrated YSI
- Arrived onsite, Checked in with Dennis, Grabbed offsite keys
- IH began sampling Groundwater
- ET began sampling Leachate
- Discussed low flow from 6/7s with Dennis + Bob, proceeded to collect sample with low liquid level in Sump. ET sampled 6/7s, 8S, 8P, 9S, 9P.

IH Sampled MW-19A, DUP4 (mw-19A), FB4 (mw-19A), MW-14A, and MW-14B

Departed from site.

All Leachate Samples and remaining GW samples Shipped to Eurofins Denver Via FedEx.

Signed: [signature]

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Cloudy 66°F
Project: 04208022.22		
Event: Riverbend MW-21B		Date: 6/1/22
Prepared By: B. Rapozo	Address: McMinnville, Or	Arrival: 0920
		Departure: 1115

- Packed up the truck and calibrated the YSI.
- Departed SCS
- Picked up ice and arrived at Riverbend Landfill.
- Grabbed the Gem from Joey and made my way to MW-21B.
- Decorned the sounder and the pump
- Inserted the pump without issue.
- Began sampling
- Packed up and departed for SCS.

Signed: BR

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: Sunny 40°F
Project: 04208022.22 / Riverbend LF		
Event: 4Q22 Monitoring		Date: 11/14/22
Prepared By: E. Taylor	Address: McMinnville, OR	Arrival: 0740
		Departure: 1530

- Loaded up the truck and departed for the site.
- Stopped at Safeway for decon supplies
- Arrived onsite, let site personnel know.
- Started the GW elevation survey.
- Called Dennis about the gate key
- Completed the GW elevation survey and departed the site.

Signed:

SCS ENGINEERS

Field Report Form

Client: WM		Weather: Sunny 40°F
Project: 04208022.22 / RBLF		
Event: 4Q22 monitoring		Date: 11/15/22
Prepared By: E. Taylor	Address: McMinnville, OR	Arrival: 0730
		Departure: 1600

- Loaded up the truck and departed for site;
- Stopped for ice at safeway and got gas
- Arrived on-site and checked in.
- Calibrated the YSI and began sampling
- Sampled MW-16B (+FB), MW-21A, MW-15B (+dup), MW-14B, MW-21B, MW-12A and MW-12B.
- departed site for office to store samples in the fridge.

Signed:

SCS ENGINEERS

Field Report Form

Client: VM		Weather: Sunny 38°F
Project: 04908022.22 / RBLF		
Event: 4Q22 monitoring		Date: 11/16/22
Prepared By: E. Taylor	Address: McMinnville, OR	Arrival: 0730
		Departure: 1600

- Loaded up the truck and departed for the site.
- Stopped for ice along the way.
- Arrived on-site, checked in and calibrated the YSI.
- Sampled MW-18A + dup, MW-20A + FB, MW-14A and MW-16A didn't recharge and couldn't be sampled.
- Calibrated the bem5000 and conducted the LFI2 survey.
- Completed LFI2 survey and took a flare sample
- departed site to go ship samples.

Signed:

SCS ENGINEERS

Field Report Form

Client: WM		Weather: sunny 38°F
Project: 04808022.22		
Event: 4Q22 monitoring		Date: 11/17/22
Prepared By: E. Taylor	Address: McMinnville, OR	Arrival: 0730
		Departure: 1600

- Loaded up the truck and departed for the site. Stopped at Safeway for ice.
- Arrived on-site, checked in and calibrated the YSI
- Sampled MW-19A + MW-5A and two leachate points. Rechecked WL for IH
- Departed site to go ship samples

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: 52°F Raining/Wind
Project: 04203022.22		
Event: MW-14A / MW-15A		Date: 1/5/22
Prepared By: E. Taylor	Address: McMinnville, OR	Arrival: 10:00
		Departure: 1430

- Loaded up the truck with the equipment that is needed, departed for the site.
- Arrived on-site, letting Dennis & Riley know.
- Sampled MW-14A + duplicate.
- Sampled MW-15A + field blank. All samples iced.
- Departed site for office to prep cooler for shipping.

Signed:

SCS ENGINEERS

Field Report Form

Client: Waste Management		Weather: 53°F Rain
Project: Riverbend Landfill / 04208022.22		
Event: MW-12A Resample		Date: 1/13/23
Prepared By: B. Rapozo	Address: McMinnville	Arrival: 1100
		Departure: 1420

- Left to ABC Fire to fill gas tanks for the backpack controller
- Enisled and left for the office
- Arrived, calibrated YSI, loaded up truck
- Departed SCS Portland for Safeway to grab DI water, tape, bags, and ice
- Arrived at RVB LF and began ~~sampling~~ PR purging MW-12A
- Purged 5 casing volumes and got the approval to sample
- Loaded up truck and departed for SCS Portland
- Samples planned to be shipped Monday January 16

Signed:

APPENDIX C

2022 Laboratory Analytical Reports (Including Chain-of-Custody Forms, Cation-Anion Balance Data, and Laboratory QA/QC Documentation), and TestAmerica Laboratories ORELAP Certification

(on CD)

Spring 2022

Compliance Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Compliance Wells - Apr Oct

JOB NUMBER

280-162989-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

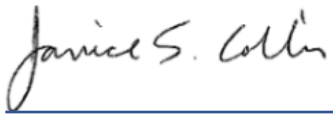
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
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(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-162989-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD 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: 280-162989-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-162989-1

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 06/02/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.4 C.

Holding Times

The holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

The Method 8260B laboratory control sample (LCS) for analytical batch 280-577411 recovered outside control limits for the following analytes: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The Method 8260B RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-577411 recovered outside control limits for the following analytes: Chloromethane, Chloroethane, and Vinyl chloride. Both the LCS and LCSD passed within limits; therefore the data is reported.

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) associated with Method 8260B analytical batch 280-577411.

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

Job ID: 280-162989-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-162989-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-162989-1

No Detections.

Client Sample ID: FB5 — Lab Sample ID: 280-162989-2

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	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: 280-162989-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	44000		500		ug/L	1		6010B	Dissolved
Iron	510		30		ug/L	1		6010B	Dissolved
Magnesium	18000		200		ug/L	1		6010B	Dissolved
Manganese	1600		3.0		ug/L	1		6010B	Dissolved
Potassium	810		500		ug/L	1		6010B	Dissolved
Sodium	28000		1000		ug/L	1		6010B	Dissolved
Chloride	14		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.43		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	2.5		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	1.9				%	1		SM 1030E	Total/NA
Calcium	44				mg/L	1		SM 1030E	Total/NA
Magnesium	18				mg/L	1		SM 1030E	Total/NA
Potassium	0.81				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21B (Continued)

Lab Sample ID: 280-162989-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sodium	28				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.43				mg/L	1		SM 1030E	Total/NA
Chloride	14				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
Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.9				%	1		SM 1030E	Total/NA
Calculated TDS	240				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	290				mg/L	1		SM 1030E	Total/NA
Iron	0.51				mg/L	1		SM 1030E	Total/NA
Calcium	2.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.021				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.031				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.39				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	0.027				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	290		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP5

Lab Sample ID: 280-162989-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	51000		500		ug/L	1		6010B	Dissolved
Iron	610		30		ug/L	1		6010B	Dissolved
Magnesium	20000		200		ug/L	1		6010B	Dissolved
Manganese	1900		3.0		ug/L	1		6010B	Dissolved
Potassium	890		500		ug/L	1		6010B	Dissolved
Sodium	33000		1000		ug/L	1		6010B	Dissolved
Chloride	14		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.54		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	2.6		1.0		mg/L	1		9060	Total/NA
Total Anions	4.8				meq/L	1		SM 1030E	Total/NA
Total Cations	5.7				meq/L	1		SM 1030E	Total/NA
Percent Difference	8.8				%	1		SM 1030E	Total/NA
Calcium	51				mg/L	1		SM 1030E	Total/NA
Magnesium	20				mg/L	1		SM 1030E	Total/NA
Potassium	0.89				mg/L	1		SM 1030E	Total/NA
Sodium	33				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.54				mg/L	1		SM 1030E	Total/NA
Chloride	14				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
Alkalinity	220				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: DUP5 (Continued)

Lab Sample ID: 280-162989-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Anion/Cation Balance	8.8				%	1		SM 1030E	Total/NA
Calculated TDS	250				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	290				mg/L	1		SM 1030E	Total/NA
Iron	0.61				mg/L	1		SM 1030E	Total/NA
Calcium	2.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.023				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.039				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.39				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	0.033				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	290		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-162989-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-162989-1	TRIP BLANK	Water	06/01/22 08:00	06/02/22 10:00
280-162989-2	FB5	Water	06/01/22 09:45	06/02/22 10:00
280-162989-3	MW-21B	Water	06/01/22 10:15	06/02/22 10:00
280-162989-4	DUP5	Water	06/01/22 10:20	06/02/22 10:00

Method Summary

Client: Waste Management
Job ID: 280-162989-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-162989-1

Client Sample ID: TRIP BLANK

Date Collected: 06/01/22 08:00
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-1

Matrix: Water

Method: SW846 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			06/08/22 10:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/08/22 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/08/22 10:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/08/22 10:59	1
1,1-Dichloroethane	ND		1.0		ug/L			06/08/22 10:59	1
1,1-Dichloroethene	ND		1.0		ug/L			06/08/22 10:59	1
1,1-Dichloropropene	ND		1.0		ug/L			06/08/22 10:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/08/22 10:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,2-Dichloroethane	ND		1.0		ug/L			06/08/22 10:59	1
1,2-Dichloropropane	ND		1.0		ug/L			06/08/22 10:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
1,3-Dichloropropane	ND		1.0		ug/L			06/08/22 10:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
2,2-Dichloropropane	ND		5.0		ug/L			06/08/22 10:59	1
2-Butanone (MEK)	ND		6.0		ug/L			06/08/22 10:59	1
2-Chlorotoluene	ND		1.0		ug/L			06/08/22 10:59	1
2-Hexanone	ND		5.0		ug/L			06/08/22 10:59	1
4-Chlorotoluene	ND		1.0		ug/L			06/08/22 10:59	1
4-Isopropyltoluene	ND		1.0		ug/L			06/08/22 10:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			06/08/22 10:59	1
Acetone	ND		10		ug/L			06/08/22 10:59	1
Benzene	ND		1.0		ug/L			06/08/22 10:59	1
Bromobenzene	ND		1.0		ug/L			06/08/22 10:59	1
Bromochloromethane	ND		1.0		ug/L			06/08/22 10:59	1
Bromodichloromethane	ND		1.0		ug/L			06/08/22 10:59	1
Bromoform	ND		1.0		ug/L			06/08/22 10:59	1
Bromomethane	ND	*+	2.0		ug/L			06/08/22 10:59	1
Carbon disulfide	ND		2.0		ug/L			06/08/22 10:59	1
Carbon tetrachloride	ND		1.0		ug/L			06/08/22 10:59	1
Chlorobenzene	ND		1.0		ug/L			06/08/22 10:59	1
Chloroethane	ND	*1	2.0		ug/L			06/08/22 10:59	1
Chloroform	ND		1.0		ug/L			06/08/22 10:59	1
Chloromethane	ND	*1	2.0		ug/L			06/08/22 10:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 10:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/08/22 10:59	1
Dibromochloromethane	ND		1.0		ug/L			06/08/22 10:59	1
Dibromomethane	ND		1.0		ug/L			06/08/22 10:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/08/22 10:59	1
Ethylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
Hexachlorobutadiene	ND		1.0		ug/L			06/08/22 10:59	1
Isopropylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
Methylene Chloride	ND		5.0		ug/L			06/08/22 10:59	1
Naphthalene	ND		1.0		ug/L			06/08/22 10:59	1
n-Butylbenzene	ND		1.0		ug/L			06/08/22 10:59	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-162989-1
Date Collected: 06/01/22 08:00
Matrix: Water
Date Received: 06/02/22 10:00

Method: SW846 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			06/08/22 10:59	1
sec-Butylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
Styrene	ND		1.0		ug/L			06/08/22 10:59	1
tert-Butylbenzene	ND		1.0		ug/L			06/08/22 10:59	1
Tetrachloroethene	ND		1.0		ug/L			06/08/22 10:59	1
Toluene	ND		1.0		ug/L			06/08/22 10:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 10:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			06/08/22 10:59	1
Trichloroethene	ND		1.0		ug/L			06/08/22 10:59	1
Trichlorofluoromethane	ND		2.0		ug/L			06/08/22 10:59	1
Vinyl chloride	ND	*1	1.0		ug/L			06/08/22 10:59	1
Xylenes (total)	ND		2.0		ug/L			06/08/22 10:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*06/08/22 10:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*06/08/22 10:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*78 - 120*		*06/08/22 10:59*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*06/08/22 10:59*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*06/08/22 10:59*	*1*

Method: SW846 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		06/07/22 17:37	06/08/22 06:15	1
1,2-Dibromoethane	ND		0.050		ug/L		06/07/22 17:37	06/08/22 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*93*		*70 - 130*	*06/07/22 17:37*	*06/08/22 06:15*	*1*

Client Sample ID: FB5

Lab Sample ID: 280-162989-2
Date Collected: 06/01/22 09:45
Matrix: Water
Date Received: 06/02/22 10:00

Method: SW846 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			06/08/22 13:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/08/22 13:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/08/22 13:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/08/22 13:28	1
1,1-Dichloroethane	ND		1.0		ug/L			06/08/22 13:28	1
1,1-Dichloroethene	ND		1.0		ug/L			06/08/22 13:28	1
1,1-Dichloropropene	ND		1.0		ug/L			06/08/22 13:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/08/22 13:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/08/22 13:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/08/22 13:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/08/22 13:28	1
1,2-Dichloroethane	ND		1.0		ug/L			06/08/22 13:28	1
1,2-Dichloropropane	ND		1.0		ug/L			06/08/22 13:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/08/22 13:28	1

Client Sample ID: FB5
Date Collected: 06/01/22 09:45
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-2
Matrix: Water

Method: SW846 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			06/08/22 13:28	1
1,3-Dichloropropane	ND		1.0		ug/L			06/08/22 13:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/08/22 13:28	1
2,2-Dichloropropane	ND		5.0		ug/L			06/08/22 13:28	1
2-Butanone (MEK)	ND		6.0		ug/L			06/08/22 13:28	1
2-Chlorotoluene	ND		1.0		ug/L			06/08/22 13:28	1
2-Hexanone	ND		5.0		ug/L			06/08/22 13:28	1
4-Chlorotoluene	ND		1.0		ug/L			06/08/22 13:28	1
4-Isopropyltoluene	ND		1.0		ug/L			06/08/22 13:28	1
4-Methyl-2-pentanone	ND		5.0		ug/L			06/08/22 13:28	1
Acetone	ND		10		ug/L			06/08/22 13:28	1
Benzene	ND		1.0		ug/L			06/08/22 13:28	1
Bromobenzene	ND		1.0		ug/L			06/08/22 13:28	1
Bromochloromethane	ND		1.0		ug/L			06/08/22 13:28	1
Bromodichloromethane	ND		1.0		ug/L			06/08/22 13:28	1
Bromoform	ND		1.0		ug/L			06/08/22 13:28	1
Bromomethane	ND	*+	2.0		ug/L			06/08/22 13:28	1
Carbon disulfide	ND		2.0		ug/L			06/08/22 13:28	1
Carbon tetrachloride	ND		1.0		ug/L			06/08/22 13:28	1
Chlorobenzene	ND		1.0		ug/L			06/08/22 13:28	1
Chloroethane	ND	*1	2.0		ug/L			06/08/22 13:28	1
Chloroform	ND		1.0		ug/L			06/08/22 13:28	1
Chloromethane	ND	*1	2.0		ug/L			06/08/22 13:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 13:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/08/22 13:28	1
Dibromochloromethane	ND		1.0		ug/L			06/08/22 13:28	1
Dibromomethane	ND		1.0		ug/L			06/08/22 13:28	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/08/22 13:28	1
Ethylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
Hexachlorobutadiene	ND		1.0		ug/L			06/08/22 13:28	1
Isopropylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
Methylene Chloride	ND		5.0		ug/L			06/08/22 13:28	1
Naphthalene	ND		1.0		ug/L			06/08/22 13:28	1
n-Butylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
N-Propylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
sec-Butylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
Styrene	ND		1.0		ug/L			06/08/22 13:28	1
tert-Butylbenzene	ND		1.0		ug/L			06/08/22 13:28	1
Tetrachloroethene	ND		1.0		ug/L			06/08/22 13:28	1
Toluene	ND		1.0		ug/L			06/08/22 13:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 13:28	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			06/08/22 13:28	1
Trichloroethene	ND		1.0		ug/L			06/08/22 13:28	1
Trichlorofluoromethane	ND		2.0		ug/L			06/08/22 13:28	1
Vinyl chloride	ND	*1	1.0		ug/L			06/08/22 13:28	1
Xylenes (total)	ND		2.0		ug/L			06/08/22 13:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*06/08/22 13:28*	*1*

Client Sample ID: FB5

Date Collected: 06/01/22 09:45
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*06/08/22 13:28*	*1*
4-Bromofluorobenzene (Surr)	*103*		*78 - 120*		*06/08/22 13:28*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*06/08/22 13:28*	*1*
Toluene-d8 (Surr)	*105*		*80 - 125*		*06/08/22 13:28*	*1*

Method: SW846 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		06/07/22 17:37	06/08/22 06:39	1
1,2-Dibromoethane	ND		0.050		ug/L		06/07/22 17:37	06/08/22 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*90*		*70 - 130*	*06/07/22 17:37*	*06/08/22 06:39*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		06/10/22 08:39	06/11/22 08:15	1
Iron	ND		30		ug/L		06/10/22 08:39	06/11/22 08:15	1
Magnesium	ND		200		ug/L		06/10/22 08:39	06/11/22 08:15	1
Manganese	ND		3.0		ug/L		06/10/22 08:39	06/11/22 08:15	1
Potassium	ND		500		ug/L		06/10/22 08:39	06/11/22 08:15	1
Sodium	ND		1000		ug/L		06/10/22 08:39	06/11/22 08:15	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.00**				meq/L			06/20/22 11:15	1
Total Cations (SM 1030E)	**0.00**				meq/L			06/20/22 11:15	1
Percent Difference (SM 1030E)	**NC**				%			06/20/22 11:15	1
Calcium (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Magnesium (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Potassium (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Sodium (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Chloride (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Sulfate (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Bicarbonate Alkalinity (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Alkalinity (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Anion/Cation Balance (SM 1030E)	**NC**				%			06/20/22 11:15	1
Calculated TDS (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
TDS Ratio (SM 1030E)	**NC**				NONE			06/20/22 11:15	1
Total Dissolved Solids (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Iron (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1
Calcium (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Magnesium (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			06/20/22 11:15	1
Alkalinity (SM 1030E (meq))	**0.00**				mg/L			06/20/22 11:15	1

Client Sample ID: FB5

Date Collected: 06/01/22 09:45
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Iron (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			06/16/22 03:50	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			06/16/22 03:50	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			06/18/22 10:03	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			06/16/22 12:42	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			06/03/22 20:53	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			06/06/22 20:47	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			06/03/22 09:42	1

Client Sample ID: MW-21B

Date Collected: 06/01/22 10:15
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-3
Matrix: Water

Method: SW846 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			06/08/22 13:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/08/22 13:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/08/22 13:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/08/22 13:50	1
1,1-Dichloroethane	ND		1.0		ug/L			06/08/22 13:50	1
1,1-Dichloroethene	ND		1.0		ug/L			06/08/22 13:50	1
1,1-Dichloropropene	ND		1.0		ug/L			06/08/22 13:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/08/22 13:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,2-Dichloroethane	ND		1.0		ug/L			06/08/22 13:50	1
1,2-Dichloropropane	ND		1.0		ug/L			06/08/22 13:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
1,3-Dichloropropane	ND		1.0		ug/L			06/08/22 13:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
2,2-Dichloropropane	ND		5.0		ug/L			06/08/22 13:50	1
2-Butanone (MEK)	ND		6.0		ug/L			06/08/22 13:50	1
2-Chlorotoluene	ND		1.0		ug/L			06/08/22 13:50	1
2-Hexanone	ND		5.0		ug/L			06/08/22 13:50	1
4-Chlorotoluene	ND		1.0		ug/L			06/08/22 13:50	1
4-Isopropyltoluene	ND		1.0		ug/L			06/08/22 13:50	1
4-Methyl-2-pentanone	ND		5.0		ug/L			06/08/22 13:50	1
Acetone	ND		10		ug/L			06/08/22 13:50	1
Benzene	ND		1.0		ug/L			06/08/22 13:50	1
Bromobenzene	ND		1.0		ug/L			06/08/22 13:50	1
Bromochloromethane	ND		1.0		ug/L			06/08/22 13:50	1
Bromodichloromethane	ND		1.0		ug/L			06/08/22 13:50	1

Client Sample ID: MW-21B
Date Collected: 06/01/22 10:15
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0		ug/L			06/08/22 13:50	1
Bromomethane	ND	*+	2.0		ug/L			06/08/22 13:50	1
Carbon disulfide	ND		2.0		ug/L			06/08/22 13:50	1
Carbon tetrachloride	ND		1.0		ug/L			06/08/22 13:50	1
Chlorobenzene	ND		1.0		ug/L			06/08/22 13:50	1
Chloroethane	ND	*1	2.0		ug/L			06/08/22 13:50	1
Chloroform	ND		1.0		ug/L			06/08/22 13:50	1
Chloromethane	ND	*1	2.0		ug/L			06/08/22 13:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 13:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/08/22 13:50	1
Dibromochloromethane	ND		1.0		ug/L			06/08/22 13:50	1
Dibromomethane	ND		1.0		ug/L			06/08/22 13:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/08/22 13:50	1
Ethylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
Hexachlorobutadiene	ND		1.0		ug/L			06/08/22 13:50	1
Isopropylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
Methylene Chloride	ND		5.0		ug/L			06/08/22 13:50	1
Naphthalene	ND		1.0		ug/L			06/08/22 13:50	1
n-Butylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
N-Propylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
sec-Butylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
Styrene	ND		1.0		ug/L			06/08/22 13:50	1
tert-Butylbenzene	ND		1.0		ug/L			06/08/22 13:50	1
Tetrachloroethene	ND		1.0		ug/L			06/08/22 13:50	1
Toluene	ND		1.0		ug/L			06/08/22 13:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 13:50	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			06/08/22 13:50	1
Trichloroethene	ND		1.0		ug/L			06/08/22 13:50	1
Trichlorofluoromethane	ND		2.0		ug/L			06/08/22 13:50	1
Vinyl chloride	ND	*1	1.0		ug/L			06/08/22 13:50	1
Xylenes (total)	ND		2.0		ug/L			06/08/22 13:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*06/08/22 13:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*06/08/22 13:50*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*06/08/22 13:50*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 120*		*06/08/22 13:50*	*1*
Toluene-d8 (Surr)	*104*		*80 - 125*		*06/08/22 13:50*	*1*

Method: SW846 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		06/07/22 17:37	06/08/22 07:02	1
1,2-Dibromoethane	ND		0.050		ug/L		06/07/22 17:37	06/08/22 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*97*		*70 - 130*	*06/07/22 17:37*	*06/08/22 07:02*	*1*

Client Sample ID: MW-21B

Date Collected: 06/01/22 10:15
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-3

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	44000		500		ug/L		06/10/22 08:39	06/11/22 08:19	1
Iron	510		30		ug/L		06/10/22 08:39	06/11/22 08:19	1
Magnesium	18000		200		ug/L		06/10/22 08:39	06/11/22 08:19	1
Manganese	1600		3.0		ug/L		06/10/22 08:39	06/11/22 08:19	1
Potassium	810		500		ug/L		06/10/22 08:39	06/11/22 08:19	1
Sodium	28000		1000		ug/L		06/10/22 08:39	06/11/22 08:19	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	4.8				meq/L			06/20/22 11:15	1
Total Cations (SM 1030E)	5.0				meq/L			06/20/22 11:15	1
Percent Difference (SM 1030E)	1.9				%			06/20/22 11:15	1
Calcium (SM 1030E)	44				mg/L			06/20/22 11:15	1
Magnesium (SM 1030E)	18				mg/L			06/20/22 11:15	1
Potassium (SM 1030E)	0.81				mg/L			06/20/22 11:15	1
Sodium (SM 1030E)	28				mg/L			06/20/22 11:15	1
Ammonia as N (SM 1030E)	0.43				mg/L			06/20/22 11:15	1
Chloride (SM 1030E)	14				mg/L			06/20/22 11:15	1
Sulfate (SM 1030E)	0.00				mg/L			06/20/22 11:15	1
Bicarbonate Alkalinity (SM 1030E)	220				mg/L			06/20/22 11:15	1
Alkalinity (SM 1030E)	220				mg/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			06/20/22 11:15	1
Anion/Cation Balance (SM 1030E)	1.9				%			06/20/22 11:15	1
Calculated TDS (SM 1030E)	240				mg/L			06/20/22 11:15	1
TDS Ratio (SM 1030E)	1.2				NONE			06/20/22 11:15	1
Total Dissolved Solids (SM 1030E)	290				mg/L			06/20/22 11:15	1
Iron (SM 1030E)	0.51				mg/L			06/20/22 11:15	1
Calcium (SM 1030E (meq))	2.2				meq/L			06/20/22 11:15	1
Magnesium (SM 1030E (meq))	1.5				meq/L			06/20/22 11:15	1
Potassium (SM 1030E (meq))	0.021				meq/L			06/20/22 11:15	1
Sodium (SM 1030E (meq))	1.2				meq/L			06/20/22 11:15	1
Ammonia as N (SM 1030E (meq))	0.031				meq/L			06/20/22 11:15	1
Chloride (SM 1030E (meq))	0.39				meq/L			06/20/22 11:15	1
Sulfate (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Alkalinity (SM 1030E (meq))	220				mg/L			06/20/22 11:15	1
Bicarbonate Alkalinity (SM 1030E (meq))	4.4				meq/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Iron (SM 1030E (meq))	0.027				meq/L			06/20/22 11:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		0.50		mg/L			06/18/22 06:39	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			06/18/22 06:39	1
Ammonia as N (EPA 350.1)	0.43		0.030		mg/L			06/18/22 10:05	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			06/16/22 12:44	1
Total Organic Carbon - Average (SW846 9060)	2.5		1.0		mg/L			06/03/22 21:07	1
Bicarbonate Alkalinity (SM 2320B)	220		10		mg/L			06/06/22 20:50	1
Total Dissolved Solids (SM 2540C)	290		10		mg/L			06/06/22 09:59	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-162989-1

Client Sample ID: DUP5
Date Collected: 06/01/22 10:20
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-4
Matrix: Water

Method: SW846 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			06/08/22 14:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/08/22 14:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/08/22 14:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/08/22 14:11	1
1,1-Dichloroethane	ND		1.0		ug/L			06/08/22 14:11	1
1,1-Dichloroethene	ND		1.0		ug/L			06/08/22 14:11	1
1,1-Dichloropropene	ND		1.0		ug/L			06/08/22 14:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/08/22 14:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,2-Dichloroethane	ND		1.0		ug/L			06/08/22 14:11	1
1,2-Dichloropropane	ND		1.0		ug/L			06/08/22 14:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
1,3-Dichloropropane	ND		1.0		ug/L			06/08/22 14:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
2,2-Dichloropropane	ND		5.0		ug/L			06/08/22 14:11	1
2-Butanone (MEK)	ND		6.0		ug/L			06/08/22 14:11	1
2-Chlorotoluene	ND		1.0		ug/L			06/08/22 14:11	1
2-Hexanone	ND		5.0		ug/L			06/08/22 14:11	1
4-Chlorotoluene	ND		1.0		ug/L			06/08/22 14:11	1
4-Isopropyltoluene	ND		1.0		ug/L			06/08/22 14:11	1
4-Methyl-2-pentanone	ND		5.0		ug/L			06/08/22 14:11	1
Acetone	ND		10		ug/L			06/08/22 14:11	1
Benzene	ND		1.0		ug/L			06/08/22 14:11	1
Bromobenzene	ND		1.0		ug/L			06/08/22 14:11	1
Bromochloromethane	ND		1.0		ug/L			06/08/22 14:11	1
Bromodichloromethane	ND		1.0		ug/L			06/08/22 14:11	1
Bromoform	ND		1.0		ug/L			06/08/22 14:11	1
Bromomethane	ND	*+	2.0		ug/L			06/08/22 14:11	1
Carbon disulfide	ND		2.0		ug/L			06/08/22 14:11	1
Carbon tetrachloride	ND		1.0		ug/L			06/08/22 14:11	1
Chlorobenzene	ND		1.0		ug/L			06/08/22 14:11	1
Chloroethane	ND	*1	2.0		ug/L			06/08/22 14:11	1
Chloroform	ND		1.0		ug/L			06/08/22 14:11	1
Chloromethane	ND	*1	2.0		ug/L			06/08/22 14:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 14:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/08/22 14:11	1
Dibromochloromethane	ND		1.0		ug/L			06/08/22 14:11	1
Dibromomethane	ND		1.0		ug/L			06/08/22 14:11	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/08/22 14:11	1
Ethylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
Hexachlorobutadiene	ND		1.0		ug/L			06/08/22 14:11	1
Isopropylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
Methylene Chloride	ND		5.0		ug/L			06/08/22 14:11	1
Naphthalene	ND		1.0		ug/L			06/08/22 14:11	1
n-Butylbenzene	ND		1.0		ug/L			06/08/22 14:11	1

Client Sample ID: DUP5

Date Collected: 06/01/22 10:20
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-4

Matrix: Water

Method: SW846 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			06/08/22 14:11	1
sec-Butylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
Styrene	ND		1.0		ug/L			06/08/22 14:11	1
tert-Butylbenzene	ND		1.0		ug/L			06/08/22 14:11	1
Tetrachloroethene	ND		1.0		ug/L			06/08/22 14:11	1
Toluene	ND		1.0		ug/L			06/08/22 14:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 14:11	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			06/08/22 14:11	1
Trichloroethene	ND		1.0		ug/L			06/08/22 14:11	1
Trichlorofluoromethane	ND		2.0		ug/L			06/08/22 14:11	1
Vinyl chloride	ND	*1	1.0		ug/L			06/08/22 14:11	1
Xylenes (total)	ND		2.0		ug/L			06/08/22 14:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*06/08/22 14:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*06/08/22 14:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*06/08/22 14:11*	*1*
Dibromofluoromethane (Surr)	*106*		*77 - 120*		*06/08/22 14:11*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*06/08/22 14:11*	*1*

Method: SW846 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		06/07/22 17:37	06/08/22 07:26	1
1,2-Dibromoethane	ND		0.050		ug/L		06/07/22 17:37	06/08/22 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*89*		*70 - 130*	*06/07/22 17:37*	*06/08/22 07:26*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**51000**		500		ug/L		06/10/22 08:39	06/11/22 08:23	1
Iron	**610**		30		ug/L		06/10/22 08:39	06/11/22 08:23	1
Magnesium	**20000**		200		ug/L		06/10/22 08:39	06/11/22 08:23	1
Manganese	**1900**		3.0		ug/L		06/10/22 08:39	06/11/22 08:23	1
Potassium	**890**		500		ug/L		06/10/22 08:39	06/11/22 08:23	1
Sodium	**33000**		1000		ug/L		06/10/22 08:39	06/11/22 08:23	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**4.8**				meq/L			06/20/22 11:15	1
Total Cations (SM 1030E)	**5.7**				meq/L			06/20/22 11:15	1
Percent Difference (SM 1030E)	**8.8**				%			06/20/22 11:15	1
Calcium (SM 1030E)	**51**				mg/L			06/20/22 11:15	1
Magnesium (SM 1030E)	**20**				mg/L			06/20/22 11:15	1
Potassium (SM 1030E)	**0.89**				mg/L			06/20/22 11:15	1
Sodium (SM 1030E)	**33**				mg/L			06/20/22 11:15	1
Ammonia as N (SM 1030E)	**0.54**				mg/L			06/20/22 11:15	1
Chloride (SM 1030E)	**14**				mg/L			06/20/22 11:15	1
Sulfate (SM 1030E)	**0.00**				mg/L			06/20/22 11:15	1

Client Sample ID: DUP5
Date Collected: 06/01/22 10:20
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E)	220				mg/L			06/20/22 11:15	1
Alkalinity (SM 1030E)	220				mg/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			06/20/22 11:15	1
Anion/Cation Balance (SM 1030E)	8.8				%			06/20/22 11:15	1
Calculated TDS (SM 1030E)	250				mg/L			06/20/22 11:15	1
TDS Ratio (SM 1030E)	1.2				NONE			06/20/22 11:15	1
Total Dissolved Solids (SM 1030E)	290				mg/L			06/20/22 11:15	1
Iron (SM 1030E)	0.61				mg/L			06/20/22 11:15	1
Calcium (SM 1030E (meq))	2.5				meq/L			06/20/22 11:15	1
Magnesium (SM 1030E (meq))	1.6				meq/L			06/20/22 11:15	1
Potassium (SM 1030E (meq))	0.023				meq/L			06/20/22 11:15	1
Sodium (SM 1030E (meq))	1.4				meq/L			06/20/22 11:15	1
Ammonia as N (SM 1030E (meq))	0.039				meq/L			06/20/22 11:15	1
Chloride (SM 1030E (meq))	0.39				meq/L			06/20/22 11:15	1
Sulfate (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Alkalinity (SM 1030E (meq))	220				mg/L			06/20/22 11:15	1
Bicarbonate Alkalinity (SM 1030E (meq))	4.4				meq/L			06/20/22 11:15	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			06/20/22 11:15	1
Iron (SM 1030E (meq))	0.033				meq/L			06/20/22 11:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		0.50		mg/L			06/18/22 06:58	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			06/18/22 06:58	1
Ammonia as N (EPA 350.1)	0.54		0.030		mg/L			06/18/22 10:18	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			06/16/22 12:46	1
Total Organic Carbon - Average (SW846 9060)	2.6		1.0		mg/L			06/03/22 21:24	1
Bicarbonate Alkalinity (SM 2320B)	220		10		mg/L			06/08/22 16:42	1
Total Dissolved Solids (SM 2540C)	290		10		mg/L			06/06/22 09:59	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-162989-1

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)
280-162989-1	TRIP BLANK	97	104	103	102
280-162989-2	FB5	102	103	106	105
280-162989-3	MW-21B	99	102	105	104
280-162989-4	DUP5	98	102	106	103
LCS 280-577411/4	Lab Control Sample	93	102	100	97
LCSD 280-577411/5	Lab Control Sample Dup	93	102	100	99
MB 280-577411/9	Method Blank	97	101	107	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)
280-162989-1	TRIP BLANK	93
280-162989-2	FB5	90
280-162989-3	MW-21B	97
280-162989-4	DUP5	89
LCS 280-577389/2-A	Lab Control Sample	94
LCSD 280-577389/3-A	Lab Control Sample Dup	92
MB 280-577389/1-A	Method Blank	94

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-577411/9
Matrix: Water
Analysis Batch: 577411

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			06/08/22 10:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			06/08/22 10:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/08/22 10:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/08/22 10:17	1
1,1-Dichloroethane	ND		1.0		ug/L			06/08/22 10:17	1
1,1-Dichloroethene	ND		1.0		ug/L			06/08/22 10:17	1
1,1-Dichloropropene	ND		1.0		ug/L			06/08/22 10:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			06/08/22 10:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,2-Dichloroethane	ND		1.0		ug/L			06/08/22 10:17	1
1,2-Dichloropropane	ND		1.0		ug/L			06/08/22 10:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
1,3-Dichloropropane	ND		1.0		ug/L			06/08/22 10:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
2,2-Dichloropropane	ND		5.0		ug/L			06/08/22 10:17	1
2-Butanone (MEK)	ND		6.0		ug/L			06/08/22 10:17	1
2-Chlorotoluene	ND		1.0		ug/L			06/08/22 10:17	1
2-Hexanone	ND		5.0		ug/L			06/08/22 10:17	1
4-Chlorotoluene	ND		1.0		ug/L			06/08/22 10:17	1
4-Isopropyltoluene	ND		1.0		ug/L			06/08/22 10:17	1
4-Methyl-2-pentanone	ND		5.0		ug/L			06/08/22 10:17	1
Acetone	ND		10		ug/L			06/08/22 10:17	1
Benzene	ND		1.0		ug/L			06/08/22 10:17	1
Bromobenzene	ND		1.0		ug/L			06/08/22 10:17	1
Bromochloromethane	ND		1.0		ug/L			06/08/22 10:17	1
Bromodichloromethane	ND		1.0		ug/L			06/08/22 10:17	1
Bromoform	ND		1.0		ug/L			06/08/22 10:17	1
Bromomethane	ND		2.0		ug/L			06/08/22 10:17	1
Carbon disulfide	ND		2.0		ug/L			06/08/22 10:17	1
Carbon tetrachloride	ND		1.0		ug/L			06/08/22 10:17	1
Chlorobenzene	ND		1.0		ug/L			06/08/22 10:17	1
Chloroethane	ND		2.0		ug/L			06/08/22 10:17	1
Chloroform	ND		1.0		ug/L			06/08/22 10:17	1
Chloromethane	ND		2.0		ug/L			06/08/22 10:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 10:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/08/22 10:17	1
Dibromochloromethane	ND		1.0		ug/L			06/08/22 10:17	1
Dibromomethane	ND		1.0		ug/L			06/08/22 10:17	1
Dichlorodifluoromethane	ND		2.0		ug/L			06/08/22 10:17	1
Ethylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
Hexachlorobutadiene	ND		1.0		ug/L			06/08/22 10:17	1
Isopropylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
Methylene Chloride	ND		5.0		ug/L			06/08/22 10:17	1
Naphthalene	ND		1.0		ug/L			06/08/22 10:17	1

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

Lab Sample ID: MB 280-577411/9
Matrix: Water
Analysis Batch: 577411

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			06/08/22 10:17	1
N-Propylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
sec-Butylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
Styrene	ND		1.0		ug/L			06/08/22 10:17	1
tert-Butylbenzene	ND		1.0		ug/L			06/08/22 10:17	1
Tetrachloroethene	ND		1.0		ug/L			06/08/22 10:17	1
Toluene	ND		1.0		ug/L			06/08/22 10:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/08/22 10:17	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			06/08/22 10:17	1
Trichloroethene	ND		1.0		ug/L			06/08/22 10:17	1
Trichlorofluoromethane	ND		2.0		ug/L			06/08/22 10:17	1
Vinyl chloride	ND		1.0		ug/L			06/08/22 10:17	1
Xylenes (total)	ND		2.0		ug/L			06/08/22 10:17	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*06/08/22 10:17*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*06/08/22 10:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*06/08/22 10:17*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*06/08/22 10:17*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*06/08/22 10:17*	*1*

Lab Sample ID: LCS 280-577411/4
Matrix: Water
Analysis Batch: 577411

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	23.9		ug/L		96	74 - 121
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	62 - 132
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	72 - 122
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	72 - 128
1,1-Dichloroethane	25.0	25.8		ug/L		103	66 - 130
1,1-Dichloroethene	25.0	26.6		ug/L		106	62 - 130
1,1-Dichloropropene	25.0	25.7		ug/L		103	64 - 133
1,2,3-Trichlorobenzene	25.0	22.2		ug/L		89	70 - 127
1,2,3-Trichloropropane	25.0	23.4		ug/L		94	74 - 123
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		92	73 - 124
1,2,4-Trimethylbenzene	25.0	26.4		ug/L		106	74 - 124
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 121
1,2-Dichloroethane	25.0	23.7		ug/L		95	61 - 130
1,2-Dichloropropane	25.0	27.1		ug/L		108	68 - 127
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	73 - 127
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	76 - 121
1,3-Dichloropropane	25.0	24.9		ug/L		99	80 - 118
1,4-Dichlorobenzene	25.0	24.1		ug/L		97	76 - 119
2,2-Dichloropropane	25.0	26.1		ug/L		104	57 - 140
2-Butanone (MEK)	100	82.8		ug/L		83	53 - 135

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

Lab Sample ID: LCS 280-577411/4
Matrix: Water
Analysis Batch: 577411

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	75 - 123
2-Hexanone	100	81.2		ug/L		81	58 - 134
4-Chlorotoluene	25.0	24.7		ug/L		99	74 - 124
4-Isopropyltoluene	25.0	25.5		ug/L		102	74 - 127
4-Methyl-2-pentanone	100	90.7		ug/L		91	56 - 135
Acetone	100	88.3		ug/L		88	50 - 137
Benzene	25.0	26.9		ug/L		107	69 - 126
Bromobenzene	25.0	24.4		ug/L		98	75 - 122
Bromochloromethane	25.0	25.9		ug/L		104	71 - 130
Bromodichloromethane	25.0	26.5		ug/L		106	67 - 126
Bromoform	25.0	24.6		ug/L		98	57 - 125
Bromomethane	25.0	43.8	*+	ug/L		175	25 - 163
Carbon disulfide	25.0	29.6		ug/L		118	56 - 128
Carbon tetrachloride	25.0	26.1		ug/L		104	60 - 133
Chlorobenzene	25.0	24.6		ug/L		98	78 - 118
Chloroethane	25.0	32.4		ug/L		130	52 - 144
Chloroform	25.0	26.5		ug/L		106	68 - 128
Chloromethane	25.0	31.8		ug/L		127	43 - 142
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	69 - 126
cis-1,3-Dichloropropene	25.0	24.9		ug/L		100	75 - 120
Dibromochloromethane	25.0	25.2		ug/L		101	71 - 122
Dibromomethane	25.0	25.4		ug/L		102	68 - 129
Dichlorodifluoromethane	25.0	32.5		ug/L		130	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	25.2		ug/L		101	69 - 133
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 127
Methylene Chloride	25.0	28.7		ug/L		115	64 - 128
Naphthalene	25.0	20.8		ug/L		83	63 - 129
n-Butylbenzene	25.0	26.6		ug/L		107	69 - 130
N-Propylbenzene	25.0	24.3		ug/L		97	73 - 127
sec-Butylbenzene	25.0	24.0		ug/L		96	72 - 127
Styrene	25.0	25.9		ug/L		103	79 - 120
tert-Butylbenzene	25.0	24.6		ug/L		98	72 - 126
Tetrachloroethene	25.0	24.1		ug/L		96	72 - 127
Toluene	25.0	26.5		ug/L		106	68 - 127
trans-1,2-Dichloroethene	25.0	26.4		ug/L		105	66 - 129
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	66 - 127
Trichloroethene	25.0	24.6		ug/L		98	70 - 125
Trichlorofluoromethane	25.0	30.0		ug/L		120	57 - 144
Vinyl chloride	25.0	33.5		ug/L		134	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

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

Lab Sample ID: LCSD 280-577411/5
Matrix: Water
Analysis Batch: 577411

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	24.5		ug/L		98	74 - 121	3	20
1,1,1-Trichloroethane			25.0	25.6		ug/L		102	62 - 132	1	20
1,1,2,2-Tetrachloroethane			25.0	24.3		ug/L		97	72 - 122	1	20
1,1,2-Trichloroethane			25.0	26.0		ug/L		104	72 - 128	1	20
1,1-Dichloroethane			25.0	25.9		ug/L		104	66 - 130	0	20
1,1-Dichloroethene			25.0	26.8		ug/L		107	62 - 130	1	21
1,1-Dichloropropene			25.0	26.2		ug/L		105	64 - 133	2	20
1,2,3-Trichlorobenzene			25.0	23.1		ug/L		92	70 - 127	4	20
1,2,3-Trichloropropane			25.0	24.0		ug/L		96	74 - 123	3	20
1,2,4-Trichlorobenzene			25.0	24.0		ug/L		96	73 - 124	4	20
1,2,4-Trimethylbenzene			25.0	26.5		ug/L		106	74 - 124	0	20
1,2-Dichlorobenzene			25.0	25.3		ug/L		101	77 - 121	1	20
1,2-Dichloroethane			25.0	23.4		ug/L		94	61 - 130	1	20
1,2-Dichloropropane			25.0	27.0		ug/L		108	68 - 127	0	20
1,3,5-Trimethylbenzene			25.0	26.0		ug/L		104	73 - 127	1	20
1,3-Dichlorobenzene			25.0	24.6		ug/L		98	76 - 121	1	20
1,3-Dichloropropane			25.0	25.6		ug/L		102	80 - 118	3	20
1,4-Dichlorobenzene			25.0	23.9		ug/L		96	76 - 119	1	20
2,2-Dichloropropane			25.0	25.8		ug/L		103	57 - 140	1	22
2-Butanone (MEK)			100	84.0		ug/L		84	53 - 135	1	20
2-Chlorotoluene			25.0	24.9		ug/L		100	75 - 123	1	20
2-Hexanone			100	80.7		ug/L		81	58 - 134	1	21
4-Chlorotoluene			25.0	25.6		ug/L		102	74 - 124	3	20
4-Isopropyltoluene			25.0	25.9		ug/L		104	74 - 127	2	20
4-Methyl-2-pentanone			100	90.0		ug/L		90	56 - 135	1	20
Acetone			100	88.8		ug/L		89	50 - 137	0	21
Benzene			25.0	26.8		ug/L		107	69 - 126	0	20
Bromobenzene			25.0	24.5		ug/L		98	75 - 122	1	20
Bromochloromethane			25.0	25.9		ug/L		104	71 - 130	0	20
Bromodichloromethane			25.0	26.3		ug/L		105	67 - 126	1	20
Bromoform			25.0	25.2		ug/L		101	57 - 125	3	20
Bromomethane			25.0	39.5		ug/L		158	25 - 163	10	40
Carbon disulfide			25.0	29.6		ug/L		118	56 - 128	0	20
Carbon tetrachloride			25.0	26.5		ug/L		106	60 - 133	2	20
Chlorobenzene			25.0	25.3		ug/L		101	78 - 118	3	20
Chloroethane			25.0	19.3	*1	ug/L		77	52 - 144	51	30
Chloroform			25.0	26.3		ug/L		105	68 - 128	1	20
Chloromethane			25.0	22.0	*1	ug/L		88	43 - 142	36	20
cis-1,2-Dichloroethene			25.0	25.8		ug/L		103	69 - 126	1	20
cis-1,3-Dichloropropene			25.0	25.5		ug/L		102	75 - 120	3	20
Dibromochloromethane			25.0	25.5		ug/L		102	71 - 122	1	20
Dibromomethane			25.0	25.8		ug/L		103	68 - 129	2	20
Dichlorodifluoromethane			25.0	31.0		ug/L		124	26 - 152	5	21
Ethylbenzene			25.0	25.6		ug/L		102	76 - 121	3	20
Hexachlorobutadiene			25.0	24.8		ug/L		99	69 - 133	1	20
Isopropylbenzene			25.0	25.4		ug/L		102	70 - 127	2	20
Methylene Chloride			25.0	28.7		ug/L		115	64 - 128	0	20
Naphthalene			25.0	21.6		ug/L		86	63 - 129	4	21

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

Lab Sample ID: LCSD 280-577411/5
Matrix: Water
Analysis Batch: 577411

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	27.0		ug/L		108	69 - 130	1	20
N-Propylbenzene	25.0	24.8		ug/L		99	73 - 127	2	20
sec-Butylbenzene	25.0	24.0		ug/L		96	72 - 127	0	20
Styrene	25.0	26.3		ug/L		105	79 - 120	2	20
tert-Butylbenzene	25.0	25.1		ug/L		100	72 - 126	2	20
Tetrachloroethene	25.0	24.9		ug/L		99	72 - 127	3	20
Toluene	25.0	26.4		ug/L		106	68 - 127	0	20
trans-1,2-Dichloroethene	25.0	26.9		ug/L		107	66 - 129	2	20
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	66 - 127	0	20
Trichloroethene	25.0	25.1		ug/L		100	70 - 125	2	20
Trichlorofluoromethane	25.0	23.1		ug/L		92	57 - 144	26	28
Vinyl chloride	25.0	23.1	*1	ug/L		92	53 - 141	37	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-577389/1-A
Matrix: Water
Analysis Batch: 577396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 577389

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		06/07/22 17:37	06/07/22 22:42	1
1,2-Dibromoethane	ND		0.050		ug/L		06/07/22 17:37	06/07/22 22:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*94*		*70 - 130*	*06/07/22 17:37*	*06/07/22 22:42*	*1*

Lab Sample ID: LCS 280-577389/2-A
Matrix: Water
Analysis Batch: 577396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 577389

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	0.227		ug/L		91	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*94*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-577389/3-A
Matrix: Water
Analysis Batch: 577396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 577389

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		101	60 - 140	2	10
1,2-Dibromoethane			0.250	0.235		ug/L		94	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*92*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-577621/1-A
Matrix: Water
Analysis Batch: 577836

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 577621

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		06/10/22 08:39	06/11/22 07:18	1
Iron	ND		30		ug/L		06/10/22 08:39	06/11/22 07:18	1
Magnesium	ND		200		ug/L		06/10/22 08:39	06/11/22 07:18	1
Manganese	ND		3.0		ug/L		06/10/22 08:39	06/11/22 07:18	1
Potassium	ND		500		ug/L		06/10/22 08:39	06/11/22 07:18	1
Sodium	ND		1000		ug/L		06/10/22 08:39	06/11/22 07:18	1

Lab Sample ID: LCS 280-577621/2-A
Matrix: Water
Analysis Batch: 577836

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 577621

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	51200		ug/L		102	90 - 111		
Iron			10000	10300		ug/L		103	89 - 115		
Magnesium			50000	50400		ug/L		101	90 - 113		
Manganese			1000	1030		ug/L		103	90 - 110		
Potassium			50000	50800		ug/L		102	89 - 114		
Sodium			50000	51500		ug/L		103	90 - 115		

Lab Sample ID: 280-163025-C-9-B MS
Matrix: Water
Analysis Batch: 577836

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 577621

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	1100		50000	51300		ug/L		100	48 - 153		
Iron	ND		10000	10100		ug/L		101	52 - 155		
Magnesium	1200		50000	51200		ug/L		100	62 - 146		
Manganese	3.4		1000	1020		ug/L		102	79 - 121		
Potassium	650		50000	50100		ug/L		99	76 - 132		
Sodium	6300		50000	55700		ug/L		99	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-163025-C-9-C MSD
Matrix: Water
Analysis Batch: 577836

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 577621

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	1100		50000	47800		ug/L		93	48 - 153	7	20
Iron	ND		10000	9410		ug/L		94	52 - 155	7	20
Magnesium	1200		50000	47600		ug/L		93	62 - 146	7	20
Manganese	3.4		1000	948		ug/L		94	79 - 121	7	20
Potassium	650		50000	46600		ug/L		92	76 - 132	7	20
Sodium	6300		50000	51900		ug/L		91	70 - 203	7	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-630196/4
Matrix: Water
Analysis Batch: 630196

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			06/16/22 03:11	1
Sulfate	ND		1.0		mg/L			06/16/22 03:11	1

Lab Sample ID: LCS 480-630196/5
Matrix: Water
Analysis Batch: 630196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.4		mg/L		101	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: MB 480-630550/28
Matrix: Water
Analysis Batch: 630550

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			06/18/22 01:42	1
Sulfate	ND		1.0		mg/L			06/18/22 01:42	1

Lab Sample ID: LCS 480-630550/29
Matrix: Water
Analysis Batch: 630550

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	48.2		mg/L		96	90 - 110
Sulfate	50.0	48.1		mg/L		96	90 - 110

Lab Sample ID: 480-198911-C-3 MS
Matrix: Water
Analysis Batch: 630550

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	37		100	129		mg/L		91	81 - 120
Sulfate	ND		100	92.8		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-198911-C-3 MSD
Matrix: Water
Analysis Batch: 630550

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	37		100	128		mg/L		91	81 - 120	0	15
Sulfate	ND		100	92.4		mg/L		92	80 - 120	0	15

Lab Sample ID: 480-199027-G-1 MS
Matrix: Water
Analysis Batch: 630550

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	150		251	382		mg/L		91	81 - 120
Sulfate	51		250	281		mg/L		92	80 - 120

Lab Sample ID: 480-198665-C-3 MS
Matrix: Water
Analysis Batch: 630196

Client Sample ID: Matrix Spike
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.1	46.3		mg/L		92	81 - 120
Sulfate	ND		50.0	46.8		mg/L		92	80 - 120

Lab Sample ID: 480-198665-C-3 MSD
Matrix: Water
Analysis Batch: 630196

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		50.1	46.3		mg/L		92	81 - 120	0	15
Sulfate	ND		50.0	46.8		mg/L		92	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-578455/19
Matrix: Water
Analysis Batch: 578455

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			06/18/22 09:23	1

Lab Sample ID: LCS 280-578455/17
Matrix: Water
Analysis Batch: 578455

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 280-578455/18
Matrix: Water
Analysis Batch: 578455

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: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-162776-A-13 MS
Matrix: Water
Analysis Batch: 578455

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	1.01		mg/L		101	90 - 110

Lab Sample ID: 280-162776-A-13 MSD
Matrix: Water
Analysis Batch: 578455

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: 280-162840-A-2 MS
Matrix: Water
Analysis Batch: 578455

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	1.00		mg/L		100	90 - 110

Lab Sample ID: 280-162840-A-2 MSD
Matrix: Water
Analysis Batch: 578455

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	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-578283/23
Matrix: Water
Analysis Batch: 578283

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			06/16/22 11:34	1

Lab Sample ID: LCS 280-578283/21
Matrix: Water
Analysis Batch: 578283

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	4.95		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-578283/22
Matrix: Water
Analysis Batch: 578283

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	4.98		mg/L		100	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-162841-A-5 MS
Matrix: Water
Analysis Batch: 578283

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	0.44		4.00	4.46		mg/L		101	90 - 110

Lab Sample ID: 280-162841-A-5 MSD
Matrix: Water
Analysis Batch: 578283

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	0.44		4.00	4.52		mg/L		102	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-577172/4
Matrix: Water
Analysis Batch: 577172

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			06/03/22 17:08	1

Lab Sample ID: LCS 280-577172/3
Matrix: Water
Analysis Batch: 577172

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: 280-162989-4 MS
Matrix: Water
Analysis Batch: 577172

Client Sample ID: DUP5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	2.6		25.0	27.3		mg/L		99	88 - 112

Lab Sample ID: 280-162989-4 MSD
Matrix: Water
Analysis Batch: 577172

Client Sample ID: DUP5
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	2.6		25.0	27.4		mg/L		99	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-578517/1
Matrix: Water
Analysis Batch: 578517

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			06/20/22 11:15	1
Magnesium	0.000				meq/L			06/20/22 11:15	1
Potassium	0.000				meq/L			06/20/22 11:15	1
Sodium	0.000				meq/L			06/20/22 11:15	1

Method: SM 1030E (meq) - Cation Anion Balance (Continued)

Lab Sample ID: MB 280-578517/1
Matrix: Water
Analysis Batch: 578517

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.000				meq/L			06/20/22 11:15	1
Chloride	0.000				meq/L			06/20/22 11:15	1
Sulfate	0.000				meq/L			06/20/22 11:15	1
Alkalinity	0.000				mg/L			06/20/22 11:15	1
Bicarbonate Alkalinity	0.000				meq/L			06/20/22 11:15	1
Nitrate/Nitrite	0.000				meq/L			06/20/22 11:15	1
Iron	0.000				meq/L			06/20/22 11:15	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-577294/32
Matrix: Water
Analysis Batch: 577294

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			06/06/22 16:31	1

Lab Sample ID: MB 280-577294/58
Matrix: Water
Analysis Batch: 577294

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			06/06/22 19:19	1

Lab Sample ID: MB 280-577294/6
Matrix: Water
Analysis Batch: 577294

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			06/06/22 14:10	1

Lab Sample ID: 280-162978-B-12 DU
Matrix: Water
Analysis Batch: 577294

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	990			980		mg/L				0.6	20

Lab Sample ID: MB 280-577614/6
Matrix: Water
Analysis Batch: 577614

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			06/08/22 15:52	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-163028-K-1 DU
Matrix: Water
Analysis Batch: 577614

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	310			318		mg/L				1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-577023/1
Matrix: Water
Analysis Batch: 577023

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			06/03/22 08:42	1

Lab Sample ID: LCS 280-577023/2
Matrix: Water
Analysis Batch: 577023

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			509	502		mg/L		99	88 - 114		

Lab Sample ID: LCSD 280-577023/3
Matrix: Water
Analysis Batch: 577023

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			509	501		mg/L		98	88 - 114	0	20

Lab Sample ID: 280-162989-2 DU
Matrix: Water
Analysis Batch: 577023

Client Sample ID: FB5
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 280-577187/1
Matrix: Water
Analysis Batch: 577187

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			06/06/22 09:58	1

Lab Sample ID: LCS 280-577187/2
Matrix: Water
Analysis Batch: 577187

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	488		mg/L		97	88 - 114		

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCSD 280-577187/3
Matrix: Water
Analysis Batch: 577187

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	487		mg/L		97	88 - 114	0	20

Lab Sample ID: 160-45698-A-2 DU
Matrix: Water
Analysis Batch: 577187

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	180			173		mg/L				2	10

GC/MS VOA

Analysis Batch: 577411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-1	TRIP BLANK	Total/NA	Water	8260B	
280-162989-2	FB5	Total/NA	Water	8260B	
280-162989-3	MW-21B	Total/NA	Water	8260B	
280-162989-4	DUP5	Total/NA	Water	8260B	
MB 280-577411/9	Method Blank	Total/NA	Water	8260B	
LCS 280-577411/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-577411/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 577389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-1	TRIP BLANK	Total/NA	Water	8011	
280-162989-2	FB5	Total/NA	Water	8011	
280-162989-3	MW-21B	Total/NA	Water	8011	
280-162989-4	DUP5	Total/NA	Water	8011	
MB 280-577389/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-577389/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-577389/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 577396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-1	TRIP BLANK	Total/NA	Water	8011	577389
280-162989-2	FB5	Total/NA	Water	8011	577389
280-162989-3	MW-21B	Total/NA	Water	8011	577389
280-162989-4	DUP5	Total/NA	Water	8011	577389
MB 280-577389/1-A	Method Blank	Total/NA	Water	8011	577389
LCS 280-577389/2-A	Lab Control Sample	Total/NA	Water	8011	577389
LCSD 280-577389/3-A	Lab Control Sample Dup	Total/NA	Water	8011	577389

Metals

Prep Batch: 577621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Dissolved	Water	3005A	
280-162989-3	MW-21B	Dissolved	Water	3005A	
280-162989-4	DUP5	Dissolved	Water	3005A	
MB 280-577621/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-577621/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-163025-C-9-B MS	Matrix Spike	Dissolved	Water	3005A	
280-163025-C-9-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 577836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Dissolved	Water	6010B	577621
280-162989-3	MW-21B	Dissolved	Water	6010B	577621
280-162989-4	DUP5	Dissolved	Water	6010B	577621
MB 280-577621/1-A	Method Blank	Total Recoverable	Water	6010B	577621
LCS 280-577621/2-A	Lab Control Sample	Total Recoverable	Water	6010B	577621
280-163025-C-9-B MS	Matrix Spike	Dissolved	Water	6010B	577621
280-163025-C-9-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	577621

General Chemistry

Analysis Batch: 577023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	SM 2540C	
MB 280-577023/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-577023/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-577023/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-162989-2 DU	FB5	Total/NA	Water	SM 2540C	

Analysis Batch: 577172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	9060	
280-162989-3	MW-21B	Total/NA	Water	9060	
280-162989-4	DUP5	Total/NA	Water	9060	
MB 280-577172/4	Method Blank	Total/NA	Water	9060	
LCS 280-577172/3	Lab Control Sample	Total/NA	Water	9060	
280-162989-4 MS	DUP5	Total/NA	Water	9060	
280-162989-4 MSD	DUP5	Total/NA	Water	9060	

Analysis Batch: 577187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-3	MW-21B	Total/NA	Water	SM 2540C	
280-162989-4	DUP5	Total/NA	Water	SM 2540C	
MB 280-577187/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-577187/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-577187/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
160-45698-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 577294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	SM 2320B	
280-162989-3	MW-21B	Total/NA	Water	SM 2320B	
MB 280-577294/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-577294/58	Method Blank	Total/NA	Water	SM 2320B	
MB 280-577294/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-577294/57	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-577294/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-162978-B-12 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 577614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-4	DUP5	Total/NA	Water	SM 2320B	
MB 280-577614/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-577614/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-577614/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-163028-K-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 578283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	353.2	
280-162989-3	MW-21B	Total/NA	Water	353.2	
280-162989-4	DUP5	Total/NA	Water	353.2	
MB 280-578283/23	Method Blank	Total/NA	Water	353.2	
LCS 280-578283/21	Lab Control Sample	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 578283 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-578283/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-162841-A-5 MS	Matrix Spike	Total/NA	Water	353.2	
280-162841-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 578455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	350.1	
280-162989-3	MW-21B	Total/NA	Water	350.1	
280-162989-4	DUP5	Total/NA	Water	350.1	
MB 280-578455/19	Method Blank	Total/NA	Water	350.1	
LCS 280-578455/17	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-578455/18	Lab Control Sample Dup	Total/NA	Water	350.1	
280-162776-A-13 MS	Matrix Spike	Total/NA	Water	350.1	
280-162776-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
280-162840-A-2 MS	Matrix Spike	Total/NA	Water	350.1	
280-162840-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 578517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	SM 1030E	
280-162989-2	FB5	Total/NA	Water	SM 1030E (meq)	
280-162989-3	MW-21B	Total/NA	Water	SM 1030E	
280-162989-3	MW-21B	Total/NA	Water	SM 1030E (meq)	
280-162989-4	DUP5	Total/NA	Water	SM 1030E	
280-162989-4	DUP5	Total/NA	Water	SM 1030E (meq)	
MB 280-578517/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 630196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-2	FB5	Total/NA	Water	300.0	
MB 480-630196/4	Method Blank	Total/NA	Water	300.0	
LCS 480-630196/5	Lab Control Sample	Total/NA	Water	300.0	
480-198665-C-3 MS	Matrix Spike	Dissolved	Water	300.0	
480-198665-C-3 MSD	Matrix Spike Duplicate	Dissolved	Water	300.0	

Analysis Batch: 630550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162989-3	MW-21B	Total/NA	Water	300.0	
280-162989-4	DUP5	Total/NA	Water	300.0	
MB 480-630550/28	Method Blank	Total/NA	Water	300.0	
LCS 480-630550/29	Lab Control Sample	Total/NA	Water	300.0	
480-198911-C-3 MS	Matrix Spike	Total/NA	Water	300.0	
480-198911-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-199027-G-1 MS	Matrix Spike	Total/NA	Water	300.0	

Lab Chronicle

Client: Waste Management
Job ID: 280-162989-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-162989-1
Date Collected: 06/01/22 08:00
Matrix: Water
Date Received: 06/02/22 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	577411	06/08/22 10:59	TAW	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	577389	06/07/22 17:37	KSA	EET DEN
Total/NA	Analysis	8011		1			577396	06/08/22 06:15	KSA	EET DEN

Client Sample ID: FB5
Lab Sample ID: 280-162989-2
Date Collected: 06/01/22 09:45
Matrix: Water
Date Received: 06/02/22 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	577411	06/08/22 13:28	TAW	EET DEN
Total/NA	Prep	8011			35.1 mL	35 mL	577389	06/07/22 17:37	KSA	EET DEN
Total/NA	Analysis	8011		1			577396	06/08/22 06:39	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	577621	06/10/22 08:39	PFM	EET DEN
Dissolved	Analysis	6010B		1			577836	06/11/22 08:15	MAB	EET DEN
Total/NA	Analysis	300.0		1			630196	06/16/22 03:50	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	578455	06/18/22 10:03	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	578283	06/16/22 12:42	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	577172	06/03/22 20:53	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			577294	06/06/22 20:47	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	577023	06/03/22 09:42	ABW	EET DEN

Client Sample ID: MW-21B
Lab Sample ID: 280-162989-3
Date Collected: 06/01/22 10:15
Matrix: Water
Date Received: 06/02/22 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	577411	06/08/22 13:50	TAW	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	577389	06/07/22 17:37	KSA	EET DEN
Total/NA	Analysis	8011		1			577396	06/08/22 07:02	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	577621	06/10/22 08:39	PFM	EET DEN
Dissolved	Analysis	6010B		1			577836	06/11/22 08:19	MAB	EET DEN
Total/NA	Analysis	300.0		1			630550	06/18/22 06:39	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	578455	06/18/22 10:05	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	578283	06/16/22 12:44	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	577172	06/03/22 21:07	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			577294	06/06/22 20:50	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	577187	06/06/22 09:59	CAI	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-162989-1

Client Sample ID: DUP5

Date Collected: 06/01/22 10:20
Date Received: 06/02/22 10:00

Lab Sample ID: 280-162989-4

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	577411	06/08/22 14:11	TAW	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	577389	06/07/22 17:37	KSA	EET DEN
Total/NA	Analysis	8011		1			577396	06/08/22 07:26	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	577621	06/10/22 08:39	PFM	EET DEN
Dissolved	Analysis	6010B		1			577836	06/11/22 08:23	MAB	EET DEN
Total/NA	Analysis	300.0		1			630550	06/18/22 06:58	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	578455	06/18/22 10:18	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	578283	06/16/22 12:46	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	577172	06/03/22 21:24	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			578517	06/20/22 11:15	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			577614	06/08/22 16:42	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	577187	06/06/22 09:59	CAI	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET 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: SCS	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-16511-866.1
Client Contact:	Phone: (503) 718 4568	E-Mail: Janice.collins@et.eurofinsus.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		
TB1	6/1/22	0800	G	W						X	X			2	
FB5	6/1/22	0945	G	W	X		X	X	X	X	X	X	X	11	
MW-21B	6/1/22	1015	G	W	X		X	X	X	X	X	X	X	11	
DUP5	6/1/22	1020	G	W	X		X	X	X	X	X	X	X	11	

280-162989 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
B. Rapoco	6/1/22 @ 1630	SCS		6/2/22 1000	EETA-DEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No	1773779	4.3 + 0.1 IR#12

ORIGIN ID:BNOA

SHIP DATE: 01JUN22
ACTWGT: 56.20 LB
CAD: /SSFE2321
DIMS: 15x25x15 IN

TO EUROFINS TEST AMERICA
TESTAMERICA
4955 YARROW ST

ARVADA CO 80002 (US)
(303) 432-8921
INV:
PO: REF:
DEPT:

FedEx Express

TRK# 0667 8165 8007 6430

THU - 02 JUN 10:30A
PRIORITY OVERNIGHT

XA LAAA 4.3

80002
CO-US DEN

Custody Seal
DATE 6/1/22
SIGNATURE

eurofins | Environment Testing TestAmerica

1773779

280-162989 Waybill

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-617108.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-162989-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 6/22/2022			
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, Y - Trizma, 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:						
FB5 (280-162989-2)	6/1/22	09:45 Pacific		Water			X	1	
MW-21B (280-162989-3)	6/1/22	10:15 Pacific		Water			X	1	
DUP5 (280-162989-4)	6/1/22	10:20 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: 6/3/22 1500	Company EA DEN	Received by:	Date/Time: 6/4/22 1000	Company EA	
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: 4.6 # ICE			

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-162989-1

Login Number: 162989
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: 280-162989-1

Login Number: 162989
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 06/06/22 10:46 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	4.6 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: 280-161414-1
Client Project/Site: 1003|Riverbend Landfill SCS Engineers
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:
6/9/2022 7:48:12 PM

Janice Collins, Project Management Assistant I
(303)736-0100
Janice.Collins@et.eurofinsus.com

LINKS
Review your project results through my EOL
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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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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.

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: 280-161414-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161414-1

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 04/22/2022 and 4/25/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt were 0.4°C, 2.1°C, 3.2°C, 4.4°C and 7.5°C. The cooler temperature was above the recommended temperature of 6.0 C. The client was notified and requested to proceed with all analyses.

One of three VOA vials for the sample MW12-1 was received broken. Sufficient volume remained to proceed with the analysis.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

1,2-Dichlorobenzene and 1,3-Dichlorobenzene Method 8260B recovered outside control limits for the LCS associated with analytical batch 280-573474. This is not indicative of a systematic control problem because these were random marginal exceedances.

The Method 8260B laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with the sample TRIP BLANK recovered low for the analyte 1,4-Dichlorobenzene (both recovered at 75, lower limit 76). The %RPD between the two is within acceptable limits and the analyte is within acceptable limits in the continuing calibration verification (CCV). There is no remaining volume for reanalysis of the sample; therefore, data was reported.

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 (Batch 573636) 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 multiple spike compounds Method 8260B. In addition, the RPD was outside of the RPD limits for multiple spike compounds Method 8260B. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, this anomaly may

Job ID: 280-161414-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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

Report Revision

This submission was revised to report the correct Anion/Cation Balance result for the sample MW-15A. Due to a laboratory error, the original Anion/Cation Balance result for the sample MW-15A was incorrectly reported.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-161414-1

No Detections.

Client Sample ID: MW-12A — Lab Sample ID: 280-161414-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	28000		500		ug/L	1		6010B	Dissolved
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Potassium	790		500		ug/L	1		6010B	Dissolved
Sodium	30000		1000		ug/L	1		6010B	Dissolved
Chloride	60		0.50		mg/L	1		300.0	Total/NA
Sulfate	18		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	3.0		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	3.8				meq/L	1		SM 1030E	Total/NA
Total Cations	3.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-2.6				%	1		SM 1030E	Total/NA
Calcium	28				mg/L	1		SM 1030E	Total/NA
Magnesium	11				mg/L	1		SM 1030E	Total/NA
Potassium	0.79				mg/L	1		SM 1030E	Total/NA
Sodium	30				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	60				mg/L	1		SM 1030E	Total/NA
Sulfate	18				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	77				mg/L	1		SM 1030E	Total/NA
Alkalinity	77				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	3.0				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-2.6				%	1		SM 1030E	Total/NA
Calculated TDS	180				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.3				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	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.020				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.37				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	77				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	77		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	240		10		mg/L	1		SM 2540C	Total/NA
Field pH	5.91				SU	1		Field Sampling	Total/NA
Field Conductivity	440.3				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	3.20				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	196.2				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 SCS Engineers

Job ID: 280-161414-1

Client Sample ID: MW-12B — Lab Sample ID: 280-161414-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	62000		500		ug/L	1		6010B	Dissolved
Iron	2300		30		ug/L	1		6010B	Dissolved
Magnesium	19000		200		ug/L	1		6010B	Dissolved
Manganese	1200		3.0		ug/L	1		6010B	Dissolved
Potassium	530		500		ug/L	1		6010B	Dissolved
Sodium	23000		1000		ug/L	1		6010B	Dissolved
Chloride	62		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.34		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.5		1.0		mg/L	1		9060	Total/NA
Total Anions	5.5				meq/L	1		SM 1030E	Total/NA
Total Cations	5.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.4				%	1		SM 1030E	Total/NA
Calcium	62				mg/L	1		SM 1030E	Total/NA
Magnesium	19				mg/L	1		SM 1030E	Total/NA
Potassium	0.53				mg/L	1		SM 1030E	Total/NA
Sodium	23				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.34				mg/L	1		SM 1030E	Total/NA
Chloride	62				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				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	2.4				%	1		SM 1030E	Total/NA
Calculated TDS	280				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	310				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	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.0				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.024				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	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	0.12				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	190		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	310		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.06				SU	1		Field Sampling	Total/NA
Field Conductivity	594.9				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	3.22				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-44.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-15A — Lab Sample ID: 280-161414-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6900		500		ug/L	1		6010B	Dissolved
Iron	66		30		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15A (Continued)

Lab Sample ID: 280-161414-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2400		200		ug/L	1		6010B	Dissolved
Sodium	19000		1000		ug/L	1		6010B	Dissolved
Chloride	2.3		0.50		mg/L	1		300.0	Total/NA
Sulfate	24		1.0		mg/L	1		300.0	Total/NA
Total Organic Carbon - Average	1.3		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	-3.9				%	1		SM 1030E	Total/NA
Calcium	6.9				mg/L	1		SM 1030E	Total/NA
Magnesium	2.4				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	2.3				mg/L	1		SM 1030E	Total/NA
Sulfate	24				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	46				mg/L	1		SM 1030E	Total/NA
Alkalinity	46				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.9				%	1		SM 1030E	Total/NA
Calculated TDS	58				mg/L	1		SM 1030E	Total/NA
TDS Ratio	4.5				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	260				mg/L	1		SM 1030E	Total/NA
Iron	0.066				mg/L	1		SM 1030E	Total/NA
Calcium	0.34				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.20				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	0.065				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.50				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	46				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.92				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0035				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	46		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	260		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.15				SU	1		Field Sampling	Total/NA
Field Conductivity	149.8				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.3				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	7.11				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	177.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-15B

Lab Sample ID: 280-161414-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	56000		500		ug/L	1		6010B	Dissolved
Iron	590		30		ug/L	1		6010B	Dissolved
Magnesium	25000		200		ug/L	1		6010B	Dissolved
Manganese	2300		3.0		ug/L	1		6010B	Dissolved
Sodium	31000		1000		ug/L	1		6010B	Dissolved
Chloride	23		0.50		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15B (Continued)

Lab Sample ID: 280-161414-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	2.4		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.040		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	6.3				meq/L	1		SM 1030E	Total/NA
Total Cations	6.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.47				%	1		SM 1030E	Total/NA
Calcium	56				mg/L	1		SM 1030E	Total/NA
Magnesium	25				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	31				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.040				mg/L	1		SM 1030E	Total/NA
Chloride	23				mg/L	1		SM 1030E	Total/NA
Sulfate	2.4				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	-0.47				%	1		SM 1030E	Total/NA
Calculated TDS	300				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	330				mg/L	1		SM 1030E	Total/NA
Iron	0.59				mg/L	1		SM 1030E	Total/NA
Calcium	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.1				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	0.0029				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.65				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.050				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	0.032				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	280		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	330		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.72				SU	1		Field Sampling	Total/NA
Field Conductivity	527.6				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.78				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	29.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-16A

Lab Sample ID: 280-161414-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	80		30		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Manganese	1400		3.0		ug/L	1		6010B	Dissolved
Sodium	33000		1000		ug/L	1		6010B	Dissolved
Chloride	13		0.50		mg/L	1		300.0	Total/NA
Sulfate	23		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.11		0.050		mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16A (Continued)

Lab Sample ID: 280-161414-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Average	1.7		1.0		mg/L	1		9060	Total/NA
Total Anions	3.7				meq/L	1		SM 1030E	Total/NA
Total Cations	4.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	6.3				%	1		SM 1030E	Total/NA
Calcium	31				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	33				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	13				mg/L	1		SM 1030E	Total/NA
Sulfate	23				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	0.11				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	6.3				%	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	210				mg/L	1		SM 1030E	Total/NA
Iron	0.080				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	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.37				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.48				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	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0043				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	6.18				SU	1		Field Sampling	Total/NA
Field Conductivity	326.8				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	9.42				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	117.4				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP1

Lab Sample ID: 280-161414-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	58		30		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Manganese	1400		3.0		ug/L	1		6010B	Dissolved
Sodium	34000		1000		ug/L	1		6010B	Dissolved
Chloride	13		0.50		mg/L	1		300.0	Total/NA
Sulfate	23		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.12		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	3.5				meq/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP1 (Continued)

Lab Sample ID: 280-161414-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Cations	4.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	9.6				%	1		SM 1030E	Total/NA
Calcium	31				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	34				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	13				mg/L	1		SM 1030E	Total/NA
Sulfate	23				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	0.12				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	9.6				%	1		SM 1030E	Total/NA
Calculated TDS	170				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	200				mg/L	1		SM 1030E	Total/NA
Iron	0.058				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	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.37				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.48				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	0.0086				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0031				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
Field pH	6.18				SU	1		Field Sampling	Total/NA
Field Conductivity	326.8				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	9.42				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	117.4				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-16B

Lab Sample ID: 280-161414-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	98000		500		ug/L	1		6010B	Dissolved
Iron	830		30		ug/L	1		6010B	Dissolved
Magnesium	35000		200		ug/L	1		6010B	Dissolved
Manganese	2800		3.0		ug/L	1		6010B	Dissolved
Potassium	550		500		ug/L	1		6010B	Dissolved
Sodium	65000		1000		ug/L	1		6010B	Dissolved
Chloride	140		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.7		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.23		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.5		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

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16B (Continued)

Lab Sample ID: 280-161414-8

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Percent Difference	-1.6				%	1		SM 1030E	Total/NA
Calcium	98				mg/L	1		SM 1030E	Total/NA
Magnesium	35				mg/L	1		SM 1030E	Total/NA
Potassium	0.55				mg/L	1		SM 1030E	Total/NA
Sodium	65				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.23				mg/L	1		SM 1030E	Total/NA
Chloride	140				mg/L	1		SM 1030E	Total/NA
Sulfate	3.7				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.6				%	1		SM 1030E	Total/NA
Calculated TDS	550				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	580				mg/L	1		SM 1030E	Total/NA
Iron	0.83				mg/L	1		SM 1030E	Total/NA
Calcium	4.9				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	2.8				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	3.9				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.077				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	350				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	7.0				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.045				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	350		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	580		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA
Field Conductivity	1135				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.71				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-10.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-21A

Lab Sample ID: 280-161414-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	28000		500		ug/L	1		6010B	Dissolved
Iron	33		30		ug/L	1		6010B	Dissolved
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Sodium	15000		1000		ug/L	1		6010B	Dissolved
Chloride	4.7		0.50		mg/L	1		300.0	Total/NA
Sulfate	11		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	1.5		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.5		1.0		mg/L	1		9060	Total/NA
Total Anions	3.1				meq/L	1		SM 1030E	Total/NA
Total Cations	3.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.8				%	1		SM 1030E	Total/NA
Calcium	28				mg/L	1		SM 1030E	Total/NA
Magnesium	11				mg/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 SCS Engineers

Job ID: 280-161414-1

Client Sample ID: MW-21A (Continued)

Lab Sample ID: 280-161414-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	15				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	4.7				mg/L	1		SM 1030E	Total/NA
Sulfate	11				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	1.5				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.8				%	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	0.033				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	0.65				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.13				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.23				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	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0018				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	6.12				SU	1		Field Sampling	Total/NA
Field Conductivity	316.5				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.91				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	225.3				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Waste Management
Job ID: 280-161414-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

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

Sample Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161414-1	TRIP BLANK	Water	04/19/22 07:00	04/22/22 11:00
280-161414-2	MW-12A	Water	04/21/22 14:30	04/22/22 11:00
280-161414-3	MW-12B	Water	04/21/22 13:40	04/22/22 11:00
280-161414-4	MW-15A	Water	04/19/22 14:45	04/22/22 11:00
280-161414-5	MW-15B	Water	04/20/22 11:35	04/22/22 11:00
280-161414-6	MW-16A	Water	04/19/22 12:40	04/22/22 11:00
280-161414-7	DUP1	Water	04/19/22 12:45	04/22/22 11:00
280-161414-8	MW-16B	Water	04/19/22 14:10	04/22/22 11:00
280-161414-9	MW-21A	Water	04/21/22 12:15	04/22/22 11:00

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

Client Sample ID: TRIP BLANK
Date Collected: 04/19/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 14:04	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 14:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 14:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:04	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 14:04	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 14:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:04	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 14:04	1
1,4-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:04	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 14:04	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 14:04	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:04	1
2-Hexanone	ND		5.0		ug/L			04/30/22 14:04	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:04	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 14:04	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 14:04	1
Acetone	ND		10		ug/L			04/30/22 14:04	1
Benzene	ND		1.0		ug/L			04/30/22 14:04	1
Bromobenzene	ND		1.0		ug/L			04/30/22 14:04	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 14:04	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 14:04	1
Bromoform	ND		1.0		ug/L			04/30/22 14:04	1
Bromomethane	ND		2.0		ug/L			04/30/22 14:04	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 14:04	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 14:04	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 14:04	1
Chloroethane	ND		2.0		ug/L			04/30/22 14:04	1
Chloroform	ND		1.0		ug/L			04/30/22 14:04	1
Chloromethane	ND		2.0		ug/L			04/30/22 14:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 14:04	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 14:04	1
Dibromomethane	ND		1.0		ug/L			04/30/22 14:04	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 14:04	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 14:04	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 14:04	1
Naphthalene	ND		1.0		ug/L			04/30/22 14:04	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 14:04	1

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

Client Sample ID: TRIP BLANK
Date Collected: 04/19/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
Styrene	ND		1.0		ug/L			04/30/22 14:04	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 14:04	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 14:04	1
Toluene	ND		1.0		ug/L			04/30/22 14:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:04	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 14:04	1
Trichloroethene	ND		1.0		ug/L			04/30/22 14:04	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 14:04	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 14:04	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 14:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 14:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*04/30/22 14:04*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/30/22 14:04*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*04/30/22 14:04*	*1*
Toluene-d8 (Surr)	*91*		*80 - 125*		*04/30/22 14:04*	*1*

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 10:51	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 10:51	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 10:51	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 10:51	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 10:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 10:51	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 10:51	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 10:51	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:51	1
2-Hexanone	ND		5.0		ug/L			05/04/22 10:51	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:51	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 10:51	1

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

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 10:51	1
Acetone	ND		10		ug/L			05/04/22 10:51	1
Benzene	ND		1.0		ug/L			05/04/22 10:51	1
Bromobenzene	ND		1.0		ug/L			05/04/22 10:51	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 10:51	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 10:51	1
Bromoform	ND		1.0		ug/L			05/04/22 10:51	1
Bromomethane	ND		2.0		ug/L			05/04/22 10:51	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 10:51	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 10:51	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 10:51	1
Chloroethane	ND		2.0		ug/L			05/04/22 10:51	1
Chloroform	ND		1.0		ug/L			05/04/22 10:51	1
Chloromethane	ND		2.0		ug/L			05/04/22 10:51	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:51	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 10:51	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 10:51	1
Dibromomethane	ND		1.0		ug/L			05/04/22 10:51	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 10:51	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 10:51	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 10:51	1
Naphthalene	ND		1.0		ug/L			05/04/22 10:51	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
Styrene	ND		1.0		ug/L			05/04/22 10:51	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 10:51	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 10:51	1
Toluene	ND		1.0		ug/L			05/04/22 10:51	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:51	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 10:51	1
Trichloroethene	ND		1.0		ug/L			05/04/22 10:51	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 10:51	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 10:51	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 10:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/22 10:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/04/22 10:51*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/04/22 10:51*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 120*		*05/04/22 10:51*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/04/22 10:51*	*1*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

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

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 11:13	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 11:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 11:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 11:13	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 11:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 11:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 11:13	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 11:13	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:13	1
2-Hexanone	ND		5.0		ug/L			05/04/22 11:13	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:13	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 11:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 11:13	1
Acetone	ND		10		ug/L			05/04/22 11:13	1
Benzene	ND		1.0		ug/L			05/04/22 11:13	1
Bromobenzene	ND		1.0		ug/L			05/04/22 11:13	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 11:13	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 11:13	1
Bromoform	ND		1.0		ug/L			05/04/22 11:13	1
Bromomethane	ND		2.0		ug/L			05/04/22 11:13	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 11:13	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 11:13	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 11:13	1
Chloroethane	ND		2.0		ug/L			05/04/22 11:13	1
Chloroform	ND		1.0		ug/L			05/04/22 11:13	1
Chloromethane	ND		2.0		ug/L			05/04/22 11:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 11:13	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 11:13	1
Dibromomethane	ND		1.0		ug/L			05/04/22 11:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 11:13	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 11:13	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 11:13	1
Naphthalene	ND		1.0		ug/L			05/04/22 11:13	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 11:13	1

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

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
Styrene	ND		1.0		ug/L			05/04/22 11:13	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 11:13	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 11:13	1
Toluene	ND		1.0		ug/L			05/04/22 11:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 11:13	1
Trichloroethene	ND		1.0		ug/L			05/04/22 11:13	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 11:13	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 11:13	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 11:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/22 11:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*05/04/22 11:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/04/22 11:13*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 120*		*05/04/22 11:13*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/04/22 11:13*	*1*

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 14:26	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 14:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 14:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 14:26	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 14:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:26	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 14:26	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 14:26	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 14:26	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:26	1
2-Hexanone	ND		5.0		ug/L			04/30/22 14:26	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:26	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 14:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 14:26	1

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

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/30/22 14:26	1
Benzene	ND		1.0		ug/L			04/30/22 14:26	1
Bromobenzene	ND		1.0		ug/L			04/30/22 14:26	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 14:26	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 14:26	1
Bromoform	ND		1.0		ug/L			04/30/22 14:26	1
Bromomethane	ND		2.0		ug/L			04/30/22 14:26	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 14:26	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 14:26	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 14:26	1
Chloroethane	ND		2.0		ug/L			04/30/22 14:26	1
Chloroform	ND		1.0		ug/L			04/30/22 14:26	1
Chloromethane	ND		2.0		ug/L			04/30/22 14:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 14:26	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 14:26	1
Dibromomethane	ND		1.0		ug/L			04/30/22 14:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 14:26	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 14:26	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 14:26	1
Naphthalene	ND		1.0		ug/L			04/30/22 14:26	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
Styrene	ND		1.0		ug/L			04/30/22 14:26	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 14:26	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 14:26	1
Toluene	ND		1.0		ug/L			04/30/22 14:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 14:26	1
Trichloroethene	ND		1.0		ug/L			04/30/22 14:26	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 14:26	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 14:26	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 14:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 14:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/30/22 14:26*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/30/22 14:26*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 120*		*04/30/22 14:26*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*04/30/22 14:26*	*1*

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

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 15:23	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 15:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 15:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 15:23	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 15:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 15:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 15:23	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 15:23	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:23	1
2-Hexanone	ND		5.0		ug/L			05/03/22 15:23	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:23	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 15:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 15:23	1
Acetone	ND		10		ug/L			05/03/22 15:23	1
Benzene	ND		1.0		ug/L			05/03/22 15:23	1
Bromobenzene	ND		1.0		ug/L			05/03/22 15:23	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 15:23	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 15:23	1
Bromoform	ND		1.0		ug/L			05/03/22 15:23	1
Bromomethane	ND		2.0		ug/L			05/03/22 15:23	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 15:23	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 15:23	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 15:23	1
Chloroethane	ND		2.0		ug/L			05/03/22 15:23	1
Chloroform	ND		1.0		ug/L			05/03/22 15:23	1
Chloromethane	ND		2.0		ug/L			05/03/22 15:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 15:23	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 15:23	1
Dibromomethane	ND		1.0		ug/L			05/03/22 15:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 15:23	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 15:23	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 15:23	1
Naphthalene	ND		1.0		ug/L			05/03/22 15:23	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 15:23	1

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

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
Styrene	ND		1.0		ug/L			05/03/22 15:23	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 15:23	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 15:23	1
Toluene	ND		1.0		ug/L			05/03/22 15:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 15:23	1
Trichloroethene	ND		1.0		ug/L			05/03/22 15:23	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 15:23	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 15:23	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 15:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/22 15:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*05/03/22 15:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/22 15:23*	*1*
Dibromofluoromethane (Surr)	*86*		*77 - 120*		*05/03/22 15:23*	*1*
Toluene-d8 (Surr)	*112*		*80 - 125*		*05/03/22 15:23*	*1*

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 14:48	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 14:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 14:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 14:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:48	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 14:48	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 14:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 14:48	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 14:48	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 14:48	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 14:48	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:48	1
2-Hexanone	ND		5.0		ug/L			04/30/22 14:48	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 14:48	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 14:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 14:48	1

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

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/30/22 14:48	1
Benzene	ND		1.0		ug/L			04/30/22 14:48	1
Bromobenzene	ND		1.0		ug/L			04/30/22 14:48	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 14:48	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 14:48	1
Bromoform	ND		1.0		ug/L			04/30/22 14:48	1
Bromomethane	ND		2.0		ug/L			04/30/22 14:48	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 14:48	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 14:48	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 14:48	1
Chloroethane	ND		2.0		ug/L			04/30/22 14:48	1
Chloroform	ND		1.0		ug/L			04/30/22 14:48	1
Chloromethane	ND		2.0		ug/L			04/30/22 14:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 14:48	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 14:48	1
Dibromomethane	ND		1.0		ug/L			04/30/22 14:48	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 14:48	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 14:48	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 14:48	1
Naphthalene	ND		1.0		ug/L			04/30/22 14:48	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
Styrene	ND		1.0		ug/L			04/30/22 14:48	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 14:48	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 14:48	1
Toluene	ND		1.0		ug/L			04/30/22 14:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 14:48	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 14:48	1
Trichloroethene	ND		1.0		ug/L			04/30/22 14:48	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 14:48	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 14:48	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 14:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 14:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*04/30/22 14:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/30/22 14:48*	*1*
Dibromofluoromethane (Surr)	*105*		*77 - 120*		*04/30/22 14:48*	*1*
Toluene-d8 (Surr)	*93*		*80 - 125*		*04/30/22 14:48*	*1*

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

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 15:10	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 15:10	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:10	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 15:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:10	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 15:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 15:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:10	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 15:10	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 15:10	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 15:10	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:10	1
2-Hexanone	ND		5.0		ug/L			04/30/22 15:10	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:10	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 15:10	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 15:10	1
Acetone	ND		10		ug/L			04/30/22 15:10	1
Benzene	ND		1.0		ug/L			04/30/22 15:10	1
Bromobenzene	ND		1.0		ug/L			04/30/22 15:10	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 15:10	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 15:10	1
Bromoform	ND		1.0		ug/L			04/30/22 15:10	1
Bromomethane	ND		2.0		ug/L			04/30/22 15:10	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 15:10	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 15:10	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 15:10	1
Chloroethane	ND		2.0		ug/L			04/30/22 15:10	1
Chloroform	ND		1.0		ug/L			04/30/22 15:10	1
Chloromethane	ND		2.0		ug/L			04/30/22 15:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 15:10	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 15:10	1
Dibromomethane	ND		1.0		ug/L			04/30/22 15:10	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 15:10	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 15:10	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 15:10	1
Naphthalene	ND		1.0		ug/L			04/30/22 15:10	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 15:10	1

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

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
Styrene	ND		1.0		ug/L			04/30/22 15:10	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 15:10	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 15:10	1
Toluene	ND		1.0		ug/L			04/30/22 15:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:10	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 15:10	1
Trichloroethene	ND		1.0		ug/L			04/30/22 15:10	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 15:10	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 15:10	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 15:10	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 15:10*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*04/30/22 15:10*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*04/30/22 15:10*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*04/30/22 15:10*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/30/22 15:10*	*1*

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 15:32	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 15:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 15:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:32	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 15:32	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 15:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:32	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 15:32	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 15:32	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 15:32	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:32	1
2-Hexanone	ND		5.0		ug/L			04/30/22 15:32	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:32	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 15:32	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 15:32	1
Acetone	ND		10		ug/L			04/30/22 15:32	1

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

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/30/22 15:32	1
Bromobenzene	ND		1.0		ug/L			04/30/22 15:32	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 15:32	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 15:32	1
Bromoform	ND		1.0		ug/L			04/30/22 15:32	1
Bromomethane	ND		2.0		ug/L			04/30/22 15:32	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 15:32	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 15:32	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 15:32	1
Chloroethane	ND		2.0		ug/L			04/30/22 15:32	1
Chloroform	ND		1.0		ug/L			04/30/22 15:32	1
Chloromethane	ND		2.0		ug/L			04/30/22 15:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 15:32	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 15:32	1
Dibromomethane	ND		1.0		ug/L			04/30/22 15:32	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 15:32	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 15:32	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 15:32	1
Naphthalene	ND		1.0		ug/L			04/30/22 15:32	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
Styrene	ND		1.0		ug/L			04/30/22 15:32	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 15:32	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 15:32	1
Toluene	ND		1.0		ug/L			04/30/22 15:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:32	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 15:32	1
Trichloroethene	ND		1.0		ug/L			04/30/22 15:32	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 15:32	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 15:32	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 15:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 15:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*04/30/22 15:32*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*04/30/22 15:32*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*04/30/22 15:32*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*04/30/22 15:32*	*1*

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 11:34	1

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

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 11:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 11:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 11:34	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 11:34	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 11:34	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 11:34	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 11:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 11:34	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 11:34	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 11:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 11:34	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 11:34	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:34	1
2-Hexanone	ND		5.0		ug/L			05/04/22 11:34	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:34	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 11:34	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 11:34	1
Acetone	ND		10		ug/L			05/04/22 11:34	1
Benzene	ND		1.0		ug/L			05/04/22 11:34	1
Bromobenzene	ND		1.0		ug/L			05/04/22 11:34	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 11:34	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 11:34	1
Bromoform	ND		1.0		ug/L			05/04/22 11:34	1
Bromomethane	ND		2.0		ug/L			05/04/22 11:34	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 11:34	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 11:34	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 11:34	1
Chloroethane	ND		2.0		ug/L			05/04/22 11:34	1
Chloroform	ND		1.0		ug/L			05/04/22 11:34	1
Chloromethane	ND		2.0		ug/L			05/04/22 11:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 11:34	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 11:34	1
Dibromomethane	ND		1.0		ug/L			05/04/22 11:34	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 11:34	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 11:34	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 11:34	1
Naphthalene	ND		1.0		ug/L			05/04/22 11:34	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 11:34	1

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

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
Styrene	ND		1.0		ug/L			05/04/22 11:34	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 11:34	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 11:34	1
Toluene	ND		1.0		ug/L			05/04/22 11:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:34	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 11:34	1
Trichloroethene	ND		1.0		ug/L			05/04/22 11:34	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 11:34	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 11:34	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 11:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/22 11:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/04/22 11:34*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/04/22 11:34*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 120*		*05/04/22 11:34*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/04/22 11:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/03/22 03:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 03:31*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/03/22 03:31*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*05/03/22 03:31*	*1*

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*05/03/22 03:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/22 03:52*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/03/22 03:52*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*05/03/22 03:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/03/22 04:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/03/22 04:13*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*05/03/22 04:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 125*		*05/03/22 04:13*	*1*

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*05/03/22 04:35*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*05/03/22 04:35*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/03/22 04:35*	*1*
Toluene-d8 (Surr)	*104*		*80 - 125*		*05/03/22 04:35*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Client Sample ID: TRIP BLANK
Date Collected: 04/19/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 09:12	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 09:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*101*		*70 - 130*	*05/02/22 18:00*	*05/03/22 09:12*	*1*

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 09:36	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*106*		*70 - 130*	*05/02/22 18:00*	*05/03/22 09:36*	*1*

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 10:00	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*102*		*70 - 130*	*05/02/22 18:00*	*05/03/22 10:00*	*1*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 10:24	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 10:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*05/02/22 18:00*	*05/03/22 10:24*	*1*

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 10:48	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*05/02/22 18:00*	*05/03/22 10:48*	*1*

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 11:12	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*05/02/22 18:00*	*05/03/22 11:12*	*1*

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 11:36	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*111*		*70 - 130*	*05/02/22 18:00*	*05/03/22 11:36*	*1*

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 12:00	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*05/02/22 18:00*	*05/03/22 12:00*	*1*

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 12:24	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 12:24	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	116		70 - 130	05/02/22 18:00	05/03/22 12:24	1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	28000		500		ug/L		05/03/22 19:17	05/04/22 21:00	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 21:00	1
Magnesium	11000		200		ug/L		05/03/22 19:17	05/04/22 21:00	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 21:00	1
Potassium	790		500		ug/L		05/03/22 19:17	05/04/22 21:00	1
Sodium	30000		1000		ug/L		05/03/22 19:17	05/04/22 21:00	1

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	62000		500		ug/L		05/03/22 19:17	05/04/22 21:04	1
Iron	2300		30		ug/L		05/03/22 19:17	05/04/22 21:04	1
Magnesium	19000		200		ug/L		05/03/22 19:17	05/04/22 21:04	1
Manganese	1200		3.0		ug/L		05/03/22 19:17	05/04/22 21:04	1
Potassium	530		500		ug/L		05/03/22 19:17	05/04/22 21:04	1
Sodium	23000		1000		ug/L		05/03/22 19:17	05/04/22 21:04	1

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6900		500		ug/L		05/03/22 19:17	05/04/22 21:08	1
Iron	66		30		ug/L		05/03/22 19:17	05/04/22 21:08	1
Magnesium	2400		200		ug/L		05/03/22 19:17	05/04/22 21:08	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 21:08	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:08	1
Sodium	19000		1000		ug/L		05/03/22 19:17	05/04/22 21:08	1

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	56000		500		ug/L		05/03/22 19:17	05/04/22 21:29	1
Iron	590		30		ug/L		05/03/22 19:17	05/04/22 21:29	1
Magnesium	25000		200		ug/L		05/03/22 19:17	05/04/22 21:29	1
Manganese	2300		3.0		ug/L		05/03/22 19:17	05/04/22 21:29	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:29	1
Sodium	31000		1000		ug/L		05/03/22 19:17	05/04/22 21:29	1

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000		500		ug/L		05/03/22 19:17	05/04/22 21:33	1

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	80		30		ug/L		05/03/22 19:17	05/04/22 21:33	1
Magnesium	14000		200		ug/L		05/03/22 19:17	05/04/22 21:33	1
Manganese	1400		3.0		ug/L		05/03/22 19:17	05/04/22 21:33	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:33	1
Sodium	33000		1000		ug/L		05/03/22 19:17	05/04/22 21:33	1

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000		500		ug/L		05/03/22 19:17	05/04/22 21:37	1
Iron	58		30		ug/L		05/03/22 19:17	05/04/22 21:37	1
Magnesium	14000		200		ug/L		05/03/22 19:17	05/04/22 21:37	1
Manganese	1400		3.0		ug/L		05/03/22 19:17	05/04/22 21:37	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:37	1
Sodium	34000		1000		ug/L		05/03/22 19:17	05/04/22 21:37	1

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	98000		500		ug/L		05/03/22 19:17	05/04/22 21:42	1
Iron	830		30		ug/L		05/03/22 19:17	05/04/22 21:42	1
Magnesium	35000		200		ug/L		05/03/22 19:17	05/04/22 21:42	1
Manganese	2800		3.0		ug/L		05/03/22 19:17	05/04/22 21:42	1
Potassium	550		500		ug/L		05/03/22 19:17	05/04/22 21:42	1
Sodium	65000		1000		ug/L		05/03/22 19:17	05/04/22 21:42	1

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	28000		500		ug/L		05/03/22 19:17	05/04/22 21:46	1
Iron	33		30		ug/L		05/03/22 19:17	05/04/22 21:46	1
Magnesium	11000		200		ug/L		05/03/22 19:17	05/04/22 21:46	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 21:46	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:46	1
Sodium	15000		1000		ug/L		05/03/22 19:17	05/04/22 21:46	1

General Chemistry

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.8				meq/L			05/10/22 12:14	1
Total Cations	3.6				meq/L			05/10/22 12:14	1
Percent Difference	-2.6				%			05/10/22 12:14	1
Calcium	28				mg/L			05/10/22 12:14	1
Magnesium	11				mg/L			05/10/22 12:14	1
Potassium	0.79				mg/L			05/10/22 12:14	1

General Chemistry (Continued)

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	30				mg/L			05/10/22 12:14	1
Ammonia as N	0.00				mg/L			05/10/22 12:14	1
Chloride	60				mg/L			05/10/22 12:14	1
Sulfate	18				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	77				mg/L			05/10/22 12:14	1
Alkalinity	77				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	3.0				mg/L			05/10/22 12:14	1
Anion/Cation Balance	-2.6				%			05/10/22 12:14	1
Calculated TDS	180				mg/L			05/10/22 12:14	1
TDS Ratio	1.3				NONE			05/10/22 12:14	1
Total Dissolved Solids	240				mg/L			05/10/22 12:14	1
Iron	0.00				mg/L			05/10/22 12:14	1
Calcium	1.4				meq/L			05/10/22 12:14	1
Magnesium	0.91				meq/L			05/10/22 12:14	1
Potassium	0.020				meq/L			05/10/22 12:14	1
Sodium	1.3				meq/L			05/10/22 12:14	1
Ammonia as N	0.00				meq/L			05/10/22 12:14	1
Chloride	1.7				meq/L			05/10/22 12:14	1
Sulfate	0.37				meq/L			05/10/22 12:14	1
Alkalinity	77				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	1.5				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.21				meq/L			05/10/22 12:14	1
Iron	0.00				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60		0.50		mg/L			05/07/22 07:13	1
Sulfate	18		1.0		mg/L			05/07/22 07:13	1
Ammonia as N	ND		0.030		mg/L			05/05/22 13:35	1
Nitrate/Nitrite	3.0		0.050		mg/L			05/03/22 16:46	1
Total Organic Carbon - Average	1.8		1.0		mg/L			04/28/22 17:12	1
Bicarbonate Alkalinity	77		10		mg/L			04/27/22 22:30	1
Total Dissolved Solids	240		10		mg/L			04/26/22 11:39	1

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	5.5				meq/L			05/10/22 12:14	1
Total Cations	5.8				meq/L			05/10/22 12:14	1
Percent Difference	2.4				%			05/10/22 12:14	1
Calcium	62				mg/L			05/10/22 12:14	1
Magnesium	19				mg/L			05/10/22 12:14	1
Potassium	0.53				mg/L			05/10/22 12:14	1
Sodium	23				mg/L			05/10/22 12:14	1
Ammonia as N	0.34				mg/L			05/10/22 12:14	1
Chloride	62				mg/L			05/10/22 12:14	1
Sulfate	0.00				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	190				mg/L			05/10/22 12:14	1
Alkalinity	190				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				mg/L			05/10/22 12:14	1

General Chemistry (Continued)

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	2.4				%			05/10/22 12:14	1
Calculated TDS	280				mg/L			05/10/22 12:14	1
TDS Ratio	1.1				NONE			05/10/22 12:14	1
Total Dissolved Solids	310				mg/L			05/10/22 12:14	1
Iron	2.3				mg/L			05/10/22 12:14	1
Calcium	3.1				meq/L			05/10/22 12:14	1
Magnesium	1.6				meq/L			05/10/22 12:14	1
Potassium	0.014				meq/L			05/10/22 12:14	1
Sodium	1.0				meq/L			05/10/22 12:14	1
Ammonia as N	0.024				meq/L			05/10/22 12:14	1
Chloride	1.7				meq/L			05/10/22 12:14	1
Sulfate	0.00				meq/L			05/10/22 12:14	1
Alkalinity	190				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	3.8				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				meq/L			05/10/22 12:14	1
Iron	0.12				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62		0.50		mg/L			05/07/22 07:31	1
Sulfate	ND		1.0		mg/L			05/07/22 07:31	1
Ammonia as N	0.34		0.030		mg/L			05/05/22 13:53	1
Nitrate/Nitrite	ND		0.050		mg/L			05/03/22 16:48	1
Total Organic Carbon - Average	1.5		1.0		mg/L			04/28/22 17:57	1
Bicarbonate Alkalinity	190		10		mg/L			04/27/22 22:36	1
Total Dissolved Solids	310		10		mg/L			04/26/22 11:39	1

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	1.5				meq/L			05/10/22 12:14	1
Total Cations	1.4				meq/L			05/10/22 12:14	1
Percent Difference	-3.9				%			05/10/22 12:14	1
Calcium	6.9				mg/L			05/10/22 12:14	1
Magnesium	2.4				mg/L			05/10/22 12:14	1
Potassium	0.00				mg/L			05/10/22 12:14	1
Sodium	19				mg/L			05/10/22 12:14	1
Ammonia as N	0.00				mg/L			05/10/22 12:14	1
Chloride	2.3				mg/L			05/10/22 12:14	1
Sulfate	24				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	46				mg/L			05/10/22 12:14	1
Alkalinity	46				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				mg/L			05/10/22 12:14	1
Anion/Cation Balance	-3.9				%			05/10/22 12:14	1
Calculated TDS	58				mg/L			05/10/22 12:14	1
TDS Ratio	4.5				NONE			05/10/22 12:14	1
Total Dissolved Solids	260				mg/L			05/10/22 12:14	1
Iron	0.066				mg/L			05/10/22 12:14	1
Calcium	0.34				meq/L			05/10/22 12:14	1
Magnesium	0.20				meq/L			05/10/22 12:14	1

General Chemistry (Continued)

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	0.00				meq/L			05/10/22 12:14	1
Sodium	0.83				meq/L			05/10/22 12:14	1
Ammonia as N	0.00				meq/L			05/10/22 12:14	1
Chloride	0.065				meq/L			05/10/22 12:14	1
Sulfate	0.50				meq/L			05/10/22 12:14	1
Alkalinity	46				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.92				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				meq/L			05/10/22 12:14	1
Iron	0.0035				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		0.50		mg/L			05/07/22 07:50	1
Sulfate	24		1.0		mg/L			05/07/22 07:50	1
Ammonia as N	ND		0.030		mg/L			05/05/22 13:55	1
Nitrate/Nitrite	ND		0.050		mg/L			05/03/22 16:50	1
Total Organic Carbon - Average	1.3		1.0		mg/L			04/28/22 18:16	1
Bicarbonate Alkalinity	46		10		mg/L			04/27/22 22:41	1
Total Dissolved Solids	260		10		mg/L			04/26/22 08:45	1

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	6.3				meq/L			05/10/22 12:14	1
Total Cations	6.2				meq/L			05/10/22 12:14	1
Percent Difference	-0.47				%			05/10/22 12:14	1
Calcium	56				mg/L			05/10/22 12:14	1
Magnesium	25				mg/L			05/10/22 12:14	1
Potassium	0.00				mg/L			05/10/22 12:14	1
Sodium	31				mg/L			05/10/22 12:14	1
Ammonia as N	0.040				mg/L			05/10/22 12:14	1
Chloride	23				mg/L			05/10/22 12:14	1
Sulfate	2.4				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	280				mg/L			05/10/22 12:14	1
Alkalinity	280				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				mg/L			05/10/22 12:14	1
Anion/Cation Balance	-0.47				%			05/10/22 12:14	1
Calculated TDS	300				mg/L			05/10/22 12:14	1
TDS Ratio	1.1				NONE			05/10/22 12:14	1
Total Dissolved Solids	330				mg/L			05/10/22 12:14	1
Iron	0.59				mg/L			05/10/22 12:14	1
Calcium	2.8				meq/L			05/10/22 12:14	1
Magnesium	2.1				meq/L			05/10/22 12:14	1
Potassium	0.00				meq/L			05/10/22 12:14	1
Sodium	1.3				meq/L			05/10/22 12:14	1
Ammonia as N	0.0029				meq/L			05/10/22 12:14	1
Chloride	0.65				meq/L			05/10/22 12:14	1
Sulfate	0.050				meq/L			05/10/22 12:14	1
Alkalinity	280				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	5.6				meq/L			05/10/22 12:14	1

General Chemistry (Continued)

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.00				meq/L			05/10/22 12:14	1
Iron	0.032				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		0.50		mg/L			05/07/22 08:08	1
Sulfate	2.4		1.0		mg/L			05/07/22 08:08	1
Ammonia as N	0.040		0.030		mg/L			05/05/22 13:57	1
Nitrate/Nitrite	ND		0.050		mg/L			05/02/22 17:10	1
Total Organic Carbon - Average	1.1		1.0		mg/L			04/28/22 18:30	1
Bicarbonate Alkalinity	280		10		mg/L			04/28/22 19:46	1
Total Dissolved Solids	330		10		mg/L			04/26/22 11:39	1

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.7				meq/L			05/10/22 12:14	1
Total Cations	4.1				meq/L			05/10/22 12:14	1
Percent Difference	6.3				%			05/10/22 12:14	1
Calcium	31				mg/L			05/10/22 12:14	1
Magnesium	14				mg/L			05/10/22 12:14	1
Potassium	0.00				mg/L			05/10/22 12:14	1
Sodium	33				mg/L			05/10/22 12:14	1
Ammonia as N	0.00				mg/L			05/10/22 12:14	1
Chloride	13				mg/L			05/10/22 12:14	1
Sulfate	23				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	140				mg/L			05/10/22 12:14	1
Alkalinity	140				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.11				mg/L			05/10/22 12:14	1
Anion/Cation Balance	6.3				%			05/10/22 12:14	1
Calculated TDS	180				mg/L			05/10/22 12:14	1
TDS Ratio	1.2				NONE			05/10/22 12:14	1
Total Dissolved Solids	210				mg/L			05/10/22 12:14	1
Iron	0.080				mg/L			05/10/22 12:14	1
Calcium	1.5				meq/L			05/10/22 12:14	1
Magnesium	1.2				meq/L			05/10/22 12:14	1
Potassium	0.00				meq/L			05/10/22 12:14	1
Sodium	1.4				meq/L			05/10/22 12:14	1
Ammonia as N	0.00				meq/L			05/10/22 12:14	1
Chloride	0.37				meq/L			05/10/22 12:14	1
Sulfate	0.48				meq/L			05/10/22 12:14	1
Alkalinity	140				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	2.8				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.0079				meq/L			05/10/22 12:14	1
Iron	0.0043				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		0.50		mg/L			05/09/22 19:07	1
Sulfate	23		1.0		mg/L			05/09/22 19:07	1
Ammonia as N	ND		0.030		mg/L			05/05/22 13:59	1
Nitrate/Nitrite	0.11		0.050		mg/L			05/02/22 17:12	1

General Chemistry (Continued)

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	1.7		1.0		mg/L			04/28/22 18:48	1
Bicarbonate Alkalinity	140		10		mg/L			04/28/22 19:52	1
Total Dissolved Solids	210		10		mg/L			04/26/22 08:45	1

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.5				meq/L			05/10/22 12:14	1
Total Cations	4.2				meq/L			05/10/22 12:14	1
Percent Difference	9.6				%			05/10/22 12:14	1
Calcium	31				mg/L			05/10/22 12:14	1
Magnesium	14				mg/L			05/10/22 12:14	1
Potassium	0.00				mg/L			05/10/22 12:14	1
Sodium	34				mg/L			05/10/22 12:14	1
Ammonia as N	0.00				mg/L			05/10/22 12:14	1
Chloride	13				mg/L			05/10/22 12:14	1
Sulfate	23				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	130				mg/L			05/10/22 12:14	1
Alkalinity	130				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.12				mg/L			05/10/22 12:14	1
Anion/Cation Balance	9.6				%			05/10/22 12:14	1
Calculated TDS	170				mg/L			05/10/22 12:14	1
TDS Ratio	1.2				NONE			05/10/22 12:14	1
Total Dissolved Solids	200				mg/L			05/10/22 12:14	1
Iron	0.058				mg/L			05/10/22 12:14	1
Calcium	1.5				meq/L			05/10/22 12:14	1
Magnesium	1.2				meq/L			05/10/22 12:14	1
Potassium	0.00				meq/L			05/10/22 12:14	1
Sodium	1.5				meq/L			05/10/22 12:14	1
Ammonia as N	0.00				meq/L			05/10/22 12:14	1
Chloride	0.37				meq/L			05/10/22 12:14	1
Sulfate	0.48				meq/L			05/10/22 12:14	1
Alkalinity	130				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	2.6				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.0086				meq/L			05/10/22 12:14	1
Iron	0.0031				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		0.50		mg/L			05/09/22 19:26	1
Sulfate	23		1.0		mg/L			05/09/22 19:26	1
Ammonia as N	ND		0.030		mg/L			05/05/22 14:01	1
Nitrate/Nitrite	0.12		0.050		mg/L			05/02/22 17:14	1
Total Organic Carbon - Average	1.7		1.0		mg/L			04/28/22 19:33	1
Bicarbonate Alkalinity	130		10		mg/L			04/28/22 19:58	1
Total Dissolved Solids	200		10		mg/L			04/26/22 08:45	1

General Chemistry

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	11				meq/L			05/10/22 12:14	1
Total Cations	11				meq/L			05/10/22 12:14	1
Percent Difference	-1.6				%			05/10/22 12:14	1
Calcium	98				mg/L			05/10/22 12:14	1
Magnesium	35				mg/L			05/10/22 12:14	1
Potassium	0.55				mg/L			05/10/22 12:14	1
Sodium	65				mg/L			05/10/22 12:14	1
Ammonia as N	0.23				mg/L			05/10/22 12:14	1
Chloride	140				mg/L			05/10/22 12:14	1
Sulfate	3.7				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	350				mg/L			05/10/22 12:14	1
Alkalinity	350				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				mg/L			05/10/22 12:14	1
Anion/Cation Balance	-1.6				%			05/10/22 12:14	1
Calculated TDS	550				mg/L			05/10/22 12:14	1
TDS Ratio	1.1				NONE			05/10/22 12:14	1
Total Dissolved Solids	580				mg/L			05/10/22 12:14	1
Iron	0.83				mg/L			05/10/22 12:14	1
Calcium	4.9				meq/L			05/10/22 12:14	1
Magnesium	2.9				meq/L			05/10/22 12:14	1
Potassium	0.014				meq/L			05/10/22 12:14	1
Sodium	2.8				meq/L			05/10/22 12:14	1
Ammonia as N	0.016				meq/L			05/10/22 12:14	1
Chloride	3.9				meq/L			05/10/22 12:14	1
Sulfate	0.077				meq/L			05/10/22 12:14	1
Alkalinity	350				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	7.0				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.00				meq/L			05/10/22 12:14	1
Iron	0.045				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		0.50		mg/L			05/09/22 19:46	1
Sulfate	3.7		1.0		mg/L			05/09/22 19:46	1
Ammonia as N	0.23		0.030		mg/L			05/05/22 14:03	1
Nitrate/Nitrite	ND		0.050		mg/L			05/02/22 17:16	1
Total Organic Carbon - Average	1.5		1.0		mg/L			04/28/22 19:53	1
Bicarbonate Alkalinity	350		10		mg/L			04/28/22 20:31	1
Total Dissolved Solids	580		10		mg/L			04/26/22 08:45	1

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	3.1				meq/L			05/10/22 12:14	1
Total Cations	3.0				meq/L			05/10/22 12:14	1
Percent Difference	-1.8				%			05/10/22 12:14	1
Calcium	28				mg/L			05/10/22 12:14	1
Magnesium	11				mg/L			05/10/22 12:14	1
Potassium	0.00				mg/L			05/10/22 12:14	1
Sodium	15				mg/L			05/10/22 12:14	1

General Chemistry (Continued)

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.00				mg/L			05/10/22 12:14	1
Chloride	4.7				mg/L			05/10/22 12:14	1
Sulfate	11				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	130				mg/L			05/10/22 12:14	1
Alkalinity	130				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	1.5				mg/L			05/10/22 12:14	1
Anion/Cation Balance	-1.8				%			05/10/22 12:14	1
Calculated TDS	140				mg/L			05/10/22 12:14	1
TDS Ratio	1.3				NONE			05/10/22 12:14	1
Total Dissolved Solids	180				mg/L			05/10/22 12:14	1
Iron	0.033				mg/L			05/10/22 12:14	1
Calcium	1.4				meq/L			05/10/22 12:14	1
Magnesium	0.91				meq/L			05/10/22 12:14	1
Potassium	0.00				meq/L			05/10/22 12:14	1
Sodium	0.65				meq/L			05/10/22 12:14	1
Ammonia as N	0.00				meq/L			05/10/22 12:14	1
Chloride	0.13				meq/L			05/10/22 12:14	1
Sulfate	0.23				meq/L			05/10/22 12:14	1
Alkalinity	130				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	2.6				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.11				meq/L			05/10/22 12:14	1
Iron	0.0018				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.7		0.50		mg/L			05/09/22 20:05	1
Sulfate	11		1.0		mg/L			05/09/22 20:05	1
Ammonia as N	ND		0.030		mg/L			05/05/22 14:05	1
Nitrate/Nitrite	1.5		0.050		mg/L			05/02/22 17:30	1
Total Organic Carbon - Average	1.5		1.0		mg/L			04/28/22 20:09	1
Bicarbonate Alkalinity	130		10		mg/L			04/28/22 20:45	1
Total Dissolved Solids	180		10		mg/L			04/26/22 11:39	1

Method: Field Sampling - Field Sampling

Client Sample ID: MW-12A
Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.91				SU			04/21/22 15:30	1
Field Conductivity	440.3				umhos/cm			04/21/22 15:30	1
Field Temperature	9.4				Degrees C			04/21/22 15:30	1
Field Dissolved Oxygen	3.20				mg/L			04/21/22 15:30	1
Field EH/ORP	196.2				millivolts			04/21/22 15:30	1

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.06				SU			04/21/22 14:40	1
Field Conductivity	594.9				umhos/cm			04/21/22 14:40	1
Field Temperature	10.7				Degrees C			04/21/22 14:40	1

Method: Field Sampling - Field Sampling (Continued)

Client Sample ID: MW-12B
Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field Dissolved Oxygen	3.22				mg/L			04/21/22 14:40	1
Field EH/ORP	-44.1				millivolts			04/21/22 14:40	1

Client Sample ID: MW-15A
Date Collected: 04/19/22 14:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-4
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.15				SU			04/19/22 15:45	1
Field Conductivity	149.8				umhos/cm			04/19/22 15:45	1
Field Temperature	12.3				Degrees C			04/19/22 15:45	1
Field Dissolved Oxygen	7.11				mg/L			04/19/22 15:45	1
Field EH/ORP	177.2				millivolts			04/19/22 15:45	1

Client Sample ID: MW-15B
Date Collected: 04/20/22 11:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-5
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.72				SU			04/20/22 12:35	1
Field Conductivity	527.6				umhos/cm			04/20/22 12:35	1
Field Temperature	12.1				Degrees C			04/20/22 12:35	1
Field Dissolved Oxygen	0.78				mg/L			04/20/22 12:35	1
Field EH/ORP	29.6				millivolts			04/20/22 12:35	1

Client Sample ID: MW-16A
Date Collected: 04/19/22 12:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-6
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.18				SU			04/19/22 13:40	1
Field Conductivity	326.8				umhos/cm			04/19/22 13:40	1
Field Temperature	12.0				Degrees C			04/19/22 13:40	1
Field Dissolved Oxygen	9.42				mg/L			04/19/22 13:40	1
Field EH/ORP	117.4				millivolts			04/19/22 13:40	1

Client Sample ID: DUP1
Date Collected: 04/19/22 12:45
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-7
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.18				SU			04/19/22 13:45	1
Field Conductivity	326.8				umhos/cm			04/19/22 13:45	1
Field Temperature	12.0				Degrees C			04/19/22 13:45	1
Field Dissolved Oxygen	9.42				mg/L			04/19/22 13:45	1
Field EH/ORP	117.4				millivolts			04/19/22 13:45	1

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.82				SU			04/19/22 15:10	1
Field Conductivity	1135				umhos/cm			04/19/22 15:10	1
Field Temperature	12.0				Degrees C			04/19/22 15:10	1
Field Dissolved Oxygen	0.71				mg/L			04/19/22 15:10	1

Method: Field Sampling - Field Sampling (Continued)

Client Sample ID: MW-16B
Date Collected: 04/19/22 14:10
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-8
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field EH/ORP	-10.3				millivolts			04/19/22 15:10	1

Client Sample ID: MW-21A
Date Collected: 04/21/22 12:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-9
Matrix: Water

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.12				SU			04/21/22 13:15	1
Field Conductivity	316.5				umhos/cm			04/21/22 13:15	1
Field Temperature	11.6				Degrees C			04/21/22 13:15	1
Field Dissolved Oxygen	0.91				mg/L			04/21/22 13:15	1
Field EH/ORP	225.3				millivolts			04/21/22 13:15	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

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)
280-161414-1	TRIP BLANK	102	95	107	91
280-161414-2	MW-12A	94	97	89	109
280-161414-3	MW-12B	93	97	89	109
280-161414-4	MW-15A	100	95	105	93
280-161414-4 - RA	MW-15A	101	96	102	103
280-161414-5	MW-15B	93	97	86	112
280-161414-6	MW-16A	100	96	105	93
280-161414-6 - RA	MW-16A	100	97	102	103
280-161414-7	DUP1	99	97	102	97
280-161414-7 - RA	DUP1	101	98	101	104
280-161414-8	MW-16B	97	95	100	96
280-161414-8 - RA	MW-16B	100	95	102	104
280-161414-9	MW-21A	94	96	88	110
280-161623-D-1 MS	Matrix Spike	96	96	94	104
280-161623-E-1 MSD	Matrix Spike Duplicate	95	97	94	104
280-161669-A-17 MS	Matrix Spike	95	94	88	111
280-161669-B-17 MSD	Matrix Spike Duplicate	90	93	89	109
LCS 280-573474/4	Lab Control Sample	106	95	115	85
LCS 280-573636/1002	Lab Control Sample	98	95	99	102
LCS 280-573782/5	Lab Control Sample	89	96	85	111
LCSD 280-573474/5	Lab Control Sample Dup	107	96	116	84
LCSD 280-573636/5	Lab Control Sample Dup	100	96	100	102
LCSD 280-573782/6	Lab Control Sample Dup	92	96	89	111
MB 280-573474/9	Method Blank	104	96	118	83
MB 280-573636/9	Method Blank	102	96	102	101
MB 280-573649/9	Method Blank	94	96	90	109
MB 280-573782/10	Method Blank	94	99	90	109

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)
280-161414-1	TRIP BLANK	101
280-161414-2	MW-12A	106
280-161414-3	MW-12B	102
280-161414-4	MW-15A	115
280-161414-5	MW-15B	112
280-161414-6	MW-16A	112
280-161414-7	DUP1	111
280-161414-8	MW-16B	112
280-161414-9	MW-21A	116
LCS 280-573629/2-A	Lab Control Sample	118

Surrogate Summary

Client: Waste Management
Job ID: 280-161414-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	12DBP1 (70-130)								
LCSD 280-573629/3-A	Lab Control Sample Dup	120								
MB 280-573629/1-A	Method Blank	112								

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573474/9
Matrix: Water
Analysis Batch: 573474

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			04/30/22 09:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 09:13	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 09:13	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 09:13	1
2-Hexanone	ND		5.0		ug/L			04/30/22 09:13	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 09:13	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 09:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 09:13	1
Acetone	ND		10		ug/L			04/30/22 09:13	1
Benzene	ND		1.0		ug/L			04/30/22 09:13	1
Bromobenzene	ND		1.0		ug/L			04/30/22 09:13	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Bromoform	ND		1.0		ug/L			04/30/22 09:13	1
Bromomethane	ND		2.0		ug/L			04/30/22 09:13	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 09:13	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 09:13	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
Chloroethane	ND		2.0		ug/L			04/30/22 09:13	1
Chloroform	ND		1.0		ug/L			04/30/22 09:13	1
Chloromethane	ND		2.0		ug/L			04/30/22 09:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 09:13	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Dibromomethane	ND		1.0		ug/L			04/30/22 09:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 09:13	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 09:13	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 09:13	1
Naphthalene	ND		1.0		ug/L			04/30/22 09:13	1

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

Lab Sample ID: MB 280-573474/9
Matrix: Water
Analysis Batch: 573474

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			04/30/22 09:13	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Styrene	ND		1.0		ug/L			04/30/22 09:13	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 09:13	1
Toluene	ND		1.0		ug/L			04/30/22 09:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 09:13	1
Trichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 09:13	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 09:13	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 09:13	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/30/22 09:13*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*04/30/22 09:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/30/22 09:13*	*1*
Dibromofluoromethane (Surr)	*118*		*77 - 120*		*04/30/22 09:13*	*1*
Toluene-d8 (Surr)	*83*		*80 - 125*		*04/30/22 09:13*	*1*

Lab Sample ID: LCS 280-573474/4
Matrix: Water
Analysis Batch: 573474

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	42.0		ug/L		84	74 - 121
1,1,1-Trichloroethane	50.0	53.9		ug/L		108	62 - 132
1,1,2,2-Tetrachloroethane	50.0	37.6		ug/L		75	72 - 122
1,1,2-Trichloroethane	50.0	58.7		ug/L		117	72 - 128
1,1-Dichloroethane	50.0	52.4		ug/L		105	66 - 130
1,1-Dichloroethene	50.0	46.6		ug/L		93	62 - 130
1,1-Dichloropropene	50.0	53.4		ug/L		107	64 - 133
1,2,3-Trichlorobenzene	50.0	35.1		ug/L		70	70 - 127
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	74 - 123
1,2,4-Trichlorobenzene	50.0	36.8		ug/L		74	73 - 124
1,2,4-Trimethylbenzene	50.0	37.6		ug/L		75	74 - 124
1,2-Dichlorobenzene	50.0	37.3	*-	ug/L		75	77 - 121
1,2-Dichloroethane	50.0	55.0		ug/L		110	61 - 130
1,2-Dichloropropane	50.0	55.2		ug/L		110	68 - 127
1,3,5-Trimethylbenzene	50.0	37.6		ug/L		75	73 - 127
1,3-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 121
1,3-Dichloropropane	50.0	41.5		ug/L		83	80 - 118
1,4-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 119
2,2-Dichloropropane	50.0	53.3		ug/L		107	57 - 140
2-Butanone (MEK)	200	195		ug/L		97	53 - 135

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

Lab Sample ID: LCS 280-573474/4
Matrix: Water
Analysis Batch: 573474

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	50.0	37.9		ug/L		76	75 - 123
2-Hexanone	200	150		ug/L		75	58 - 134
4-Chlorotoluene	50.0	38.3		ug/L		77	74 - 124
4-Isopropyltoluene	50.0	37.6		ug/L		75	74 - 127
4-Methyl-2-pentanone	200	224		ug/L		112	56 - 135
Acetone	200	198		ug/L		99	50 - 137
Benzene	50.0	55.6		ug/L		111	69 - 126
Bromobenzene	50.0	39.2		ug/L		78	75 - 122
Bromochloromethane	50.0	59.6		ug/L		119	71 - 130
Bromodichloromethane	50.0	57.6		ug/L		115	67 - 126
Bromoform	50.0	40.5		ug/L		81	57 - 125
Bromomethane	50.0	54.9		ug/L		110	25 - 163
Carbon disulfide	50.0	40.3		ug/L		81	56 - 128
Carbon tetrachloride	50.0	53.7		ug/L		107	60 - 133
Chlorobenzene	50.0	41.1		ug/L		82	78 - 118
Chloroethane	50.0	57.2		ug/L		114	52 - 144
Chloroform	50.0	55.8		ug/L		112	68 - 128
Chloromethane	50.0	48.4		ug/L		97	43 - 142
cis-1,2-Dichloroethene	50.0	57.2		ug/L		114	69 - 126
cis-1,3-Dichloropropene	50.0	40.3		ug/L		81	75 - 120
Dibromochloromethane	50.0	40.8		ug/L		82	71 - 122
Dibromomethane	50.0	58.4		ug/L		117	68 - 129
Dichlorodifluoromethane	50.0	47.6		ug/L		95	26 - 152
Ethylbenzene	50.0	40.2		ug/L		80	76 - 121
Hexachlorobutadiene	50.0	34.7		ug/L		69	69 - 133
Isopropylbenzene	50.0	37.1		ug/L		74	70 - 127
Methylene Chloride	50.0	56.2		ug/L		112	64 - 128
Naphthalene	50.0	35.5		ug/L		71	63 - 129
n-Butylbenzene	50.0	37.1		ug/L		74	69 - 130
N-Propylbenzene	50.0	37.0		ug/L		74	73 - 127
sec-Butylbenzene	50.0	37.5		ug/L		75	72 - 127
Styrene	50.0	41.9		ug/L		84	79 - 120
tert-Butylbenzene	50.0	40.6		ug/L		81	72 - 126
Tetrachloroethene	50.0	40.1		ug/L		80	72 - 127
Toluene	50.0	57.0		ug/L		114	68 - 127
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	66 - 129
trans-1,3-Dichloropropene	50.0	57.4		ug/L		115	66 - 127
Trichloroethene	50.0	57.0		ug/L		114	70 - 125
Trichlorofluoromethane	50.0	59.6		ug/L		119	57 - 144
Vinyl chloride	50.0	51.5		ug/L		103	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*
Dibromofluoromethane (Surr)	*115*		*77 - 120*
Toluene-d8 (Surr)	*85*		*80 - 125*

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

Lab Sample ID: LCSD 280-573474/5
Matrix: Water
Analysis Batch: 573474

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	41.5		ug/L		83	74 - 121	1	20
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	62 - 132	0	20
1,1,2,2-Tetrachloroethane	50.0	39.2		ug/L		78	72 - 122	4	20
1,1,2-Trichloroethane	50.0	60.7		ug/L		121	72 - 128	3	20
1,1-Dichloroethane	50.0	52.7		ug/L		105	66 - 130	1	20
1,1-Dichloroethene	50.0	46.7		ug/L		93	62 - 130	0	21
1,1-Dichloropropene	50.0	53.7		ug/L		107	64 - 133	0	20
1,2,3-Trichlorobenzene	50.0	38.1		ug/L		76	70 - 127	8	20
1,2,3-Trichloropropane	50.0	40.0		ug/L		80	74 - 123	4	20
1,2,4-Trichlorobenzene	50.0	38.1		ug/L		76	73 - 124	4	20
1,2,4-Trimethylbenzene	50.0	37.7		ug/L		75	74 - 124	0	20
1,2-Dichlorobenzene	50.0	38.6		ug/L		77	77 - 121	3	20
1,2-Dichloroethane	50.0	56.3		ug/L		113	61 - 130	2	20
1,2-Dichloropropane	50.0	55.3		ug/L		111	68 - 127	0	20
1,3,5-Trimethylbenzene	50.0	37.8		ug/L		76	73 - 127	1	20
1,3-Dichlorobenzene	50.0	38.1		ug/L		76	76 - 121	1	20
1,3-Dichloropropane	50.0	42.3		ug/L		85	80 - 118	2	20
1,4-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 119	0	20
2,2-Dichloropropane	50.0	54.4		ug/L		109	57 - 140	2	22
2-Butanone (MEK)	200	210		ug/L		105	53 - 135	7	20
2-Chlorotoluene	50.0	38.5		ug/L		77	75 - 123	2	20
2-Hexanone	200	157		ug/L		79	58 - 134	5	21
4-Chlorotoluene	50.0	38.5		ug/L		77	74 - 124	0	20
4-Isopropyltoluene	50.0	38.0		ug/L		76	74 - 127	1	20
4-Methyl-2-pentanone	200	237		ug/L		119	56 - 135	6	20
Acetone	200	218		ug/L		109	50 - 137	10	21
Benzene	50.0	55.6		ug/L		111	69 - 126	0	20
Bromobenzene	50.0	39.3		ug/L		79	75 - 122	0	20
Bromochloromethane	50.0	60.7		ug/L		121	71 - 130	2	20
Bromodichloromethane	50.0	58.0		ug/L		116	67 - 126	1	20
Bromoform	50.0	40.9		ug/L		82	57 - 125	1	20
Bromomethane	50.0	57.3		ug/L		115	25 - 163	4	40
Carbon disulfide	50.0	39.3		ug/L		79	56 - 128	2	20
Carbon tetrachloride	50.0	53.3		ug/L		107	60 - 133	1	20
Chlorobenzene	50.0	40.9		ug/L		82	78 - 118	1	20
Chloroethane	50.0	56.5		ug/L		113	52 - 144	1	30
Chloroform	50.0	56.2		ug/L		112	68 - 128	1	20
Chloromethane	50.0	47.7		ug/L		95	43 - 142	1	20
cis-1,2-Dichloroethene	50.0	57.1		ug/L		114	69 - 126	0	20
cis-1,3-Dichloropropene	50.0	40.4		ug/L		81	75 - 120	0	20
Dibromochloromethane	50.0	41.7		ug/L		83	71 - 122	2	20
Dibromomethane	50.0	60.5		ug/L		121	68 - 129	4	20
Dichlorodifluoromethane	50.0	48.1		ug/L		96	26 - 152	1	21
Ethylbenzene	50.0	39.7		ug/L		79	76 - 121	1	20
Hexachlorobutadiene	50.0	36.3		ug/L		73	69 - 133	5	20
Isopropylbenzene	50.0	37.1		ug/L		74	70 - 127	0	20
Methylene Chloride	50.0	56.4		ug/L		113	64 - 128	0	20
Naphthalene	50.0	37.4		ug/L		75	63 - 129	5	21

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

Lab Sample ID: LCSD 280-573474/5
Matrix: Water
Analysis Batch: 573474

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			50.0	37.5		ug/L		75	69 - 130	1	20
N-Propylbenzene			50.0	37.4		ug/L		75	73 - 127	1	20
sec-Butylbenzene			50.0	37.8		ug/L		76	72 - 127	1	20
Styrene			50.0	41.6		ug/L		83	79 - 120	1	20
tert-Butylbenzene			50.0	41.0		ug/L		82	72 - 126	1	20
Tetrachloroethene			50.0	40.3		ug/L		81	72 - 127	0	20
Toluene			50.0	57.6		ug/L		115	68 - 127	1	20
trans-1,2-Dichloroethene			50.0	53.8		ug/L		108	66 - 129	0	20
trans-1,3-Dichloropropene			50.0	59.4		ug/L		119	66 - 127	3	20
Trichloroethene			50.0	55.5		ug/L		111	70 - 125	3	20
Trichlorofluoromethane			50.0	58.9		ug/L		118	57 - 144	1	28
Vinyl chloride			50.0	50.4		ug/L		101	53 - 141	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*116*		*77 - 120*
Toluene-d8 (Surr)	*84*		*80 - 125*

Lab Sample ID: 280-161623-D-1 MS
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	28.0		ug/L		112	74 - 121		
1,1,1-Trichloroethane	ND	F1 F2	25.0	21.9		ug/L		87	62 - 132		
1,1,2,2-Tetrachloroethane	ND	F1 F2	25.0	29.2		ug/L		117	72 - 122		
1,1,2-Trichloroethane	ND	F1 F2	25.0	25.3		ug/L		101	72 - 128		
1,1-Dichloroethane	ND	F1 F2	25.0	21.7		ug/L		87	66 - 130		
1,1-Dichloroethene	ND	F1 F2	25.0	19.1		ug/L		76	62 - 130		
1,1-Dichloropropene	ND	F1 F2	25.0	22.0		ug/L		88	64 - 133		
1,2,3-Trichlorobenzene	ND	F1 F2	25.0	28.8		ug/L		115	70 - 127		
1,2,3-Trichloropropane	ND	F1 F2	25.0	30.4		ug/L		121	74 - 123		
1,2,4-Trichlorobenzene	ND	F1 F2	25.0	28.4		ug/L		113	73 - 124		
1,2,4-Trimethylbenzene	ND	F1 F2	25.0	28.8		ug/L		115	74 - 124		
1,2-Dichlorobenzene	ND	*- F1 F2	25.0	29.2		ug/L		117	77 - 121		
1,2-Dichloroethane	ND	F1 F2	25.0	23.1		ug/L		92	61 - 130		
1,2-Dichloropropane	ND	F1 F2	25.0	22.8		ug/L		91	68 - 127		
1,3,5-Trimethylbenzene	ND	F1 F2	25.0	28.9		ug/L		116	73 - 127		
1,3-Dichlorobenzene	ND	*- F1 F2	25.0	29.3		ug/L		117	76 - 121		
1,3-Dichloropropane	ND	F1 F2	25.0	29.2		ug/L		117	80 - 118		
1,4-Dichlorobenzene	ND	*- F1 F2	25.0	28.7		ug/L		115	76 - 119		
2,2-Dichloropropane	ND	F1 F2	25.0	19.4		ug/L		77	57 - 140		
2-Butanone (MEK)	ND	F1 F2	100	81.0		ug/L		81	53 - 135		
2-Chlorotoluene	ND	F1 F2	25.0	29.1		ug/L		116	75 - 123		
2-Hexanone	ND	F2	100	103		ug/L		103	58 - 134		
4-Chlorotoluene	ND	F1 F2	25.0	29.4		ug/L		118	74 - 124		
4-Isopropyltoluene	ND	F1 F2	25.0	28.9		ug/L		116	74 - 127		

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

Lab Sample ID: 280-161623-D-1 MS
Matrix: Water
Analysis Batch: 573474

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	F1 F2	100	92.3		ug/L		92	56 - 135
Acetone	ND	F1 F2	100	81.8		ug/L		82	50 - 137
Benzene	ND	F1 F2	25.0	23.1		ug/L		92	69 - 126
Bromobenzene	ND	F1 F2	25.0	30.5		ug/L		122	75 - 122
Bromochloromethane	ND	F1 F2	25.0	25.0		ug/L		100	71 - 130
Bromodichloromethane	ND	F1 F2	25.0	23.6		ug/L		94	67 - 126
Bromoform	ND	F2	25.0	25.8		ug/L		103	57 - 125
Bromomethane	ND		25.0	18.3		ug/L		73	25 - 163
Carbon disulfide	ND	F1 F2	25.0	15.8		ug/L		63	56 - 128
Carbon tetrachloride	ND	F1 F2	25.0	21.4		ug/L		86	60 - 133
Chlorobenzene	ND	F1 F2	25.0	28.6		ug/L		114	78 - 118
Chloroethane	ND		25.0	20.4		ug/L		82	52 - 144
Chloroform	ND	F1 F2	25.0	23.6		ug/L		95	68 - 128
Chloromethane	ND	F2	25.0	16.6		ug/L		66	43 - 142
cis-1,2-Dichloroethene	ND	F1 F2	25.0	23.1		ug/L		92	69 - 126
cis-1,3-Dichloropropene	ND	F1 F2	25.0	26.0		ug/L		104	75 - 120
Dibromochloromethane	ND	F1 F2	25.0	27.3		ug/L		109	71 - 122
Dibromomethane	ND	F1 F2	25.0	24.9		ug/L		100	68 - 129
Dichlorodifluoromethane	ND		25.0	16.9		ug/L		68	26 - 152
Ethylbenzene	ND	F1 F2	25.0	27.7		ug/L		111	76 - 121
Hexachlorobutadiene	ND	F1 F2	25.0	26.1		ug/L		104	69 - 133
Isopropylbenzene	ND	F2	25.0	28.4		ug/L		114	70 - 127
Methylene Chloride	ND	F1 F2	25.0	22.5		ug/L		90	64 - 128
Naphthalene	ND	F2	25.0	28.4		ug/L		114	63 - 129
n-Butylbenzene	ND	F1 F2	25.0	27.7		ug/L		111	69 - 130
N-Propylbenzene	ND	F1 F2	25.0	28.8		ug/L		115	73 - 127
sec-Butylbenzene	ND	F1 F2	25.0	28.6		ug/L		114	72 - 127
Styrene	ND	F1 F2	25.0	28.6		ug/L		115	79 - 120
tert-Butylbenzene	ND	F2	25.0	31.2		ug/L		125	72 - 126
Tetrachloroethene	ND	F1 F2	25.0	28.0		ug/L		112	72 - 127
Toluene	ND	F1 F2	25.0	24.1		ug/L		96	68 - 127
trans-1,2-Dichloroethene	ND	F1 F2	25.0	22.3		ug/L		89	66 - 129
trans-1,3-Dichloropropene	ND	F1 F2	25.0	22.6		ug/L		90	66 - 127
Trichloroethene	ND	F1 F2	25.0	23.3		ug/L		93	70 - 125
Trichlorofluoromethane	ND		25.0	21.3		ug/L		85	57 - 144
Vinyl chloride	ND		25.0	18.0		ug/L		72	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*94*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 125*

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

Lab Sample ID: 280-161623-E-1 MSD
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	16.7	F1 F2	ug/L		67	74 - 121	51	20
1,1,1-Trichloroethane	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	62 - 132	49	20
1,1,2,2-Tetrachloroethane	ND	F1 F2	25.0	17.4	F1 F2	ug/L		70	72 - 122	51	20
1,1,2-Trichloroethane	ND	F1 F2	25.0	14.6	F1 F2	ug/L		58	72 - 128	54	20
1,1-Dichloroethane	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	66 - 130	48	20
1,1-Dichloroethene	ND	F1 F2	25.0	11.7	F1 F2	ug/L		47	62 - 130	48	21
1,1-Dichloropropene	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	64 - 133	50	20
1,2,3-Trichlorobenzene	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	70 - 127	50	20
1,2,3-Trichloropropane	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	74 - 123	55	20
1,2,4-Trichlorobenzene	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	73 - 124	50	20
1,2,4-Trimethylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		71	74 - 124	48	20
1,2-Dichlorobenzene	ND	*- F1 F2	25.0	18.2	F1 F2	ug/L		73	77 - 121	47	20
1,2-Dichloroethane	ND	F1 F2	25.0	14.0	F1 F2	ug/L		56	61 - 130	49	20
1,2-Dichloropropane	ND	F1 F2	25.0	13.9	F1 F2	ug/L		56	68 - 127	48	20
1,3,5-Trimethylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		70	73 - 127	49	20
1,3-Dichlorobenzene	ND	*- F1 F2	25.0	17.8	F1 F2	ug/L		71	76 - 121	49	20
1,3-Dichloropropane	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	80 - 118	53	20
1,4-Dichlorobenzene	ND	*- F1 F2	25.0	17.7	F1 F2	ug/L		71	76 - 119	47	20
2,2-Dichloropropane	ND	F1 F2	25.0	11.5	F1 F2	ug/L		46	57 - 140	51	22
2-Butanone (MEK)	ND	F1 F2	100	46.5	F1 F2	ug/L		47	53 - 135	54	20
2-Chlorotoluene	ND	F1 F2	25.0	18.0	F1 F2	ug/L		72	75 - 123	47	20
2-Hexanone	ND	F2	100	59.6	F2	ug/L		60	58 - 134	53	21
4-Chlorotoluene	ND	F1 F2	25.0	17.7	F1 F2	ug/L		71	74 - 124	50	20
4-Isopropyltoluene	ND	F1 F2	25.0	17.1	F1 F2	ug/L		69	74 - 127	51	20
4-Methyl-2-pentanone	ND	F1 F2	100	52.2	F1 F2	ug/L		52	56 - 135	55	20
Acetone	ND	F1 F2	100	47.8	F1 F2	ug/L		48	50 - 137	52	21
Benzene	ND	F1 F2	25.0	14.0	F1 F2	ug/L		56	69 - 126	49	20
Bromobenzene	ND	F1 F2	25.0	18.4	F1 F2	ug/L		74	75 - 122	49	20
Bromochloromethane	ND	F1 F2	25.0	15.4	F1 F2	ug/L		62	71 - 130	47	20
Bromodichloromethane	ND	F1 F2	25.0	14.1	F1 F2	ug/L		56	67 - 126	50	20
Bromoform	ND	F2	25.0	14.6	F2	ug/L		58	57 - 125	56	20
Bromomethane	ND		25.0	14.8		ug/L		59	25 - 163	21	40
Carbon disulfide	ND	F1 F2	25.0	9.76	F1 F2	ug/L		39	56 - 128	47	20
Carbon tetrachloride	ND	F1 F2	25.0	12.6	F1 F2	ug/L		50	60 - 133	52	20
Chlorobenzene	ND	F1 F2	25.0	17.2	F1 F2	ug/L		69	78 - 118	49	20
Chloroethane	ND		25.0	15.8		ug/L		63	52 - 144	26	30
Chloroform	ND	F1 F2	25.0	14.6	F1 F2	ug/L		58	68 - 128	48	20
Chloromethane	ND	F2	25.0	13.3	F2	ug/L		53	43 - 142	22	20
cis-1,2-Dichloroethene	ND	F1 F2	25.0	14.3	F1 F2	ug/L		57	69 - 126	47	20
cis-1,3-Dichloropropene	ND	F1 F2	25.0	15.5	F1 F2	ug/L		62	75 - 120	51	20
Dibromochloromethane	ND	F1 F2	25.0	16.0	F1 F2	ug/L		64	71 - 122	52	20
Dibromomethane	ND	F1 F2	25.0	15.0	F1 F2	ug/L		60	68 - 129	50	20
Dichlorodifluoromethane	ND		25.0	13.8		ug/L		55	26 - 152	21	21
Ethylbenzene	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	76 - 121	48	20
Hexachlorobutadiene	ND	F1 F2	25.0	15.7	F1 F2	ug/L		63	69 - 133	49	20
Isopropylbenzene	ND	F2	25.0	17.5	F2	ug/L		70	70 - 127	48	20
Methylene Chloride	ND	F1 F2	25.0	13.5	F1 F2	ug/L		54	64 - 128	50	20
Naphthalene	ND	F2	25.0	17.0	F2	ug/L		68	63 - 129	50	21

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

Lab Sample ID: 280-161623-E-1 MSD
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	16.6	F1 F2	ug/L		67	69 - 130	50	20
N-Propylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		71	73 - 127	48	20
sec-Butylbenzene	ND	F1 F2	25.0	17.4	F1 F2	ug/L		70	72 - 127	49	20
Styrene	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	79 - 120	50	20
tert-Butylbenzene	ND	F2	25.0	19.1	F2	ug/L		76	72 - 126	48	20
Tetrachloroethene	ND	F1 F2	25.0	16.9	F1 F2	ug/L		68	72 - 127	49	20
Toluene	ND	F1 F2	25.0	14.6	F1 F2	ug/L		59	68 - 127	49	20
trans-1,2-Dichloroethene	ND	F1 F2	25.0	13.7	F1 F2	ug/L		55	66 - 129	48	20
trans-1,3-Dichloropropene	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	66 - 127	52	20
Trichloroethene	ND	F1 F2	25.0	14.3	F1 F2	ug/L		57	70 - 125	48	20
Trichlorofluoromethane	ND		25.0	17.0		ug/L		68	57 - 144	22	28
Vinyl chloride	ND		25.0	14.5		ug/L		58	53 - 141	22	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*94*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 125*

Lab Sample ID: MB 280-573636/9
Matrix: Water
Analysis Batch: 573636

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			05/02/22 21:49	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/02/22 21:49*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*		*05/02/22 21:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/02/22 21:49*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/02/22 21:49*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/02/22 21:49*	*1*

Lab Sample ID: LCS 280-573636/1002
Matrix: Water
Analysis Batch: 573636

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dichlorobenzene			25.0	26.1		ug/L		105	76 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

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

Lab Sample ID: LCSD 280-573636/5
Matrix: Water
Analysis Batch: 573636

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
1,4-Dichlorobenzene			25.0	24.3		ug/L		97	76 - 119	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 08:59	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 08:59	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
2-Hexanone	ND		5.0		ug/L			05/03/22 08:59	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 08:59	1
Acetone	ND		10		ug/L			05/03/22 08:59	1
Benzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromoform	ND		1.0		ug/L			05/03/22 08:59	1
Bromomethane	ND		2.0		ug/L			05/03/22 08:59	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 08:59	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 08:59	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1

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

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		2.0		ug/L			05/03/22 08:59	1
Chloroform	ND		1.0		ug/L			05/03/22 08:59	1
Chloromethane	ND		2.0		ug/L			05/03/22 08:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Dibromomethane	ND		1.0		ug/L			05/03/22 08:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 08:59	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 08:59	1
Naphthalene	ND		1.0		ug/L			05/03/22 08:59	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Styrene	ND		1.0		ug/L			05/03/22 08:59	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Toluene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 08:59	1
Trichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 08:59	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/03/22 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 08:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 08:59*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 08:59*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 08:59*	*1*

Lab Sample ID: MB 280-573782/10
Matrix: Water
Analysis Batch: 573782

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			05/04/22 09:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 09:25	1

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

Lab Sample ID: MB 280-573782/10
Matrix: Water
Analysis Batch: 573782

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 09:25	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 09:25	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:25	1
2-Hexanone	ND		5.0		ug/L			05/04/22 09:25	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:25	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 09:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 09:25	1
Acetone	ND		10		ug/L			05/04/22 09:25	1
Benzene	ND		1.0		ug/L			05/04/22 09:25	1
Bromobenzene	ND		1.0		ug/L			05/04/22 09:25	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Bromoform	ND		1.0		ug/L			05/04/22 09:25	1
Bromomethane	ND		2.0		ug/L			05/04/22 09:25	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 09:25	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 09:25	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
Chloroethane	ND		2.0		ug/L			05/04/22 09:25	1
Chloroform	ND		1.0		ug/L			05/04/22 09:25	1
Chloromethane	ND		2.0		ug/L			05/04/22 09:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 09:25	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Dibromomethane	ND		1.0		ug/L			05/04/22 09:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 09:25	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 09:25	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 09:25	1
Naphthalene	ND		1.0		ug/L			05/04/22 09:25	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Styrene	ND		1.0		ug/L			05/04/22 09:25	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 09:25	1
Toluene	ND		1.0		ug/L			05/04/22 09:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1

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

Lab Sample ID: MB 280-573782/10
Matrix: Water
Analysis Batch: 573782

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 09:25	1
Trichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 09:25	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 09:25	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 09:25	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*05/04/22 09:25*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/04/22 09:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/04/22 09:25*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/04/22 09:25*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/04/22 09:25*	*1*

Lab Sample ID: LCS 280-573782/5
Matrix: Water
Analysis Batch: 573782

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	74 - 121
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	62 - 132
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	72 - 122
1,1,2-Trichloroethane	25.0	20.8		ug/L		83	72 - 128
1,1-Dichloroethane	25.0	20.2		ug/L		81	66 - 130
1,1-Dichloroethene	25.0	20.0		ug/L		80	62 - 130
1,1-Dichloropropene	25.0	22.2		ug/L		89	64 - 133
1,2,3-Trichlorobenzene	25.0	18.9		ug/L		76	70 - 127
1,2,3-Trichloropropane	25.0	22.4		ug/L		89	74 - 123
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	73 - 124
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	74 - 124
1,2-Dichlorobenzene	25.0	26.6		ug/L		106	77 - 121
1,2-Dichloroethane	25.0	22.7		ug/L		91	61 - 130
1,2-Dichloropropane	25.0	21.4		ug/L		86	68 - 127
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	73 - 127
1,3-Dichlorobenzene	25.0	26.6		ug/L		106	76 - 121
1,3-Dichloropropane	25.0	26.5		ug/L		106	80 - 118
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	76 - 119
2,2-Dichloropropane	25.0	20.4		ug/L		82	57 - 140
2-Butanone (MEK)	100	76.6		ug/L		77	53 - 135
2-Chlorotoluene	25.0	23.6		ug/L		94	75 - 123
2-Hexanone	100	103		ug/L		103	58 - 134
4-Chlorotoluene	25.0	23.6		ug/L		94	74 - 124
4-Isopropyltoluene	25.0	26.8		ug/L		107	74 - 127
4-Methyl-2-pentanone	100	75.5		ug/L		75	56 - 135
Acetone	100	70.4		ug/L		70	50 - 137
Benzene	25.0	23.7		ug/L		95	69 - 126
Bromobenzene	25.0	25.6		ug/L		103	75 - 122

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

Lab Sample ID: LCS 280-573782/5
Matrix: Water
Analysis Batch: 573782

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromochloromethane	25.0	18.9		ug/L		75	71 - 130
Bromodichloromethane	25.0	20.7		ug/L		83	67 - 126
Bromoform	25.0	20.3		ug/L		81	57 - 125
Bromomethane	25.0	17.6		ug/L		71	25 - 163
Carbon disulfide	25.0	21.0		ug/L		84	56 - 128
Carbon tetrachloride	25.0	20.8		ug/L		83	60 - 133
Chlorobenzene	25.0	28.2		ug/L		113	78 - 118
Chloroethane	25.0	25.1		ug/L		100	52 - 144
Chloroform	25.0	21.9		ug/L		88	68 - 128
Chloromethane	25.0	20.9		ug/L		83	43 - 142
cis-1,2-Dichloroethene	25.0	19.8		ug/L		79	69 - 126
cis-1,3-Dichloropropene	25.0	22.6		ug/L		91	75 - 120
Dibromochloromethane	25.0	22.5		ug/L		90	71 - 122
Dibromomethane	25.0	20.5		ug/L		82	68 - 129
Dichlorodifluoromethane	25.0	22.7		ug/L		91	26 - 152
Ethylbenzene	25.0	25.8		ug/L		103	76 - 121
Hexachlorobutadiene	25.0	21.5		ug/L		86	69 - 133
Isopropylbenzene	25.0	27.4		ug/L		109	70 - 127
Methylene Chloride	25.0	21.0		ug/L		84	64 - 128
Naphthalene	25.0	20.3		ug/L		81	63 - 129
n-Butylbenzene	25.0	25.9		ug/L		104	69 - 130
N-Propylbenzene	25.0	24.7		ug/L		99	73 - 127
sec-Butylbenzene	25.0	23.7		ug/L		95	72 - 127
Styrene	25.0	27.3		ug/L		109	79 - 120
tert-Butylbenzene	25.0	25.8		ug/L		103	72 - 126
Tetrachloroethene	25.0	25.0		ug/L		100	72 - 127
Toluene	25.0	23.8		ug/L		95	68 - 127
trans-1,2-Dichloroethene	25.0	20.2		ug/L		81	66 - 129
trans-1,3-Dichloropropene	25.0	20.3		ug/L		81	66 - 127
Trichloroethene	25.0	26.7		ug/L		107	70 - 125
Trichlorofluoromethane	25.0	21.6		ug/L		87	57 - 144
Vinyl chloride	25.0	21.2		ug/L		85	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*85*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

Lab Sample ID: LCSD 280-573782/6
Matrix: Water
Analysis Batch: 573782

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	74 - 121	0	20
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	62 - 132	1	20
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	72 - 122	1	20
1,1,2-Trichloroethane	25.0	20.8		ug/L		83	72 - 128	0	20

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

Lab Sample ID: LCSD 280-573782/6
Matrix: Water
Analysis Batch: 573782

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-Dichloroethane	25.0	20.0		ug/L		80	66 - 130	1	20
1,1-Dichloroethene	25.0	20.4		ug/L		82	62 - 130	2	21
1,1-Dichloropropene	25.0	22.0		ug/L		88	64 - 133	1	20
1,2,3-Trichlorobenzene	25.0	19.8		ug/L		79	70 - 127	5	20
1,2,3-Trichloropropane	25.0	23.4		ug/L		94	74 - 123	4	20
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		97	73 - 124	5	20
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	74 - 124	0	20
1,2-Dichlorobenzene	25.0	27.7		ug/L		111	77 - 121	4	20
1,2-Dichloroethane	25.0	22.4		ug/L		89	61 - 130	2	20
1,2-Dichloropropane	25.0	21.4		ug/L		86	68 - 127	0	20
1,3,5-Trimethylbenzene	25.0	26.6		ug/L		106	73 - 127	1	20
1,3-Dichlorobenzene	25.0	27.7		ug/L		111	76 - 121	4	20
1,3-Dichloropropane	25.0	26.6		ug/L		106	80 - 118	0	20
1,4-Dichlorobenzene	25.0	27.0		ug/L		108	76 - 119	3	20
2,2-Dichloropropane	25.0	21.1		ug/L		84	57 - 140	3	22
2-Butanone (MEK)	100	78.4		ug/L		78	53 - 135	2	20
2-Chlorotoluene	25.0	23.9		ug/L		96	75 - 123	1	20
2-Hexanone	100	101		ug/L		101	58 - 134	2	21
4-Chlorotoluene	25.0	23.9		ug/L		95	74 - 124	1	20
4-Isopropyltoluene	25.0	26.7		ug/L		107	74 - 127	1	20
4-Methyl-2-pentanone	100	74.8		ug/L		75	56 - 135	1	20
Acetone	100	70.7		ug/L		71	50 - 137	0	21
Benzene	25.0	23.5		ug/L		94	69 - 126	1	20
Bromobenzene	25.0	25.8		ug/L		103	75 - 122	1	20
Bromochloromethane	25.0	19.4		ug/L		78	71 - 130	3	20
Bromodichloromethane	25.0	20.7		ug/L		83	67 - 126	0	20
Bromoform	25.0	19.8		ug/L		79	57 - 125	3	20
Bromomethane	25.0	17.7		ug/L		71	25 - 163	1	40
Carbon disulfide	25.0	20.9		ug/L		84	56 - 128	0	20
Carbon tetrachloride	25.0	20.3		ug/L		81	60 - 133	3	20
Chlorobenzene	25.0	27.8		ug/L		111	78 - 118	1	20
Chloroethane	25.0	25.9		ug/L		104	52 - 144	3	30
Chloroform	25.0	21.8		ug/L		87	68 - 128	1	20
Chloromethane	25.0	20.0		ug/L		80	43 - 142	4	20
cis-1,2-Dichloroethene	25.0	20.5		ug/L		82	69 - 126	3	20
cis-1,3-Dichloropropene	25.0	22.5		ug/L		90	75 - 120	0	20
Dibromochloromethane	25.0	22.8		ug/L		91	71 - 122	1	20
Dibromomethane	25.0	20.5		ug/L		82	68 - 129	0	20
Dichlorodifluoromethane	25.0	23.4		ug/L		94	26 - 152	3	21
Ethylbenzene	25.0	26.1		ug/L		105	76 - 121	1	20
Hexachlorobutadiene	25.0	21.6		ug/L		86	69 - 133	1	20
Isopropylbenzene	25.0	27.4		ug/L		110	70 - 127	0	20
Methylene Chloride	25.0	20.9		ug/L		84	64 - 128	0	20
Naphthalene	25.0	22.3		ug/L		89	63 - 129	9	21
n-Butylbenzene	25.0	25.7		ug/L		103	69 - 130	1	20
N-Propylbenzene	25.0	24.3		ug/L		97	73 - 127	2	20
sec-Butylbenzene	25.0	23.3		ug/L		93	72 - 127	1	20
Styrene	25.0	26.9		ug/L		108	79 - 120	1	20
tert-Butylbenzene	25.0	26.1		ug/L		104	72 - 126	1	20

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

Lab Sample ID: LCSD 280-573782/6
Matrix: Water
Analysis Batch: 573782

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
Tetrachloroethene			25.0	25.5		ug/L		102	72 - 127	2	20
Toluene			25.0	23.8		ug/L		95	68 - 127	0	20
trans-1,2-Dichloroethene			25.0	19.9		ug/L		80	66 - 129	1	20
trans-1,3-Dichloropropene			25.0	20.6		ug/L		82	66 - 127	2	20
Trichloroethene			25.0	26.4		ug/L		106	70 - 125	1	20
Trichlorofluoromethane			25.0	21.4		ug/L		86	57 - 144	1	28
Vinyl chloride			25.0	21.1		ug/L		84	53 - 141	0	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*89*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

Lab Sample ID: 280-161669-A-17 MS
Matrix: Water
Analysis Batch: 573782

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		250	231		ug/L		92	74 - 121
1,1,1-Trichloroethane	ND		250	222		ug/L		89	62 - 132
1,1,2,2-Tetrachloroethane	ND		250	227		ug/L		91	72 - 122
1,1,2-Trichloroethane	ND		250	206		ug/L		83	72 - 128
1,1-Dichloroethane	ND		250	221		ug/L		88	66 - 130
1,1-Dichloroethene	ND		250	216		ug/L		86	62 - 130
1,1-Dichloropropene	ND		250	219		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	ND	F1	250	171	F1	ug/L		68	70 - 127
1,2,3-Trichloropropane	ND		250	206		ug/L		82	74 - 123
1,2,4-Trichlorobenzene	ND		250	212		ug/L		85	73 - 124
1,2,4-Trimethylbenzene	ND		250	251		ug/L		100	74 - 124
1,2-Dichlorobenzene	ND		250	251		ug/L		100	77 - 121
1,2-Dichloroethane	ND		250	227		ug/L		91	61 - 130
1,2-Dichloropropane	ND		250	213		ug/L		85	68 - 127
1,3,5-Trimethylbenzene	ND		250	249		ug/L		100	73 - 127
1,3-Dichlorobenzene	ND		250	252		ug/L		101	76 - 121
1,3-Dichloropropane	ND		250	256		ug/L		102	80 - 118
1,4-Dichlorobenzene	ND		250	258		ug/L		103	76 - 119
2,2-Dichloropropane	ND		250	182		ug/L		73	57 - 140
2-Butanone (MEK)	ND		1000	704		ug/L		70	53 - 135
2-Chlorotoluene	ND		250	223		ug/L		89	75 - 123
2-Hexanone	ND		1000	953		ug/L		95	58 - 134
4-Chlorotoluene	ND		250	218		ug/L		87	74 - 124
4-Isopropyltoluene	ND		250	250		ug/L		100	74 - 127
4-Methyl-2-pentanone	ND		1000	711		ug/L		71	56 - 135
Acetone	ND		1000	740		ug/L		74	50 - 137
Benzene	ND		250	234		ug/L		94	69 - 126
Bromobenzene	ND		250	235		ug/L		94	75 - 122
Bromochloromethane	ND		250	193		ug/L		77	71 - 130

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

Lab Sample ID: 280-161669-A-17 MS
Matrix: Water
Analysis Batch: 573782

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
Bromodichloromethane	ND		250	204		ug/L		82	67 - 126
Bromoform	ND		250	187		ug/L		75	57 - 125
Bromomethane	ND		250	160		ug/L		64	25 - 163
Carbon disulfide	ND		250	221		ug/L		88	56 - 128
Carbon tetrachloride	ND		250	200		ug/L		80	60 - 133
Chlorobenzene	ND		250	271		ug/L		108	78 - 118
Chloroethane	ND		250	219		ug/L		88	52 - 144
Chloroform	ND		250	224		ug/L		90	68 - 128
Chloromethane	ND		250	221		ug/L		89	43 - 142
cis-1,2-Dichloroethene	630	F1	250	795	F1	ug/L		67	69 - 126
cis-1,3-Dichloropropene	ND		250	208		ug/L		83	75 - 120
Dibromochloromethane	ND		250	216		ug/L		86	71 - 122
Dibromomethane	ND		250	197		ug/L		79	68 - 129
Dichlorodifluoromethane	ND		250	234		ug/L		94	26 - 152
Ethylbenzene	ND		250	250		ug/L		100	76 - 121
Hexachlorobutadiene	ND		250	192		ug/L		77	69 - 133
Isopropylbenzene	ND		250	254		ug/L		102	70 - 127
Methylene Chloride	ND		250	222		ug/L		89	64 - 128
Naphthalene	ND		250	182		ug/L		73	63 - 129
n-Butylbenzene	ND		250	237		ug/L		95	69 - 130
N-Propylbenzene	ND		250	223		ug/L		89	73 - 127
sec-Butylbenzene	ND		250	218		ug/L		87	72 - 127
Styrene	ND		250	259		ug/L		103	79 - 120
tert-Butylbenzene	ND		250	240		ug/L		96	72 - 126
Tetrachloroethene	ND		250	243		ug/L		97	72 - 127
Toluene	ND		250	233		ug/L		93	68 - 127
trans-1,2-Dichloroethene	ND		250	220		ug/L		88	66 - 129
trans-1,3-Dichloropropene	ND		250	194		ug/L		77	66 - 127
Trichloroethene	5.6		250	264		ug/L		103	70 - 125
Trichlorofluoromethane	ND		250	223		ug/L		89	57 - 144
Vinyl chloride	410		250	598		ug/L		77	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*88*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

Lab Sample ID: 280-161669-B-17 MSD
Matrix: Water
Analysis Batch: 573782

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		250	236		ug/L		94	74 - 121	2	20
1,1,1-Trichloroethane	ND		250	228		ug/L		91	62 - 132	3	20
1,1,2,2-Tetrachloroethane	ND		250	235		ug/L		94	72 - 122	3	20
1,1,2-Trichloroethane	ND		250	213		ug/L		85	72 - 128	3	20
1,1-Dichloroethane	ND		250	219		ug/L		87	66 - 130	1	20

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

Lab Sample ID: 280-161669-B-17 MSD
Matrix: Water
Analysis Batch: 573782

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-Dichloroethene	ND		250	225		ug/L		90	62 - 130	4	21
1,1-Dichloropropene	ND		250	220		ug/L		88	64 - 133	1	20
1,2,3-Trichlorobenzene	ND	F1	250	190		ug/L		76	70 - 127	11	20
1,2,3-Trichloropropane	ND		250	220		ug/L		88	74 - 123	6	20
1,2,4-Trichlorobenzene	ND		250	235		ug/L		94	73 - 124	10	20
1,2,4-Trimethylbenzene	ND		250	263		ug/L		105	74 - 124	5	20
1,2-Dichlorobenzene	ND		250	268		ug/L		107	77 - 121	6	20
1,2-Dichloroethane	ND		250	224		ug/L		90	61 - 130	1	20
1,2-Dichloropropane	ND		250	216		ug/L		86	68 - 127	1	20
1,3,5-Trimethylbenzene	ND		250	258		ug/L		103	73 - 127	3	20
1,3-Dichlorobenzene	ND		250	262		ug/L		105	76 - 121	4	20
1,3-Dichloropropane	ND		250	255		ug/L		102	80 - 118	0	20
1,4-Dichlorobenzene	ND		250	269		ug/L		107	76 - 119	4	20
2,2-Dichloropropane	ND		250	193		ug/L		77	57 - 140	6	22
2-Butanone (MEK)	ND		1000	781		ug/L		78	53 - 135	10	20
2-Chlorotoluene	ND		250	234		ug/L		94	75 - 123	5	20
2-Hexanone	ND		1000	974		ug/L		97	58 - 134	2	21
4-Chlorotoluene	ND		250	234		ug/L		93	74 - 124	7	20
4-Isopropyltoluene	ND		250	263		ug/L		105	74 - 127	5	20
4-Methyl-2-pentanone	ND		1000	737		ug/L		74	56 - 135	4	20
Acetone	ND		1000	768		ug/L		77	50 - 137	4	21
Benzene	ND		250	233		ug/L		93	69 - 126	1	20
Bromobenzene	ND		250	250		ug/L		100	75 - 122	6	20
Bromochloromethane	ND		250	197		ug/L		79	71 - 130	2	20
Bromodichloromethane	ND		250	208		ug/L		83	67 - 126	2	20
Bromoform	ND		250	186		ug/L		74	57 - 125	0	20
Bromomethane	ND		250	180		ug/L		72	25 - 163	12	40
Carbon disulfide	ND		250	226		ug/L		91	56 - 128	2	20
Carbon tetrachloride	ND		250	211		ug/L		84	60 - 133	5	20
Chlorobenzene	ND		250	275		ug/L		110	78 - 118	1	20
Chloroethane	ND		250	207		ug/L		83	52 - 144	6	30
Chloroform	ND		250	226		ug/L		90	68 - 128	1	20
Chloromethane	ND		250	219		ug/L		88	43 - 142	1	20
cis-1,2-Dichloroethene	630	F1	250	849		ug/L		89	69 - 126	7	20
cis-1,3-Dichloropropene	ND		250	212		ug/L		85	75 - 120	2	20
Dibromochloromethane	ND		250	220		ug/L		88	71 - 122	2	20
Dibromomethane	ND		250	204		ug/L		82	68 - 129	3	20
Dichlorodifluoromethane	ND		250	244		ug/L		98	26 - 152	4	21
Ethylbenzene	ND		250	250		ug/L		100	76 - 121	0	20
Hexachlorobutadiene	ND		250	212		ug/L		85	69 - 133	10	20
Isopropylbenzene	ND		250	267		ug/L		107	70 - 127	5	20
Methylene Chloride	ND		250	223		ug/L		89	64 - 128	0	20
Naphthalene	ND		250	210		ug/L		84	63 - 129	14	21
n-Butylbenzene	ND		250	249		ug/L		100	69 - 130	5	20
N-Propylbenzene	ND		250	240		ug/L		96	73 - 127	7	20
sec-Butylbenzene	ND		250	243		ug/L		97	72 - 127	11	20
Styrene	ND		250	265		ug/L		106	79 - 120	2	20
tert-Butylbenzene	ND		250	253		ug/L		101	72 - 126	5	20
Tetrachloroethene	ND		250	252		ug/L		101	72 - 127	3	20

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

Lab Sample ID: 280-161669-B-17 MSD
Matrix: Water
Analysis Batch: 573782

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
Toluene	ND		250	238		ug/L		95	68 - 127	2	20
trans-1,2-Dichloroethene	ND		250	220		ug/L		88	66 - 129	0	20
trans-1,3-Dichloropropene	ND		250	200		ug/L		80	66 - 127	3	20
Trichloroethene	5.6		250	269		ug/L		105	70 - 125	2	20
Trichlorofluoromethane	ND		250	228		ug/L		91	57 - 144	2	28
Vinyl chloride	410		250	579		ug/L		70	53 - 141	3	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 127*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*89*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-573629/1-A
Matrix: Water
Analysis Batch: 573632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573629

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/02/22 18:00	05/03/22 08:01	1
1,2-Dibromoethane	ND		0.050		ug/L		05/02/22 18:00	05/03/22 08:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*05/02/22 18:00*	*05/03/22 08:01*	*1*

Lab Sample ID: LCS 280-573629/2-A
Matrix: Water
Analysis Batch: 573632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573629

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.251		ug/L		100	60 - 140		
1,2-Dibromoethane			0.250	0.251		ug/L		100	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*118*		*70 - 130*

Lab Sample ID: LCSD 280-573629/3-A
Matrix: Water
Analysis Batch: 573632

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573629

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.250		ug/L		100	60 - 140	0	10
1,2-Dibromoethane			0.250	0.244		ug/L		98	60 - 140	3	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*120*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573695/1-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 20:35	1
Magnesium	ND		200		ug/L		05/03/22 19:17	05/04/22 20:35	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 20:35	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Sodium	ND		1000		ug/L		05/03/22 19:17	05/04/22 20:35	1

Lab Sample ID: LCS 280-573695/2-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	48700		ug/L		97	90 - 111
Iron	10000	9450		ug/L		94	89 - 115
Magnesium	50000	49000		ug/L		98	90 - 113
Manganese	1000	976		ug/L		98	90 - 110
Potassium	50000	49500		ug/L		99	89 - 114
Sodium	50000	49100		ug/L		98	90 - 115

Lab Sample ID: 280-161727-J-1-B MS
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	29000		50000	75700		ug/L		94	48 - 153
Iron	43		10000	9670		ug/L		96	52 - 155
Magnesium	50000		50000	98600		ug/L		97	62 - 146
Manganese	41		1000	1000		ug/L		96	79 - 121
Potassium	6900		50000	57800		ug/L		102	76 - 132
Sodium	300000		50000	347000	4	ug/L		102	70 - 203

Lab Sample ID: 280-161727-J-1-C MSD
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	29000		50000	76200		ug/L		95	48 - 153	1	20
Iron	43		10000	9760		ug/L		97	52 - 155	1	20
Magnesium	50000		50000	99200		ug/L		99	62 - 146	1	20
Manganese	41		1000	1020		ug/L		98	79 - 121	1	20
Potassium	6900		50000	57600		ug/L		101	76 - 132	0	20
Sodium	300000		50000	351000	4	ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-624944/28
Matrix: Water
Analysis Batch: 624944

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			05/07/22 01:57	1
Sulfate	ND		1.0		mg/L			05/07/22 01:57	1

Lab Sample ID: LCS 480-624944/29
Matrix: Water
Analysis Batch: 624944

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.1	49.6		mg/L		99	90 - 110		
Sulfate			50.0	49.9		mg/L		100	90 - 110		

Lab Sample ID: 280-161414-5 MS
Matrix: Water
Analysis Batch: 624944

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		
Chloride	23		50.1	69.9		mg/L		93	81 - 120		
Sulfate	2.4		50.0	50.9		mg/L		97	80 - 120		

Lab Sample ID: 480-197460-G-1 MS
Matrix: Water
Analysis Batch: 624944

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	170		251	402		mg/L		93	81 - 120		
Sulfate	54		250	295		mg/L		96	80 - 120		

Lab Sample ID: 480-197460-G-1 MSD
Matrix: Water
Analysis Batch: 624944

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	170		251	402		mg/L		93	81 - 120	0	15
Sulfate	54		250	295		mg/L		97	80 - 120	0	15

Lab Sample ID: MB 480-625182/4
Matrix: Water
Analysis Batch: 625182

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			05/09/22 14:52	1
Sulfate	ND		1.0		mg/L			05/09/22 14:52	1

Lab Sample ID: LCS 480-625182/5
Matrix: Water
Analysis Batch: 625182

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.1	50.4		mg/L		101	90 - 110		
Sulfate			50.0	51.5		mg/L		103	90 - 110		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-161417-D-4 MS
Matrix: Water
Analysis Batch: 625182

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		50.1	47.4		mg/L		95	81 - 120
Sulfate	ND		50.0	48.5		mg/L		97	80 - 120

Lab Sample ID: 620-4251-Q-6 MS
Matrix: Water
Analysis Batch: 625182

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		50.1	61.1		mg/L		93	81 - 120
Sulfate	83		50.0	128		mg/L		90	80 - 120

Lab Sample ID: 620-4251-Q-6 MSD
Matrix: Water
Analysis Batch: 625182

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		50.1	61.1		mg/L		93	81 - 120	0	15
Sulfate	83		50.0	128		mg/L		89	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574030/106
Matrix: Water
Analysis Batch: 574030

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			05/05/22 13:33	1

Lab Sample ID: LCS 280-574030/104
Matrix: Water
Analysis Batch: 574030

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	2.65		mg/L		106	90 - 110

Lab Sample ID: LCSD 280-574030/105
Matrix: Water
Analysis Batch: 574030

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	2.63		mg/L		105	90 - 110	1	10

Lab Sample ID: 280-161414-2 MS
Matrix: Water
Analysis Batch: 574030

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
Ammonia as N	ND		1.00	1.09		mg/L		109	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-161414-2 MSD
Matrix: Water
Analysis Batch: 574030

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
Ammonia as N	ND		1.00	1.08		mg/L		108	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573635/22
Matrix: Water
Analysis Batch: 573635

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			05/02/22 16:56	1

Lab Sample ID: LCS 280-573635/21
Matrix: Water
Analysis Batch: 573635

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	5.17		mg/L		103	90 - 110

Lab Sample ID: 280-161333-D-18 MS
Matrix: Water
Analysis Batch: 573635

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	2.4		4.00	6.38		mg/L		101	90 - 110

Lab Sample ID: 280-161333-D-18 MSD
Matrix: Water
Analysis Batch: 573635

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	2.4		4.00	6.46		mg/L		102	90 - 110	1	10

Lab Sample ID: MB 280-573773/22
Matrix: Water
Analysis Batch: 573773

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			05/03/22 16:34	1

Lab Sample ID: LCS 280-573773/21
Matrix: Water
Analysis Batch: 573773

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	5.09		mg/L		102	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-161382-D-2 MS
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.62		mg/L		101	90 - 110

Lab Sample ID: 280-161382-D-2 MSD
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.67		mg/L		102	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573357/4
Matrix: Water
Analysis Batch: 573357

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			04/28/22 14:27	1

Lab Sample ID: LCS 280-573357/3
Matrix: Water
Analysis Batch: 573357

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: 280-161414-6 MS
Matrix: Water
Analysis Batch: 573357

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
Total Organic Carbon - Average	1.7		25.0	26.9		mg/L		101	88 - 112

Lab Sample ID: 280-161414-6 MSD
Matrix: Water
Analysis Batch: 573357

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
Total Organic Carbon - Average	1.7		25.0	26.7		mg/L		100	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				meq/L			05/10/22 12:14	1
Potassium	0.000				meq/L			05/10/22 12:14	1
Sodium	0.000				meq/L			05/10/22 12:14	1

Method: SM 1030E (meq) - Cation Anion Balance (Continued)

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.000				meq/L			05/10/22 12:14	1
Chloride	0.000				meq/L			05/10/22 12:14	1
Sulfate	0.000				meq/L			05/10/22 12:14	1
Alkalinity	0.000				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				meq/L			05/10/22 12:14	1
Iron	0.000				meq/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573241/58
Matrix: Water
Analysis Batch: 573241

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			04/27/22 16:57	1

Lab Sample ID: MB 280-573241/6
Matrix: Water
Analysis Batch: 573241

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			04/27/22 10:51	1

Lab Sample ID: MB 280-573241/84
Matrix: Water
Analysis Batch: 573241

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			04/27/22 20:23	1

Lab Sample ID: 280-161362-A-4 DU
Matrix: Water
Analysis Batch: 573241

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	390			389		mg/L				0.3	20

Lab Sample ID: MB 280-573361/32
Matrix: Water
Analysis Batch: 573361

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			04/28/22 16:58	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-573361/58
Matrix: Water
Analysis Batch: 573361

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			04/28/22 20:24	1

Lab Sample ID: 280-161414-8 DU
Matrix: Water
Analysis Batch: 573361

Client Sample ID: MW-16B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	350			353		mg/L				2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-572980/1
Matrix: Water
Analysis Batch: 572980

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			04/26/22 07:45	1

Lab Sample ID: LCS 280-572980/2
Matrix: Water
Analysis Batch: 572980

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			505	506		mg/L		100	88 - 114		

Lab Sample ID: LCSD 280-572980/3
Matrix: Water
Analysis Batch: 572980

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			505	494		mg/L		98	88 - 114	2	20

Lab Sample ID: 280-161414-8 DU
Matrix: Water
Analysis Batch: 572980

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	580			581		mg/L				0.2	10

Lab Sample ID: MB 280-573020/1
Matrix: Water
Analysis Batch: 573020

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			04/26/22 10:38	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-573020/2
Matrix: Water
Analysis Batch: 573020

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			502	490		mg/L		98	88 - 114		

Lab Sample ID: 280-161314-A-4 DU
Matrix: Water
Analysis Batch: 573020

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	1100			1050		mg/L				1	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

GC/MS VOA

Analysis Batch: 573474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-1	TRIP BLANK	Total/NA	Water	8260B	
280-161414-4	MW-15A	Total/NA	Water	8260B	
280-161414-6	MW-16A	Total/NA	Water	8260B	
280-161414-7	DUP1	Total/NA	Water	8260B	
280-161414-8	MW-16B	Total/NA	Water	8260B	
MB 280-573474/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573474/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573474/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-161623-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
280-161623-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 573636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-4 - RA	MW-15A	Total/NA	Water	8260B	
280-161414-6 - RA	MW-16A	Total/NA	Water	8260B	
280-161414-7 - RA	DUP1	Total/NA	Water	8260B	
280-161414-8 - RA	MW-16B	Total/NA	Water	8260B	
MB 280-573636/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573636/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573636/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 573649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-5	MW-15B	Total/NA	Water	8260B	
MB 280-573649/9	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 573782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	8260B	
280-161414-3	MW-12B	Total/NA	Water	8260B	
280-161414-9	MW-21A	Total/NA	Water	8260B	
MB 280-573782/10	Method Blank	Total/NA	Water	8260B	
LCS 280-573782/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573782/6	Lab Control Sample Dup	Total/NA	Water	8260B	
280-161669-A-17 MS	Matrix Spike	Total/NA	Water	8260B	
280-161669-B-17 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 573629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-1	TRIP BLANK	Total/NA	Water	8011	
280-161414-2	MW-12A	Total/NA	Water	8011	
280-161414-3	MW-12B	Total/NA	Water	8011	
280-161414-4	MW-15A	Total/NA	Water	8011	
280-161414-5	MW-15B	Total/NA	Water	8011	
280-161414-6	MW-16A	Total/NA	Water	8011	
280-161414-7	DUP1	Total/NA	Water	8011	
280-161414-8	MW-16B	Total/NA	Water	8011	
280-161414-9	MW-21A	Total/NA	Water	8011	
MB 280-573629/1-A	Method Blank	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 573629 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-573629/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-573629/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 573632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-1	TRIP BLANK	Total/NA	Water	8011	573629
280-161414-2	MW-12A	Total/NA	Water	8011	573629
280-161414-3	MW-12B	Total/NA	Water	8011	573629
280-161414-4	MW-15A	Total/NA	Water	8011	573629
280-161414-5	MW-15B	Total/NA	Water	8011	573629
280-161414-6	MW-16A	Total/NA	Water	8011	573629
280-161414-7	DUP1	Total/NA	Water	8011	573629
280-161414-8	MW-16B	Total/NA	Water	8011	573629
280-161414-9	MW-21A	Total/NA	Water	8011	573629
MB 280-573629/1-A	Method Blank	Total/NA	Water	8011	573629
LCS 280-573629/2-A	Lab Control Sample	Total/NA	Water	8011	573629
LCSD 280-573629/3-A	Lab Control Sample Dup	Total/NA	Water	8011	573629

Metals

Prep Batch: 573695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Dissolved	Water	3005A	
280-161414-3	MW-12B	Dissolved	Water	3005A	
280-161414-4	MW-15A	Dissolved	Water	3005A	
280-161414-5	MW-15B	Dissolved	Water	3005A	
280-161414-6	MW-16A	Dissolved	Water	3005A	
280-161414-7	DUP1	Dissolved	Water	3005A	
280-161414-8	MW-16B	Dissolved	Water	3005A	
280-161414-9	MW-21A	Dissolved	Water	3005A	
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 574000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Dissolved	Water	6010B	573695
280-161414-3	MW-12B	Dissolved	Water	6010B	573695
280-161414-4	MW-15A	Dissolved	Water	6010B	573695
280-161414-5	MW-15B	Dissolved	Water	6010B	573695
280-161414-6	MW-16A	Dissolved	Water	6010B	573695
280-161414-7	DUP1	Dissolved	Water	6010B	573695
280-161414-8	MW-16B	Dissolved	Water	6010B	573695
280-161414-9	MW-21A	Dissolved	Water	6010B	573695
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	6010B	573695
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573695
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	6010B	573695
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573695

General Chemistry

Analysis Batch: 572980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-4	MW-15A	Total/NA	Water	SM 2540C	
280-161414-6	MW-16A	Total/NA	Water	SM 2540C	
280-161414-7	DUP1	Total/NA	Water	SM 2540C	
280-161414-8	MW-16B	Total/NA	Water	SM 2540C	
MB 280-572980/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-572980/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-572980/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-161414-8 DU	MW-16B	Total/NA	Water	SM 2540C	

Analysis Batch: 573020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	SM 2540C	
280-161414-3	MW-12B	Total/NA	Water	SM 2540C	
280-161414-5	MW-15B	Total/NA	Water	SM 2540C	
280-161414-9	MW-21A	Total/NA	Water	SM 2540C	
MB 280-573020/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573020/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161314-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	SM 2320B	
280-161414-3	MW-12B	Total/NA	Water	SM 2320B	
280-161414-4	MW-15A	Total/NA	Water	SM 2320B	
MB 280-573241/58	Method Blank	Total/NA	Water	SM 2320B	
MB 280-573241/6	Method Blank	Total/NA	Water	SM 2320B	
MB 280-573241/84	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573241/83	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-573241/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-161362-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	9060	
280-161414-3	MW-12B	Total/NA	Water	9060	
280-161414-4	MW-15A	Total/NA	Water	9060	
280-161414-5	MW-15B	Total/NA	Water	9060	
280-161414-6	MW-16A	Total/NA	Water	9060	
280-161414-7	DUP1	Total/NA	Water	9060	
280-161414-8	MW-16B	Total/NA	Water	9060	
280-161414-9	MW-21A	Total/NA	Water	9060	
MB 280-573357/4	Method Blank	Total/NA	Water	9060	
LCS 280-573357/3	Lab Control Sample	Total/NA	Water	9060	
280-161414-6 MS	MW-16A	Total/NA	Water	9060	
280-161414-6 MSD	MW-16A	Total/NA	Water	9060	

Analysis Batch: 573361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-5	MW-15B	Total/NA	Water	SM 2320B	
280-161414-6	MW-16A	Total/NA	Water	SM 2320B	
280-161414-7	DUP1	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 573361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-8	MW-16B	Total/NA	Water	SM 2320B	
280-161414-9	MW-21A	Total/NA	Water	SM 2320B	
MB 280-573361/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-573361/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573361/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-573361/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161414-8 DU	MW-16B	Total/NA	Water	SM 2320B	

Analysis Batch: 573635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-5	MW-15B	Total/NA	Water	353.2	
280-161414-6	MW-16A	Total/NA	Water	353.2	
280-161414-7	DUP1	Total/NA	Water	353.2	
280-161414-8	MW-16B	Total/NA	Water	353.2	
280-161414-9	MW-21A	Total/NA	Water	353.2	
MB 280-573635/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573635/21	Lab Control Sample	Total/NA	Water	353.2	
280-161333-D-18 MS	Matrix Spike	Total/NA	Water	353.2	
280-161333-D-18 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	353.2	
280-161414-3	MW-12B	Total/NA	Water	353.2	
280-161414-4	MW-15A	Total/NA	Water	353.2	
MB 280-573773/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/21	Lab Control Sample	Total/NA	Water	353.2	
280-161382-D-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-161382-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 574030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	350.1	
280-161414-3	MW-12B	Total/NA	Water	350.1	
280-161414-4	MW-15A	Total/NA	Water	350.1	
280-161414-5	MW-15B	Total/NA	Water	350.1	
280-161414-6	MW-16A	Total/NA	Water	350.1	
280-161414-7	DUP1	Total/NA	Water	350.1	
280-161414-8	MW-16B	Total/NA	Water	350.1	
280-161414-9	MW-21A	Total/NA	Water	350.1	
MB 280-574030/106	Method Blank	Total/NA	Water	350.1	
LCS 280-574030/104	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-574030/105	Lab Control Sample Dup	Total/NA	Water	350.1	
280-161414-2 MS	MW-12A	Total/NA	Water	350.1	
280-161414-2 MSD	MW-12A	Total/NA	Water	350.1	

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	SM 1030E	
280-161414-2	MW-12A	Total/NA	Water	SM 1030E (meq)	
280-161414-3	MW-12B	Total/NA	Water	SM 1030E	

General Chemistry (Continued)

Analysis Batch: 574431 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-3	MW-12B	Total/NA	Water	SM 1030E (meq)	
280-161414-4	MW-15A	Total/NA	Water	SM 1030E	
280-161414-4	MW-15A	Total/NA	Water	SM 1030E (meq)	
280-161414-5	MW-15B	Total/NA	Water	SM 1030E	
280-161414-5	MW-15B	Total/NA	Water	SM 1030E (meq)	
280-161414-6	MW-16A	Total/NA	Water	SM 1030E	
280-161414-6	MW-16A	Total/NA	Water	SM 1030E (meq)	
280-161414-7	DUP1	Total/NA	Water	SM 1030E	
280-161414-7	DUP1	Total/NA	Water	SM 1030E (meq)	
280-161414-8	MW-16B	Total/NA	Water	SM 1030E	
280-161414-8	MW-16B	Total/NA	Water	SM 1030E (meq)	
280-161414-9	MW-21A	Total/NA	Water	SM 1030E	
280-161414-9	MW-21A	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 624944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	300.0	
280-161414-3	MW-12B	Total/NA	Water	300.0	
280-161414-4	MW-15A	Total/NA	Water	300.0	
280-161414-5	MW-15B	Total/NA	Water	300.0	
MB 480-624944/28	Method Blank	Total/NA	Water	300.0	
LCS 480-624944/29	Lab Control Sample	Total/NA	Water	300.0	
280-161414-5 MS	MW-15B	Total/NA	Water	300.0	
480-197460-G-1 MS	Matrix Spike	Total/NA	Water	300.0	
480-197460-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-6	MW-16A	Total/NA	Water	300.0	
280-161414-7	DUP1	Total/NA	Water	300.0	
280-161414-8	MW-16B	Total/NA	Water	300.0	
280-161414-9	MW-21A	Total/NA	Water	300.0	
MB 480-625182/4	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/5	Lab Control Sample	Total/NA	Water	300.0	
280-161417-D-4 MS	Matrix Spike	Total/NA	Water	300.0	
620-4251-Q-6 MS	Matrix Spike	Total/NA	Water	300.0	
620-4251-Q-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 573210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161414-2	MW-12A	Total/NA	Water	Field Sampling	
280-161414-3	MW-12B	Total/NA	Water	Field Sampling	
280-161414-4	MW-15A	Total/NA	Water	Field Sampling	
280-161414-5	MW-15B	Total/NA	Water	Field Sampling	
280-161414-6	MW-16A	Total/NA	Water	Field Sampling	
280-161414-7	DUP1	Total/NA	Water	Field Sampling	
280-161414-8	MW-16B	Total/NA	Water	Field Sampling	
280-161414-9	MW-21A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161414-1

Client Sample ID: TRIP BLANK

Date Collected: 04/19/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-1

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	573474	04/30/22 14:04	CKL	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 09:12	KSA	TAL DEN

Client Sample ID: MW-12A

Date Collected: 04/21/22 14:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-2

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	573782	05/04/22 10:51	TAW	TAL DEN
Total/NA	Prep	8011			35.2 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 09:36	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:00	LMT	TAL DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 07:13	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 13:35	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:46	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 17:12	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573241	04/27/22 22:30	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573020	04/26/22 11:39	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/21/22 15:30	TJ	TAL DEN

Client Sample ID: MW-12B

Date Collected: 04/21/22 13:40
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161414-3

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	573782	05/04/22 11:13	TAW	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 10:00	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:04	LMT	TAL DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 07:31	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 13:53	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:48	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 17:57	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573241	04/27/22 22:36	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573020	04/26/22 11:39	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/21/22 14:40	TJ	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161414-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-15A
Lab Sample ID: 280-161414-4
Date Collected: 04/19/22 14:45
Matrix: Water
Date Received: 04/22/22 11:00

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	573474	04/30/22 14:26	CKL	TAL DEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	573636	05/03/22 03:31	SGB	TAL DEN
Total/NA	Prep	8011			34.7 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 10:24	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:08	LMT	TAL DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 07:50	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 13:55	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:50	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 18:16	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573241	04/27/22 22:41	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 15:45	TJ	TAL DEN

Client Sample ID: MW-15B
Lab Sample ID: 280-161414-5
Date Collected: 04/20/22 11:35
Matrix: Water
Date Received: 04/22/22 11:00

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	573649	05/03/22 15:23	TAW	TAL DEN
Total/NA	Prep	8011			35.1 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 10:48	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:29	LMT	TAL DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 08:08	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 13:57	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:10	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 18:30	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 19:46	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573020	04/26/22 11:39	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/20/22 12:35	TJ	TAL DEN

Client Sample ID: MW-16A
Lab Sample ID: 280-161414-6
Date Collected: 04/19/22 12:40
Matrix: Water
Date Received: 04/22/22 11:00

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	573474	04/30/22 14:48	CKL	TAL DEN

Client Sample ID: MW-16A

Lab Sample ID: 280-161414-6

Date Collected: 04/19/22 12:40

Matrix: Water

Date Received: 04/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	573636	05/03/22 03:52	SGB	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 11:12	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:33	LMT	TAL DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 19:07	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 13:59	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:12	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 18:48	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 19:52	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 13:40	TJ	TAL DEN

Client Sample ID: DUP1

Lab Sample ID: 280-161414-7

Date Collected: 04/19/22 12:45

Matrix: Water

Date Received: 04/22/22 11:00

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	573474	04/30/22 15:10	CKL	TAL DEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	573636	05/03/22 04:13	SGB	TAL DEN
Total/NA	Prep	8011			35 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 11:36	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:37	LMT	TAL DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 19:26	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:01	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:14	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 19:33	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 19:58	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 13:45	TJ	TAL DEN

Client Sample ID: MW-16B

Lab Sample ID: 280-161414-8

Date Collected: 04/19/22 14:10

Matrix: Water

Date Received: 04/22/22 11:00

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	573474	04/30/22 15:32	CKL	TAL DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161414-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-16B
Lab Sample ID: 280-161414-8
Date Collected: 04/19/22 14:10
Matrix: Water
Date Received: 04/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	573636	05/03/22 04:35	SGB	TAL DEN
Total/NA	Prep	8011			34.9 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 12:00	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:42	LMT	TAL DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 19:46	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:03	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:16	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 19:53	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 20:31	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 15:10	TJ	TAL DEN

Client Sample ID: MW-21A
Lab Sample ID: 280-161414-9
Date Collected: 04/21/22 12:15
Matrix: Water
Date Received: 04/22/22 11:00

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	573782	05/04/22 11:34	TAW	TAL DEN
Total/NA	Prep	8011			35.3 mL	35 mL	573629	05/02/22 18:00	KSA	TAL DEN
Total/NA	Analysis	8011		1			573632	05/03/22 12:24	KSA	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	TAL DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:46	LMT	TAL DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 20:05	IMZ	TAL BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:05	JJM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:30	SVC	TAL DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 20:09	ABW	TAL DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	TAL DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 20:45	KEG	TAL DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573020	04/26/22 11:39	LRB	TAL DEN
Total/NA	Analysis	Field Sampling		1			573210	04/21/22 13:15	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

eurofins | Environment Testing TestAmerica

Client Information	Sampler: I. Hultgren	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

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	4/19/22	0700	G	W						X	X			8	
MW-12A	4/21/22	1430	G	W	X		X	X	X	X	X	X	X	11	
MW-12B	4/21/22	1340	G	W	X		X	X	X	X	X	X	X	11	
MW-15A	4/19/22	1445	G	W	X		X	X	X	X	X	X	X	11	
MW-15B	4/20/22 ~~4/19/22~~	1135	G	W	X		X	X	X	X	X	X	X	11	
MW-16A	4/19/22	1240	G	W	X		X	X	X	X	X	X	X	11	
DUP1	4/19/22	1245	G	W	X		X	X	X	X	X	X	X	11	
MW-16B	4/19/22	1410	G	W	X		X	X	X	X	X	X	X	11	
MW-21A	4/21/22	1215	G	W	X		X	X	X	X	X	X	X	11	

280-161414 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:

	Date/Time	Company		Date/Time	Company
Relinquished by:	4/21/22 @ 1630	SCS	Received by:	4/25/2022	
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: 7.4 75.) 4.3 73.) 2R 1D 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:** ~~MW-12~~ BR-12A 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)
4/12/22	13 : 04	27 . 60	.	8 . 65	.	18 . 95	X 1	3 . 08
/ /	:	.	.	.	.		X 3	9 . 25

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	4/12/22	14 : 30	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/12/22	14 : 30	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/12/22	14 : 30	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/12/22	14 : 30	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/12/22	14 : 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: : 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	1309 F	0.00	5.36	65.1	421.7	9 . 8	9.01	~~13~~ 10.01	C/C
1	1332 F	3 . 1	5.87	170.5	442.2	9 . 7	~~9.40~~	6 . 74	C/C DTW 9.40
2	1358 F	6 . 35	5.91	182.0	440.6	9 . 4	9.50	2 . 25	C/C
3	1418 F	9 . 30	5.89	196.4	440.6	9 . 3	9.40	3 . 56	C/C
4	1420 F	9 . 45	5.90	196.3	440.4	9 . 3	9.40	3 . 17	C/C
5	1422 F	9 . 60	5.88	196.3	440.4	9 . 2	9.39	3 . 16	C/C
6	1424 F	9 . 75	5.91	196.2	440.3	9 . 4	9.39	3 . 20	C/C

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

Standard Purge (20/10/20 psi) ~500mL/min

Brandon Raposo
(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 55 .	°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]
4/21/22	13:00	14.27	.	14.6	.	31.6	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	4/21/22	13:40	F	3	40 ml	HCl	(YES)	NO		
VOA Glass	4/21/22	13:40	F	3	40 ml	$Na_2S_2O_3$	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	13:40	F	2	250, 500, 1L	(None)	(YES)	NO	NA	
Yellow Glass	4/21/22	13:40	F	2	250, 500, 1L	H_2SO_4	(YES)	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	13:40	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) (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: 13:01 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(1302)	0.00	6.45	245.2	567.1	10.1	14.6	5.18	C/C tan
1	F(1312)	0.5	6.47	229.6	562.9	10.1	14.6	4.97	C/C
2	F(1314)	0.75	7.05	2.3	596.6	10.7	14.6	3.23	C/C
3	F(1316)	0.85	7.07	-10.7	593.7	10.6	14.6	3.21	C/C
4	F(1318)	0.95	7.02	-23.0	598.1	10.7	14.6	3.24	C/C
5	F(1320)	1.10	7.06	-37.7	594.7	10.7	14.6	3.20	C/C
6	F(1322)	1.20	7.06	-44.1	594.9	10.7	14.6	3.22	C/C

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

C/C = clear / colorless

low flow 20/10/20 psi ~ 200 mL/min

SAMPLER: EDAN T (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:**	(°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)
4/19/22	13:20	24.00	.	8.79	.	15.21	X 1	2.42
/ /	:	.	.	.	.		X 3	7.43

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	4/19/22	14:45	F	3 (40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/19/22	14:45	F	3 (40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	14:45	F	2 (250, 500) mL	(None)	YES	NO	NA	✓
Yellow Glass	4/19/22	14:45	F	2 (250), 500, 1L	(H_2SO_4)	YES	NO		✓
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	14:45	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	(1340)F	0.00	5.74	172.6	159.6	12.50	9.45	8.83	BRIEF Cloudy/tan
1	(1357)F	2.50	6.24	169.3	185.4	12.10	15.02	5.12	Clearing, light tan
2	(1417)F	5.00	6.27	171.0	183.6	12.1	15.58	4.10	clearing / light tan
3	(1434)F	27.50	6.15	174.8	152.6	12.1	17.12	4.65	Turbid, tan
4	(1438)F	7.75	6.15	175.6	151.6	12.2	17.26	7.37	tan, cloudy
5	(1438)F	8.00	6.16	176.0	150.8	12.2	17.40	7.86	tan, cloudy
6	(1440)F	8.25	6.15	177.2	149.8	12.3	17.53	7.11	cloudy

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

500 mL/min

Standard purge (20/10/20psi) ~ ~~800~~ 1L

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-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:**	(052.0) °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)
4/20/22	~~45.95~~ 110.1 IH	45.95	.	15.26	.	-	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	4/20/22	11:35	F	3 (40 ml)	(HCl)	~~YES~~	~~NO~~		✓
VOA Glass	4/20/22	11:35	F	3 (40 ml)	~~$Na_2S_2O_3$~~	(YES)	~~NO~~		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/20/22	11:35	F	2 (250) 500 1L	(None)	(YES)	~~NO~~	NA	✓
Yellow Glass	4/20/22	11:35	F	2 (250), 500, 1L	~~H_2SO_4~~	~~YES~~	~~NO~~		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	11:35	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: : 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(1104)	0.00	6.60	85.9	676	11.20	15.45	3.64	Light tan, clear
1	F(1111)	0.5	6.70	56.4	491.7	12.2	15.50	0.95	clear, colorless
2	F(1115)	0.75	6.72	44.9	496.2	12.1	15.51	0.79	clear/colorless
3	F(1117)	0.85	6.72	37.9	502.1	12.1	15.46	0.82	clear/colorless
4	F(1119)	0.95	6.72	35.4	515.1	12.1	15.48	0.80	clear/colorless
5	F(1121)	1.05	6.72	30.7	520.1	12.1	15.56	0.79	clear/colorless
6	F(1123)	1.15	6.72	29.6	527.6	12.1	15.54	0.78	clear/colorless

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

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

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

FIELD SAMPLING DATA SHEET

2 of 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-15B~~ MW-15B 1st
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)
4/20/22	11:01	45.95	.	15.26	.	—	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	4/20/22	11:35	F	3	40 ml HCl	YES	NO		✓
VOA Glass	4/20/22	11:35	F	3	40 ml $Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/20/22	11:35	F	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	4/20/22	11:35	F	2	250, 500, 1L H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/20/22	11:35	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: : 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(1125)	1.25 ~~0.00~~	6.72	24.1	532.9	12.2	15.55	0.78	clear, colorless
1	F(1127)	1.35	6.73	23.6	535.6	12.2	15.47	0.77	clear/colorless
2	F(1129)	1.45	6.73	22.7	536.0	12.2	15.53	0.72	clear/colorless
3	F(1131)	1.65	6.73	18.2	536.2	12.2	15.53	0.71	clear/colorless
4	F(1133)	1.75	6.73	16.7	536.8	12.2	15.53	0.71	clear/colorless
5		.	.			.	.	.	
6			.			.	.	.	

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

Low flow purge method (20/10/10psi) ~400ml/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-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) 43 . °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)
4/19/22	11:38	25.00	.	14.90	.	10.10	X 1	1.64
/ /	:	.	.	.	.		X 3	4.93

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	4/19/22	12:49	f3 → 3	40 ml	~~HCl~~	~~YES~~ X	~~NO~~		✓
VOA Glass	4/19/22	12:49	f3 → 3	40 ml	$Na_2S_2O_3$	~~YES~~	~~NO~~		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	12:49	f2 → 2	~~250~~, 500, 1L	~~None~~	~~YES~~	~~NO~~	NA	✓
Yellow Glass	4/19/22	12:49	f2 → 2	~~250~~, 500, 1L	~~H_2SO_4~~	~~YES~~	~~NO~~		✓
Red Total Poly	/ /	:		125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12:49	f1 → 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: : 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(1152)	0.00	6.27	84.3	323.1	12.0	14.91	9.96	C/C
1	f(1208)	1.5	6.21	103.6	333.7	11.9	15.06	9.86	tan / cloudy
2	f(1215)	3.0	6.18	111.3	335.0	11.9	17.02	9.41	tan / clear
3	f(1220)	5.0	6.16	115.8	329.6	11.9	17.81	9.42	clear / colorless
4	f(1228)	5.2	6.18	117.0	327.9	12.0	18.69	9.50	C/C
5	f(1230)	5.5	6.18	118.0	327.4	12.0	18.72	9.47	C/C
6	f(1232)	5.8	6.18	117.9	326.8	12.0	18.72	9.42	C/C

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

standard purge 20/10/20 psi 400 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:** Dup 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) 45 .	°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	4/19/22	12:45	F	3	(40 ml)	HCl	(YES)	(NO)		√
VOA Glass	4/19/22	12:45	F	3	(40 ml)	$Na_2S_2O_3$	(YES)	(NO)		√
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	12:45	F	2	250, 500 (1L)	None	~~YES~~	~~NO~~	NA	√
Yellow Glass	4/19/22	12:45	F	1	~~250~~, 500, 1L	H_2SO_4	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12:45	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 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)
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 (1245)	0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected at MW-16A

SAMPLER: EDAN TAYLOR (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 . ° 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)
4/19/22	13:30	46.90	.	15.10	~~31.90~~	31.90	X 1	~~5.23~~
/ /	:	.	.	.	.		X 3	~~15~~ .

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	4/19/22	14:10	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/19/22	14:10	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	14:10	F	2	(250, 500, 1L)	(None)	(YES)	NO	NA	
Yellow Glass	4/19/22	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	4/19/22	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) (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	F(1338)	0.00	6.68	51.1	1160	12.0	15.10	1.23	C/G
1	F(1346)	0.75	6.78	20.4	1144	12.1	15.10	0.97	C/G
2	F(1348)	0.95	6.81	6.0	1139	12.0	15.10	3.14	tan/clear
3	F(1350)	1.15	6.82	-0.6	1137	12.0	15.10	0.71	C/C
4	F(1352)	1.35	6.82	-5.6	1136	12.0	15.10	0.74	C/C
5	F(1354)	1.55	6.82	-8.4	1135	12.0	15.10	0.74	C/C
6	F(1356)	1.75	6.82	-10.3	1135	12.0	15.10	0.71	C/C

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

Low flow 20/10/30 psi 400 mL/min

SAMPLER: EDAN TAYLOR (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) 53.	°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)
4/21/22	11:31	15.42	.	7.41	.	8.01	X 1	1.30
/ /	:	.	.	.	.		X 3	3.90

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	4/21/22	12:15	F	3	~~40 ml~~ (HCl)	(YES) ~~NO~~	~~YES~~ (NO)		✓
VOA Glass	4/21/22	12:15	F	3	~~40 ml~~ $Na_2S_2O_3$	(YES) ~~NO~~	~~YES~~ (NO)		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	12:15	F	2	~~250~~, 500, ~~1L~~	None	YES	NO	NA	
Yellow Glass	4/21/22	12:15	F	2	250, ~~500~~, 1L	~~H_2SO_4~~	~~YES~~	~~NO~~		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	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 — 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) (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	F(1132)	0.00	6.16	230.6	304.0	11.7	7.41	2.14	C/C
1	F(1138)	1.00	6.14	229.7	315.0	11.7	8.20	1.23	C/C
2	F(1144)	2.20	6.15	228.2	316.6	11.6	8.28	0.96	C/C
3	F(1202)	3.30	6.13	225.6	317.0	11.6	8.28	0.94	C/C
4	F(1208)	4.10	6.12	225.7	316.6	11.6	8.28	0.92	C/C
5	F(1214)	4.40	6.12	225.4	317.0	11.6	8.28	0.94	C/C
6	F(1220)	4.65	6.12	225.3	316.5	11.6	8.28	0.91	C/C

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

Standard Purge method (10/5/25 psi) ~ 600 mL/min

C/C = clear and colorless

SAMPLER: EDAN TAYLOR
(PRINTED NAME) (SIGNATURE)

FedEx

Do not lift using this tag.

ORIGIN ID:PDXA

SHIP DATE: 21APR22
ACTWGT: 54.85 LB
CAD: YSSFE2300
DIMS: 24x14x14 IN

TO SAMPLE RECEVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST

ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:
DEPT:

(US)

FedEx Express

J221022010502uv

TRK# 0667 8165 7649 6728

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

XA LAAA

AHS
80002
CO–US DEN

RT 640 4 10:30 C
FZ 6739 04.22

Part # 1562974-00 REV 03 EXP 03/23

eurofins | Environment Testing TestAmerica

1984158

FedEx Express

J221022010502uv

TRK# 0667 8165 7649 6739

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

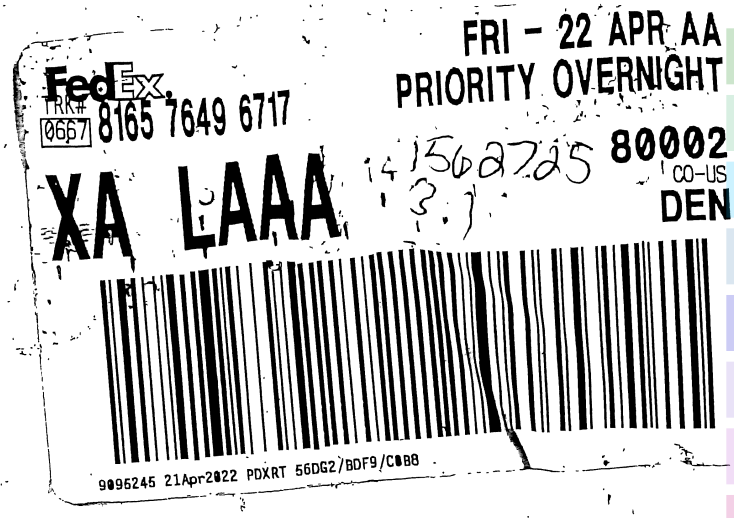
XA LAAA

AHS
80002
CO–US DEN

280-161414 Waybill

SAMPLE RECEIVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST
ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:
ofins
Environment Test
TestAmerica
1773606
(US)
FedEx
Express
FRI – 22 APR 10:30A
TRK# 8165 7649 6691
667
PRIORITY OVERNIGHT
AHS
80002
CO–US
DEN
4.3

280-161414 Waybill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0667
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80002
CO-US
XA LAAA
DEN
9096245 21Apr2022 PDXRT 56DG2/BDF9/C8B8

ORIGIN ID:PDXA
SHIP DATE: 21APR22
ACTWGT: 52.00 LB
CAD: 7SSFE2300
DIMS: 24x14x14 IN
TO SAMPLE RECEIVING
EUROFINS TESTAMERICA - DENVER
4955 YARROW ST
ARVADA CO 800
(US)
(303) 736-0100
INV:
PO:
Eurofins
Environment Testing
TestAmerica
1562723
FedEx
Express
FRI - 22 APR 10:30A
PRIORITY OVERNIGHT
TRK# 0667 8165 7649 6706
AHS
80002
CO-US DEN
XA LAAA

7-4

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-612040.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161414-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/12/2022			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 28002786			
Project Name: 1003|Riverbend Landfill SCS Engineers	SSOW#:			
Site: 1003|Riverbend Landfill				

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 (280-161414-2)	4/21/22	14:30 Pacific		Water			X	1	
MW-12B (280-161414-3)	4/21/22	13:40 Pacific		Water			X	1	
MW-15A (280-161414-4)	4/19/22	14:45 Pacific		Water			X	1	
MW-15B (280-161414-5)	4/20/22	11:35 Pacific		Water			X	1	
MW-16A (280-161414-6)	4/19/22	12:40 Pacific		Water			X	1	
DUP1 (280-161414-7)	4/19/22	12:45 Pacific		Water			X	1	
MW-16B (280-161414-8)	4/19/22	14:10 Pacific		Water			X	1	
MW-21A (280-161414-9)	4/21/22	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: 4/26/22 1530	Company: EAEN	Received by:		Date/Time: 4/28/22 1000	Company: EA	
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: 4.7 #1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161414-1

Login Number: 161414
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.	False	Refer to job narrative for details
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.	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: 280-161414-1

Login Number: 161414
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:45 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	4.7 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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Compliance Wells - Apr Oct

JOB NUMBER

280-161449-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

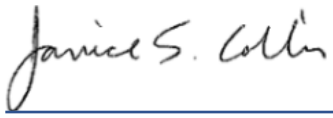
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-161449-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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.

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: 280-161449-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161449-1

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 04/23/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 1.1°C and 2.7°.

Two of three sodium thiosulfate vials for the sample MW-14B was received broken. Sufficient volume remained to proceed with the analysis.

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 (Batch 573931) 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 multiple spike compounds Method 8260B. In addition, the RPD was outside of the RPD limits for multiple spike compounds 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

Job ID: 280-161449-1 (Continued)

Laboratory: Eurofins 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
Job ID: 280-161449-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB3 — Lab Sample ID: 280-161449-1

No Detections.

Client Sample ID: MW-14A — Lab Sample ID: 280-161449-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved
Manganese	14		3.0		ug/L	1		6010B	Dissolved
Sodium	9300		1000		ug/L	1		6010B	Dissolved
Chloride	7.5		0.50		mg/L	1		300.0	Total/NA
Sulfate	15		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.066		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	3.1				meq/L	1		SM 1030E	Total/NA
Total Cations	2.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.1				%	1		SM 1030E	Total/NA
Calcium	31				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	9.3				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	7.5				mg/L	1		SM 1030E	Total/NA
Sulfate	15				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	0.066				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.1				%	1		SM 1030E	Total/NA
Calculated TDS	140				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				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	1.5				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	0.40				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.21				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.31				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	0.0047				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	170		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.02				SU	1		Field Sampling	Total/NA
Field Conductivity	325.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.2				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.40				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	96.3				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 SCS Engineers

Job ID: 280-161449-1

Client Sample ID: MW-14B

Lab Sample ID: 280-161449-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	47000		500		ug/L	1		6010B	Dissolved
Iron	1600		30		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Manganese	1300		3.0		ug/L	1		6010B	Dissolved
Sodium	35000		1000		ug/L	1		6010B	Dissolved
Chloride	31		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.7		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.26		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	5.3				meq/L	1		SM 1030E	Total/NA
Total Cations	5.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-2.1				%	1		SM 1030E	Total/NA
Calcium	47				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	35				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.26				mg/L	1		SM 1030E	Total/NA
Chloride	31				mg/L	1		SM 1030E	Total/NA
Sulfate	3.7				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	-2.1				%	1		SM 1030E	Total/NA
Calculated TDS	260				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	290				mg/L	1		SM 1030E	Total/NA
Iron	1.6				mg/L	1		SM 1030E	Total/NA
Calcium	2.3				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	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.019				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.87				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.077				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	0.086				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	290		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.22				SU	1		Field Sampling	Total/NA
Field Conductivity	543.5				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.80				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-16.3				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 SCS Engineers

Job ID: 280-161449-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161449-1	TB3	Water	04/22/22 07:00	04/23/22 11:25
280-161449-2	MW-14A	Water	04/22/22 12:00	04/23/22 11:25
280-161449-3	MW-14B	Water	04/22/22 12:45	04/23/22 11:25

Method Summary

Client: Waste Management
Job ID: 280-161449-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

Client Sample ID: TB3
Date Collected: 04/22/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-1
Matrix: Water

Method: SW846 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			05/05/22 09:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 09:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 09:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 09:29	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 09:29	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 09:29	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 09:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 09:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 09:29	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 09:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 09:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 09:29	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 09:29	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 09:29	1
2-Hexanone	ND		5.0		ug/L			05/05/22 09:29	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 09:29	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 09:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 09:29	1
Acetone	ND		10		ug/L			05/05/22 09:29	1
Benzene	ND		1.0		ug/L			05/05/22 09:29	1
Bromobenzene	ND		1.0		ug/L			05/05/22 09:29	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 09:29	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 09:29	1
Bromoform	ND		1.0		ug/L			05/05/22 09:29	1
Bromomethane	ND		2.0		ug/L			05/05/22 09:29	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 09:29	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 09:29	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 09:29	1
Chloroethane	ND		2.0		ug/L			05/05/22 09:29	1
Chloroform	ND		1.0		ug/L			05/05/22 09:29	1
Chloromethane	ND		2.0		ug/L			05/05/22 09:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 09:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 09:29	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 09:29	1
Dibromomethane	ND		1.0		ug/L			05/05/22 09:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 09:29	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 09:29	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 09:29	1
Naphthalene	ND		1.0		ug/L			05/05/22 09:29	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 09:29	1

Client Sample ID: TB3

Lab Sample ID: 280-161449-1

Date Collected: 04/22/22 07:00

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 09:29	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
Styrene	ND		1.0		ug/L			05/05/22 09:29	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 09:29	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 09:29	1
Toluene	ND		1.0		ug/L			05/05/22 09:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 09:29	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 09:29	1
Trichloroethene	ND		1.0		ug/L			05/05/22 09:29	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 09:29	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 09:29	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 09:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 09:29*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/05/22 09:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/05/22 09:29*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/05/22 09:29*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*05/05/22 09:29*	*1*

Method: SW846 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		05/06/22 17:04	05/07/22 03:37	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*101*		*70 - 130*	*05/06/22 17:04*	*05/07/22 03:37*	*1*

Client Sample ID: MW-14A

Lab Sample ID: 280-161449-2

Date Collected: 04/22/22 12:00

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 13:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 13:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 13:52	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 13:52	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 13:52	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 13:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 13:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:52	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 13:52	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 13:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:52	1

Client Sample ID: MW-14A
Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-2
Matrix: Water

Method: SW846 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			05/05/22 13:52	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 13:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:52	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 13:52	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 13:52	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 13:52	1
2-Hexanone	ND		5.0		ug/L			05/05/22 13:52	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 13:52	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 13:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 13:52	1
Acetone	ND		10		ug/L			05/05/22 13:52	1
Benzene	ND		1.0		ug/L			05/05/22 13:52	1
Bromobenzene	ND		1.0		ug/L			05/05/22 13:52	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 13:52	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 13:52	1
Bromoform	ND		1.0		ug/L			05/05/22 13:52	1
Bromomethane	ND		2.0		ug/L			05/05/22 13:52	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 13:52	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 13:52	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 13:52	1
Chloroethane	ND		2.0		ug/L			05/05/22 13:52	1
Chloroform	ND		1.0		ug/L			05/05/22 13:52	1
Chloromethane	ND		2.0		ug/L			05/05/22 13:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 13:52	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 13:52	1
Dibromomethane	ND		1.0		ug/L			05/05/22 13:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 13:52	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 13:52	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 13:52	1
Naphthalene	ND		1.0		ug/L			05/05/22 13:52	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
Styrene	ND		1.0		ug/L			05/05/22 13:52	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 13:52	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 13:52	1
Toluene	ND		1.0		ug/L			05/05/22 13:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 13:52	1
Trichloroethene	ND		1.0		ug/L			05/05/22 13:52	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 13:52	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 13:52	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 13:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*31*	*T J*	*ug/L*		*1.83*	*N/A*		*05/05/22 13:52*	*1*
Unknown	*6.9*	*T J*	*ug/L*		*2.16*	*N/A*		*05/05/22 13:52*	*1*

Client Sample ID: MW-14A

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*05/05/22 13:52*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/05/22 13:52*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/05/22 13:52*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/05/22 13:52*	*1*

Method: SW846 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		05/06/22 17:04	05/07/22 04:01	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*05/06/22 17:04*	*05/07/22 04:01*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**31000**		500		ug/L		05/04/22 09:55	05/05/22 12:01	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 12:01	1
Magnesium	**12000**		200		ug/L		05/04/22 09:55	05/05/22 12:01	1
Manganese	**14**		3.0		ug/L		05/04/22 09:55	05/05/22 12:01	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 12:01	1
Sodium	**9300**		1000		ug/L		05/04/22 09:55	05/05/22 12:01	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.1**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**2.9**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**-3.1**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**31**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**12**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**9.3**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**7.5**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**15**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.066**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**-3.1**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**140**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.2**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**170**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**1.5**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**0.99**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**0.40**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.21**				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**0.31**				meq/L			05/10/22 12:14	1
Alkalinity (SM 1030E (meq))	**130**				mg/L			05/10/22 12:14	1

Client Sample ID: MW-14A

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	2.6				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	0.0047				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	0.00				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	7.5		0.50		mg/L			05/10/22 02:38	1
Sulfate (EPA 300.0)	15		1.0		mg/L			05/10/22 02:38	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			05/09/22 13:51	1
Nitrate/Nitrite (EPA 353.2)	0.066		0.050		mg/L			05/03/22 16:54	1
Total Organic Carbon - Average (SW846 9060)	1.1		1.0		mg/L			05/04/22 22:24	1
Bicarbonate Alkalinity (SM 2320B)	130		10		mg/L			05/05/22 21:16	1
Total Dissolved Solids (SM 2540C)	170		10		mg/L			04/28/22 12:14	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.02				SU			04/22/22 13:00	1
Field Conductivity	325.0				umhos/cm			04/22/22 13:00	1
Field Temperature	10.2				Degrees C			04/22/22 13:00	1
Field Dissolved Oxygen	1.40				mg/L			04/22/22 13:00	1
Field EH/ORP	96.3				millivolts			04/22/22 13:00	1

Client Sample ID: MW-14B

Date Collected: 04/22/22 12:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-3

Matrix: Water

Method: SW846 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			05/05/22 14:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 14:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 14:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 14:14	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 14:14	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 14:14	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 14:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 14:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 14:14	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 14:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 14:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 14:14	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 14:14	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 14:14	1
2-Hexanone	ND		5.0		ug/L			05/05/22 14:14	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

Client Sample ID: MW-14B
Date Collected: 04/22/22 12:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-3
Matrix: Water

Method: SW846 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			05/05/22 14:14	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 14:14	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 14:14	1
Acetone	ND		10		ug/L			05/05/22 14:14	1
Benzene	ND		1.0		ug/L			05/05/22 14:14	1
Bromobenzene	ND		1.0		ug/L			05/05/22 14:14	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 14:14	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 14:14	1
Bromoform	ND		1.0		ug/L			05/05/22 14:14	1
Bromomethane	ND		2.0		ug/L			05/05/22 14:14	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 14:14	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 14:14	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 14:14	1
Chloroethane	ND		2.0		ug/L			05/05/22 14:14	1
Chloroform	ND		1.0		ug/L			05/05/22 14:14	1
Chloromethane	ND		2.0		ug/L			05/05/22 14:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 14:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 14:14	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 14:14	1
Dibromomethane	ND		1.0		ug/L			05/05/22 14:14	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 14:14	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 14:14	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 14:14	1
Naphthalene	ND		1.0		ug/L			05/05/22 14:14	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
Styrene	ND		1.0		ug/L			05/05/22 14:14	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 14:14	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 14:14	1
Toluene	ND		1.0		ug/L			05/05/22 14:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 14:14	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 14:14	1
Trichloroethene	ND		1.0		ug/L			05/05/22 14:14	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 14:14	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 14:14	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 14:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*18*	*T J*	*ug/L*		*1.83*	*N/A*		*05/05/22 14:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*05/05/22 14:14*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/05/22 14:14*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*05/05/22 14:14*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/05/22 14:14*	*1*

Client Sample ID: MW-14B

Date Collected: 04/22/22 12:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-3

Matrix: Water

Method: SW846 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		05/06/22 17:04	05/07/22 04:25	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*05/06/22 17:04*	*05/07/22 04:25*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**47000**		500		ug/L		05/04/22 09:55	05/05/22 12:05	1
Iron	**1600**		30		ug/L		05/04/22 09:55	05/05/22 12:05	1
Magnesium	**14000**		200		ug/L		05/04/22 09:55	05/05/22 12:05	1
Manganese	**1300**		3.0		ug/L		05/04/22 09:55	05/05/22 12:05	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 12:05	1
Sodium	**35000**		1000		ug/L		05/04/22 09:55	05/05/22 12:05	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**5.3**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**5.1**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**-2.1**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**47**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**14**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**35**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.26**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**31**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**3.7**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**220**				mg/L			05/10/22 12:14	1
Alkalinity (SM 1030E)	**220**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**-2.1**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**260**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.1**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**290**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**1.6**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**2.3**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**1.2**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**1.5**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.019**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.87**				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**0.077**				meq/L			05/10/22 12:14	1
Alkalinity (SM 1030E (meq))	**220**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**4.4**				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	**0.086**				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**31**		0.50		mg/L			05/10/22 02:57	1
Sulfate (EPA 300.0)	**3.7**		1.0		mg/L			05/10/22 02:57	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

Client Sample ID: MW-14B

Date Collected: 04/22/22 12:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	0.26		0.030		mg/L			05/09/22 14:08	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/03/22 17:08	1
Total Organic Carbon - Average (SW846 9060)	1.4		1.0		mg/L			05/04/22 23:09	1
Bicarbonate Alkalinity (SM 2320B)	220		10		mg/L			05/05/22 21:04	1
Total Dissolved Solids (SM 2540C)	290		10		mg/L			04/28/22 12:14	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.22				SU			04/22/22 13:45	1
Field Conductivity	543.5				umhos/cm			04/22/22 13:45	1
Field Temperature	10.9				Degrees C			04/22/22 13:45	1
Field Dissolved Oxygen	0.80				mg/L			04/22/22 13:45	1
Field EH/ORP	-16.3				millivolts			04/22/22 13:45	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

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)
140-27331-B-2 MS	Matrix Spike	102	97	99	100
140-27331-B-2 MSD	Matrix Spike Duplicate	103	98	101	101
280-161449-1	TB3	101	98	100	102
280-161449-2	MW-14A	104	99	102	100
280-161449-3	MW-14B	104	99	102	100
LCS 280-573931/4	Lab Control Sample	95	98	97	101
LCS 280-573935/4	Lab Control Sample	101	98	99	101
LCSD 280-573931/5	Lab Control Sample Dup	99	97	97	102
LCSD 280-573935/5	Lab Control Sample Dup	102	98	97	102
MB 280-573931/9	Method Blank	99	97	99	103
MB 280-573935/9	Method Blank	101	99	100	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)
280-161449-1	TB3	101
280-161449-2	MW-14A	110
280-161449-3	MW-14B	113
LCS 280-574184/2-A	Lab Control Sample	117
LCSD 280-574184/3-A	Lab Control Sample Dup	117
MB 280-574184/1-A	Method Blank	117

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573931/9
Matrix: Water
Analysis Batch: 573931

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			05/05/22 08:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 08:25	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 08:25	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 08:25	1
2-Hexanone	ND		5.0		ug/L			05/05/22 08:25	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 08:25	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 08:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 08:25	1
Acetone	ND		10		ug/L			05/05/22 08:25	1
Benzene	ND		1.0		ug/L			05/05/22 08:25	1
Bromobenzene	ND		1.0		ug/L			05/05/22 08:25	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Bromoform	ND		1.0		ug/L			05/05/22 08:25	1
Bromomethane	ND		2.0		ug/L			05/05/22 08:25	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 08:25	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 08:25	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
Chloroethane	ND		2.0		ug/L			05/05/22 08:25	1
Chloroform	ND		1.0		ug/L			05/05/22 08:25	1
Chloromethane	ND		2.0		ug/L			05/05/22 08:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 08:25	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Dibromomethane	ND		1.0		ug/L			05/05/22 08:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 08:25	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 08:25	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 08:25	1
Naphthalene	ND		1.0		ug/L			05/05/22 08:25	1

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

Lab Sample ID: MB 280-573931/9
Matrix: Water
Analysis Batch: 573931

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			05/05/22 08:25	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Styrene	ND		1.0		ug/L			05/05/22 08:25	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 08:25	1
Toluene	ND		1.0		ug/L			05/05/22 08:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 08:25	1
Trichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 08:25	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 08:25	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 08:25	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 08:25*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*05/05/22 08:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/05/22 08:25*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/05/22 08:25*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*05/05/22 08:25*	*1*

Lab Sample ID: LCS 280-573931/4
Matrix: Water
Analysis Batch: 573931

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	74 - 121
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	62 - 132
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	72 - 122
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	72 - 128
1,1-Dichloroethane	25.0	24.2		ug/L		97	66 - 130
1,1-Dichloroethene	25.0	25.9		ug/L		104	62 - 130
1,1-Dichloropropene	25.0	25.2		ug/L		101	64 - 133
1,2,3-Trichlorobenzene	25.0	21.6		ug/L		86	70 - 127
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	74 - 123
1,2,4-Trichlorobenzene	25.0	21.6		ug/L		86	73 - 124
1,2,4-Trimethylbenzene	25.0	23.8		ug/L		95	74 - 124
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 121
1,2-Dichloroethane	25.0	23.1		ug/L		93	61 - 130
1,2-Dichloropropane	25.0	24.0		ug/L		96	68 - 127
1,3,5-Trimethylbenzene	25.0	24.7		ug/L		99	73 - 127
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	76 - 121
1,3-Dichloropropane	25.0	25.3		ug/L		101	80 - 118
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	76 - 119
2,2-Dichloropropane	25.0	23.5		ug/L		94	57 - 140
2-Butanone (MEK)	100	84.0		ug/L		84	53 - 135

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

Lab Sample ID: LCS 280-573931/4
Matrix: Water
Analysis Batch: 573931

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	24.5		ug/L		98	75 - 123
2-Hexanone	100	87.9		ug/L		88	58 - 134
4-Chlorotoluene	25.0	24.4		ug/L		98	74 - 124
4-Isopropyltoluene	25.0	24.1		ug/L		96	74 - 127
4-Methyl-2-pentanone	100	83.9		ug/L		84	56 - 135
Acetone	100	87.5		ug/L		88	50 - 137
Benzene	25.0	24.2		ug/L		97	69 - 126
Bromobenzene	25.0	24.1		ug/L		96	75 - 122
Bromochloromethane	25.0	25.0		ug/L		100	71 - 130
Bromodichloromethane	25.0	23.5		ug/L		94	67 - 126
Bromoform	25.0	23.1		ug/L		93	57 - 125
Bromomethane	25.0	25.6		ug/L		103	25 - 163
Carbon disulfide	25.0	26.3		ug/L		105	56 - 128
Carbon tetrachloride	25.0	24.8		ug/L		99	60 - 133
Chlorobenzene	25.0	24.7		ug/L		99	78 - 118
Chloroethane	25.0	26.6		ug/L		106	52 - 144
Chloroform	25.0	24.3		ug/L		97	68 - 128
Chloromethane	25.0	23.1		ug/L		92	43 - 142
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	69 - 126
cis-1,3-Dichloropropene	25.0	23.8		ug/L		95	75 - 120
Dibromochloromethane	25.0	24.6		ug/L		99	71 - 122
Dibromomethane	25.0	24.2		ug/L		97	68 - 129
Dichlorodifluoromethane	25.0	23.5		ug/L		94	26 - 152
Ethylbenzene	25.0	24.8		ug/L		99	76 - 121
Hexachlorobutadiene	25.0	23.1		ug/L		92	69 - 133
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 127
Methylene Chloride	25.0	25.7		ug/L		103	64 - 128
Naphthalene	25.0	20.7		ug/L		83	63 - 129
n-Butylbenzene	25.0	24.7		ug/L		99	69 - 130
N-Propylbenzene	25.0	25.2		ug/L		101	73 - 127
sec-Butylbenzene	25.0	25.4		ug/L		102	72 - 127
Styrene	25.0	23.8		ug/L		95	79 - 120
tert-Butylbenzene	25.0	24.5		ug/L		98	72 - 126
Tetrachloroethene	25.0	24.9		ug/L		100	72 - 127
Toluene	25.0	25.8		ug/L		103	68 - 127
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	66 - 129
trans-1,3-Dichloropropene	25.0	22.6		ug/L		90	66 - 127
Trichloroethene	25.0	24.6		ug/L		99	70 - 125
Trichlorofluoromethane	25.0	25.8		ug/L		103	57 - 144
Vinyl chloride	25.0	26.0		ug/L		104	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

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

Lab Sample ID: LCSD 280-573931/5
Matrix: Water
Analysis Batch: 573931

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	74 - 121	2	20
1,1,1-Trichloroethane			25.0	23.7		ug/L		95	62 - 132	3	20
1,1,2,2-Tetrachloroethane			25.0	23.9		ug/L		96	72 - 122	3	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		98	72 - 128	0	20
1,1-Dichloroethane			25.0	23.4		ug/L		94	66 - 130	3	20
1,1-Dichloroethene			25.0	25.0		ug/L		100	62 - 130	3	21
1,1-Dichloropropene			25.0	24.3		ug/L		97	64 - 133	4	20
1,2,3-Trichlorobenzene			25.0	21.8		ug/L		87	70 - 127	1	20
1,2,3-Trichloropropane			25.0	25.1		ug/L		100	74 - 123	2	20
1,2,4-Trichlorobenzene			25.0	21.8		ug/L		87	73 - 124	1	20
1,2,4-Trimethylbenzene			25.0	22.8		ug/L		91	74 - 124	4	20
1,2-Dichlorobenzene			25.0	24.3		ug/L		97	77 - 121	2	20
1,2-Dichloroethane			25.0	23.0		ug/L		92	61 - 130	1	20
1,2-Dichloropropane			25.0	23.7		ug/L		95	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	23.8		ug/L		95	73 - 127	4	20
1,3-Dichlorobenzene			25.0	23.2		ug/L		93	76 - 121	3	20
1,3-Dichloropropane			25.0	25.5		ug/L		102	80 - 118	1	20
1,4-Dichlorobenzene			25.0	24.3		ug/L		97	76 - 119	1	20
2,2-Dichloropropane			25.0	22.5		ug/L		90	57 - 140	4	22
2-Butanone (MEK)			100	84.2		ug/L		84	53 - 135	0	20
2-Chlorotoluene			25.0	23.8		ug/L		95	75 - 123	3	20
2-Hexanone			100	88.7		ug/L		89	58 - 134	1	21
4-Chlorotoluene			25.0	23.4		ug/L		94	74 - 124	4	20
4-Isopropyltoluene			25.0	23.1		ug/L		92	74 - 127	4	20
4-Methyl-2-pentanone			100	84.8		ug/L		85	56 - 135	1	20
Acetone			100	89.6		ug/L		90	50 - 137	2	21
Benzene			25.0	23.7		ug/L		95	69 - 126	2	20
Bromobenzene			25.0	23.4		ug/L		94	75 - 122	3	20
Bromochloromethane			25.0	24.2		ug/L		97	71 - 130	3	20
Bromodichloromethane			25.0	23.1		ug/L		92	67 - 126	2	20
Bromoform			25.0	23.2		ug/L		93	57 - 125	0	20
Bromomethane			25.0	25.5		ug/L		102	25 - 163	1	40
Carbon disulfide			25.0	25.5		ug/L		102	56 - 128	3	20
Carbon tetrachloride			25.0	24.0		ug/L		96	60 - 133	4	20
Chlorobenzene			25.0	24.3		ug/L		97	78 - 118	1	20
Chloroethane			25.0	25.4		ug/L		102	52 - 144	4	30
Chloroform			25.0	23.9		ug/L		96	68 - 128	2	20
Chloromethane			25.0	22.3		ug/L		89	43 - 142	3	20
cis-1,2-Dichloroethene			25.0	23.2		ug/L		93	69 - 126	2	20
cis-1,3-Dichloropropene			25.0	23.5		ug/L		94	75 - 120	1	20
Dibromochloromethane			25.0	24.5		ug/L		98	71 - 122	1	20
Dibromomethane			25.0	23.4		ug/L		94	68 - 129	3	20
Dichlorodifluoromethane			25.0	20.9		ug/L		84	26 - 152	12	21
Ethylbenzene			25.0	24.0		ug/L		96	76 - 121	3	20
Hexachlorobutadiene			25.0	22.9		ug/L		91	69 - 133	1	20
Isopropylbenzene			25.0	23.8		ug/L		95	70 - 127	4	20
Methylene Chloride			25.0	25.7		ug/L		103	64 - 128	0	20
Naphthalene			25.0	20.9		ug/L		84	63 - 129	1	21

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

Lab Sample ID: LCSD 280-573931/5
Matrix: Water
Analysis Batch: 573931

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	24.3		ug/L		97	69 - 130	1	20
N-Propylbenzene			25.0	24.3		ug/L		97	73 - 127	4	20
sec-Butylbenzene			25.0	24.6		ug/L		98	72 - 127	3	20
Styrene			25.0	23.5		ug/L		94	79 - 120	1	20
tert-Butylbenzene			25.0	23.7		ug/L		95	72 - 126	3	20
Tetrachloroethene			25.0	24.4		ug/L		98	72 - 127	2	20
Toluene			25.0	25.3		ug/L		101	68 - 127	2	20
trans-1,2-Dichloroethene			25.0	25.7		ug/L		103	66 - 129	2	20
trans-1,3-Dichloropropene			25.0	22.4		ug/L		90	66 - 127	1	20
Trichloroethene			25.0	24.5		ug/L		98	70 - 125	0	20
Trichlorofluoromethane			25.0	23.3		ug/L		93	57 - 144	10	28
Vinyl chloride			25.0	24.0		ug/L		96	53 - 141	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Lab Sample ID: MB 280-573935/9
Matrix: Water
Analysis Batch: 573935

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			05/05/22 10:12	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 10:12	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 10:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 10:12	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 10:12	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 10:12	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 10:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 10:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 10:12	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 10:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 10:12	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 10:12	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 10:12	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 10:12	1
2-Hexanone	ND		5.0		ug/L			05/05/22 10:12	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 10:12	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 10:12	1

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

Lab Sample ID: MB 280-573935/9
Matrix: Water
Analysis Batch: 573935

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			05/05/22 10:12	1
Acetone	ND		10		ug/L			05/05/22 10:12	1
Benzene	ND		1.0		ug/L			05/05/22 10:12	1
Bromobenzene	ND		1.0		ug/L			05/05/22 10:12	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 10:12	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 10:12	1
Bromoform	ND		1.0		ug/L			05/05/22 10:12	1
Bromomethane	ND		2.0		ug/L			05/05/22 10:12	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 10:12	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 10:12	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 10:12	1
Chloroethane	ND		2.0		ug/L			05/05/22 10:12	1
Chloroform	ND		1.0		ug/L			05/05/22 10:12	1
Chloromethane	ND		2.0		ug/L			05/05/22 10:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 10:12	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 10:12	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 10:12	1
Dibromomethane	ND		1.0		ug/L			05/05/22 10:12	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 10:12	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 10:12	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 10:12	1
Naphthalene	ND		1.0		ug/L			05/05/22 10:12	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
Styrene	ND		1.0		ug/L			05/05/22 10:12	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 10:12	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 10:12	1
Toluene	ND		1.0		ug/L			05/05/22 10:12	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 10:12	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 10:12	1
Trichloroethene	ND		1.0		ug/L			05/05/22 10:12	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 10:12	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 10:12	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 10:12	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 10:12*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/05/22 10:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/05/22 10:12*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/05/22 10:12*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/05/22 10:12*	*1*

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

Lab Sample ID: LCS 280-573935/4
Matrix: Water
Analysis Batch: 573935

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	24.8		ug/L		99	74 - 121
1,1,1-Trichloroethane	25.0	23.6		ug/L		94	62 - 132
1,1,2,2-Tetrachloroethane	25.0	25.9		ug/L		103	72 - 122
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	72 - 128
1,1-Dichloroethane	25.0	24.5		ug/L		98	66 - 130
1,1-Dichloroethene	25.0	23.5		ug/L		94	62 - 130
1,1-Dichloropropene	25.0	24.0		ug/L		96	64 - 133
1,2,3-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 127
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	74 - 123
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	73 - 124
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	74 - 124
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 121
1,2-Dichloroethane	25.0	22.7		ug/L		91	61 - 130
1,2-Dichloropropane	25.0	24.0		ug/L		96	68 - 127
1,3,5-Trimethylbenzene	25.0	25.4		ug/L		102	73 - 127
1,3-Dichlorobenzene	25.0	24.6		ug/L		99	76 - 121
1,3-Dichloropropane	25.0	24.8		ug/L		99	80 - 118
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	76 - 119
2,2-Dichloropropane	25.0	24.3		ug/L		97	57 - 140
2-Butanone (MEK)	100	101		ug/L		101	53 - 135
2-Chlorotoluene	25.0	24.4		ug/L		98	75 - 123
2-Hexanone	100	106		ug/L		106	58 - 134
4-Chlorotoluene	25.0	24.9		ug/L		100	74 - 124
4-Isopropyltoluene	25.0	25.4		ug/L		101	74 - 127
4-Methyl-2-pentanone	100	105		ug/L		105	56 - 135
Acetone	100	97.2		ug/L		97	50 - 137
Benzene	25.0	24.4		ug/L		98	69 - 126
Bromobenzene	25.0	24.9		ug/L		100	75 - 122
Bromochloromethane	25.0	24.5		ug/L		98	71 - 130
Bromodichloromethane	25.0	24.5		ug/L		98	67 - 126
Bromoform	25.0	21.8		ug/L		87	57 - 125
Bromomethane	25.0	24.7		ug/L		99	25 - 163
Carbon disulfide	25.0	22.2		ug/L		89	56 - 128
Carbon tetrachloride	25.0	23.1		ug/L		93	60 - 133
Chlorobenzene	25.0	24.6		ug/L		98	78 - 118
Chloroethane	25.0	26.6		ug/L		107	52 - 144
Chloroform	25.0	24.7		ug/L		99	68 - 128
Chloromethane	25.0	25.8		ug/L		103	43 - 142
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	69 - 126
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	75 - 120
Dibromochloromethane	25.0	25.1		ug/L		101	71 - 122
Dibromomethane	25.0	23.9		ug/L		96	68 - 129
Dichlorodifluoromethane	25.0	26.2		ug/L		105	26 - 152
Ethylbenzene	25.0	24.3		ug/L		97	76 - 121
Hexachlorobutadiene	25.0	22.3		ug/L		89	69 - 133
Isopropylbenzene	25.0	25.1		ug/L		100	70 - 127
Methylene Chloride	25.0	23.4		ug/L		94	64 - 128
Naphthalene	25.0	24.0		ug/L		96	63 - 129

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

Lab Sample ID: LCS 280-573935/4
Matrix: Water
Analysis Batch: 573935

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	25.0		ug/L		100	69 - 130		
N-Propylbenzene			25.0	25.2		ug/L		101	73 - 127		
sec-Butylbenzene			25.0	25.4		ug/L		102	72 - 127		
Styrene			25.0	25.7		ug/L		103	79 - 120		
tert-Butylbenzene			25.0	28.4		ug/L		113	72 - 126		
Tetrachloroethene			25.0	25.1		ug/L		100	72 - 127		
Toluene			25.0	24.8		ug/L		99	68 - 127		
trans-1,2-Dichloroethene			25.0	23.9		ug/L		96	66 - 129		
trans-1,3-Dichloropropene			25.0	25.2		ug/L		101	66 - 127		
Trichloroethene			25.0	24.5		ug/L		98	70 - 125		
Trichlorofluoromethane			25.0	26.0		ug/L		104	57 - 144		
Vinyl chloride			25.0	27.0		ug/L		108	53 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Lab Sample ID: LCSD 280-573935/5
Matrix: Water
Analysis Batch: 573935

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	24.4		ug/L		98	74 - 121	2	20
1,1,1-Trichloroethane			25.0	22.5		ug/L		90	62 - 132	5	20
1,1,2,2-Tetrachloroethane			25.0	25.4		ug/L		102	72 - 122	2	20
1,1,2-Trichloroethane			25.0	24.7		ug/L		99	72 - 128	1	20
1,1-Dichloroethane			25.0	23.6		ug/L		94	66 - 130	4	20
1,1-Dichloroethene			25.0	22.2		ug/L		89	62 - 130	6	21
1,1-Dichloropropene			25.0	22.4		ug/L		90	64 - 133	7	20
1,2,3-Trichlorobenzene			25.0	23.7		ug/L		95	70 - 127	0	20
1,2,3-Trichloropropane			25.0	24.6		ug/L		98	74 - 123	1	20
1,2,4-Trichlorobenzene			25.0	23.2		ug/L		93	73 - 124	4	20
1,2,4-Trimethylbenzene			25.0	23.9		ug/L		96	74 - 124	5	20
1,2-Dichlorobenzene			25.0	23.7		ug/L		95	77 - 121	5	20
1,2-Dichloroethane			25.0	22.5		ug/L		90	61 - 130	1	20
1,2-Dichloropropane			25.0	23.4		ug/L		94	68 - 127	3	20
1,3,5-Trimethylbenzene			25.0	24.3		ug/L		97	73 - 127	4	20
1,3-Dichlorobenzene			25.0	23.4		ug/L		94	76 - 121	5	20
1,3-Dichloropropane			25.0	24.8		ug/L		99	80 - 118	0	20
1,4-Dichlorobenzene			25.0	23.1		ug/L		93	76 - 119	6	20
2,2-Dichloropropane			25.0	22.7		ug/L		91	57 - 140	7	22
2-Butanone (MEK)			100	102		ug/L		102	53 - 135	1	20
2-Chlorotoluene			25.0	23.7		ug/L		95	75 - 123	3	20
2-Hexanone			100	109		ug/L		109	58 - 134	3	21
4-Chlorotoluene			25.0	23.1		ug/L		93	74 - 124	7	20
4-Isopropyltoluene			25.0	23.3		ug/L		93	74 - 127	8	20

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

Lab Sample ID: LCSD 280-573935/5
Matrix: Water
Analysis Batch: 573935

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	107		ug/L		107	56 - 135	2	20
Acetone			100	98.7		ug/L		99	50 - 137	2	21
Benzene			25.0	23.4		ug/L		94	69 - 126	4	20
Bromobenzene			25.0	23.4		ug/L		94	75 - 122	6	20
Bromochloromethane			25.0	23.9		ug/L		95	71 - 130	3	20
Bromodichloromethane			25.0	23.8		ug/L		95	67 - 126	3	20
Bromoform			25.0	22.1		ug/L		88	57 - 125	1	20
Bromomethane			25.0	22.5		ug/L		90	25 - 163	9	40
Carbon disulfide			25.0	20.9		ug/L		83	56 - 128	6	20
Carbon tetrachloride			25.0	21.9		ug/L		87	60 - 133	6	20
Chlorobenzene			25.0	24.0		ug/L		96	78 - 118	2	20
Chloroethane			25.0	24.6		ug/L		98	52 - 144	8	30
Chloroform			25.0	23.1		ug/L		92	68 - 128	7	20
Chloromethane			25.0	24.3		ug/L		97	43 - 142	6	20
cis-1,2-Dichloroethene			25.0	23.4		ug/L		94	69 - 126	4	20
cis-1,3-Dichloropropene			25.0	24.9		ug/L		100	75 - 120	0	20
Dibromochloromethane			25.0	24.2		ug/L		97	71 - 122	4	20
Dibromomethane			25.0	24.1		ug/L		96	68 - 129	1	20
Dichlorodifluoromethane			25.0	25.0		ug/L		100	26 - 152	5	21
Ethylbenzene			25.0	23.8		ug/L		95	76 - 121	2	20
Hexachlorobutadiene			25.0	21.7		ug/L		87	69 - 133	3	20
Isopropylbenzene			25.0	23.5		ug/L		94	70 - 127	7	20
Methylene Chloride			25.0	22.5		ug/L		90	64 - 128	4	20
Naphthalene			25.0	24.4		ug/L		98	63 - 129	2	21
n-Butylbenzene			25.0	23.6		ug/L		94	69 - 130	6	20
N-Propylbenzene			25.0	23.4		ug/L		93	73 - 127	7	20
sec-Butylbenzene			25.0	23.4		ug/L		94	72 - 127	8	20
Styrene			25.0	25.3		ug/L		101	79 - 120	2	20
tert-Butylbenzene			25.0	26.8		ug/L		107	72 - 126	6	20
Tetrachloroethene			25.0	23.4		ug/L		94	72 - 127	7	20
Toluene			25.0	23.2		ug/L		93	68 - 127	6	20
trans-1,2-Dichloroethene			25.0	22.8		ug/L		91	66 - 129	5	20
trans-1,3-Dichloropropene			25.0	24.7		ug/L		99	66 - 127	2	20
Trichloroethene			25.0	23.6		ug/L		94	70 - 125	4	20
Trichlorofluoromethane			25.0	24.7		ug/L		99	57 - 144	5	28
Vinyl chloride			25.0	25.5		ug/L		102	53 - 141	6	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

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

Lab Sample ID: 140-27331-B-2 MS
Matrix: Water
Analysis Batch: 573935

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	24.7		ug/L		99	74 - 121
1,1,1-Trichloroethane	ND		25.0	23.9		ug/L		96	62 - 132
1,1,2,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	72 - 122
1,1,2-Trichloroethane	ND		25.0	25.5		ug/L		102	72 - 128
1,1-Dichloroethane	ND		25.0	24.8		ug/L		99	66 - 130
1,1-Dichloroethene	ND	F2 F1	25.0	2.13	F1	ug/L		9	62 - 130
1,1-Dichloropropene	ND	F2 F1	25.0	18.1		ug/L		73	64 - 133
1,2,3-Trichlorobenzene	ND		25.0	24.3		ug/L		97	70 - 127
1,2,3-Trichloropropane	ND	F1	25.0	ND	F1	ug/L		0	74 - 123
1,2,4-Trichlorobenzene	ND		25.0	23.5		ug/L		94	73 - 124
1,2,4-Trimethylbenzene	ND		25.0	25.3		ug/L		101	74 - 124
1,2-Dichlorobenzene	ND		25.0	24.9		ug/L		99	77 - 121
1,2-Dichloroethane	ND		25.0	23.0		ug/L		92	61 - 130
1,2-Dichloropropane	ND		25.0	24.3		ug/L		97	68 - 127
1,3,5-Trimethylbenzene	ND		25.0	24.9		ug/L		100	73 - 127
1,3-Dichlorobenzene	ND		25.0	24.8		ug/L		99	76 - 121
1,3-Dichloropropane	ND		25.0	25.5		ug/L		102	80 - 118
1,4-Dichlorobenzene	ND		25.0	24.2		ug/L		97	76 - 119
2,2-Dichloropropane	ND		25.0	22.4		ug/L		89	57 - 140
2-Butanone (MEK)	ND		100	61.7		ug/L		60	53 - 135
2-Chlorotoluene	ND		25.0	24.3		ug/L		97	75 - 123
2-Hexanone	ND		100	78.4		ug/L		78	58 - 134
4-Chlorotoluene	ND		25.0	24.8		ug/L		99	74 - 124
4-Isopropyltoluene	ND		25.0	24.3		ug/L		97	74 - 127
4-Methyl-2-pentanone	ND		100	108		ug/L		108	56 - 135
Acetone	15	F1	100	41.6	F1	ug/L		26	50 - 137
Benzene	ND		25.0	25.0		ug/L		100	69 - 126
Bromobenzene	ND		25.0	24.7		ug/L		99	75 - 122
Bromochloromethane	ND		25.0	24.8		ug/L		99	71 - 130
Bromodichloromethane	ND		25.0	25.2		ug/L		101	67 - 126
Bromoform	ND		25.0	21.4		ug/L		86	57 - 125
Bromomethane	ND	F1	25.0	ND	F1	ug/L		1	25 - 163
Carbon disulfide	ND		25.0	21.9		ug/L		88	56 - 128
Carbon tetrachloride	ND		25.0	23.4		ug/L		94	60 - 133
Chlorobenzene	ND		25.0	24.7		ug/L		99	78 - 118
Chloroethane	ND		25.0	27.6		ug/L		110	52 - 144
Chloroform	ND		25.0	25.8		ug/L		100	68 - 128
Chloromethane	ND		25.0	23.2		ug/L		93	43 - 142
cis-1,2-Dichloroethene	ND		25.0	24.3		ug/L		97	69 - 126
cis-1,3-Dichloropropene	ND	F2 F1	25.0	1.22	F1	ug/L		5	75 - 120
Dibromochloromethane	ND		25.0	24.7		ug/L		99	71 - 122
Dibromomethane	ND		25.0	25.3		ug/L		101	68 - 129
Dichlorodifluoromethane	ND		25.0	26.7		ug/L		107	26 - 152
Ethylbenzene	ND		25.0	24.1		ug/L		97	76 - 121
Hexachlorobutadiene	ND		25.0	20.8		ug/L		83	69 - 133
Isopropylbenzene	ND		25.0	24.4		ug/L		98	70 - 127
Methylene Chloride	ND		25.0	22.9		ug/L		92	64 - 128
Naphthalene	ND		25.0	25.0		ug/L		100	63 - 129

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

Lab Sample ID: 140-27331-B-2 MS
Matrix: Water
Analysis Batch: 573935

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	24.1		ug/L		96	69 - 130
N-Propylbenzene	ND		25.0	24.3		ug/L		97	73 - 127
sec-Butylbenzene	ND		25.0	24.2		ug/L		97	72 - 127
Styrene	ND	F1	25.0	ND	F1	ug/L		3	79 - 120
tert-Butylbenzene	ND		25.0	27.8		ug/L		111	72 - 126
Tetrachloroethene	ND		25.0	24.5		ug/L		98	72 - 127
Toluene	ND		25.0	25.0		ug/L		100	68 - 127
trans-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	66 - 129
trans-1,3-Dichloropropene	ND	F2 F1	25.0	9.73	F1	ug/L		39	66 - 127
Trichloroethene	ND		25.0	23.9		ug/L		96	70 - 125
Trichlorofluoromethane	ND		25.0	26.5		ug/L		106	57 - 144
Vinyl chloride	ND	F2 F1	25.0	14.7		ug/L		59	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Lab Sample ID: 140-27331-B-2 MSD
Matrix: Water
Analysis Batch: 573935

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	23.4		ug/L		94	74 - 121	5	20
1,1,1-Trichloroethane	ND		25.0	22.4		ug/L		90	62 - 132	6	20
1,1,2,2-Tetrachloroethane	ND		25.0	26.1		ug/L		104	72 - 122	2	20
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	72 - 128	3	20
1,1-Dichloroethane	ND		25.0	23.3		ug/L		93	66 - 130	6	20
1,1-Dichloroethene	ND	F2 F1	25.0	ND	F2 F1	ug/L		3	62 - 130	108	21
1,1-Dichloropropene	ND	F2 F1	25.0	14.4	F2 F1	ug/L		57	64 - 133	23	20
1,2,3-Trichlorobenzene	ND		25.0	24.0		ug/L		96	70 - 127	1	20
1,2,3-Trichloropropane	ND	F1	25.0	ND	F1	ug/L		0	74 - 123	NC	20
1,2,4-Trichlorobenzene	ND		25.0	23.0		ug/L		92	73 - 124	2	20
1,2,4-Trimethylbenzene	ND		25.0	23.5		ug/L		94	74 - 124	7	20
1,2-Dichlorobenzene	ND		25.0	23.8		ug/L		95	77 - 121	4	20
1,2-Dichloroethane	ND		25.0	22.9		ug/L		92	61 - 130	0	20
1,2-Dichloropropane	ND		25.0	23.0		ug/L		92	68 - 127	5	20
1,3,5-Trimethylbenzene	ND		25.0	23.7		ug/L		95	73 - 127	5	20
1,3-Dichlorobenzene	ND		25.0	23.3		ug/L		93	76 - 121	6	20
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	80 - 118	4	20
1,4-Dichlorobenzene	ND		25.0	23.0		ug/L		92	76 - 119	5	20
2,2-Dichloropropane	ND		25.0	21.4		ug/L		86	57 - 140	4	22
2-Butanone (MEK)	ND		100	57.9		ug/L		56	53 - 135	6	20
2-Chlorotoluene	ND		25.0	23.7		ug/L		95	75 - 123	3	20
2-Hexanone	ND		100	77.0		ug/L		77	58 - 134	2	21
4-Chlorotoluene	ND		25.0	23.4		ug/L		94	74 - 124	6	20
4-Isopropyltoluene	ND		25.0	23.0		ug/L		92	74 - 127	5	20

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

Lab Sample ID: 140-27331-B-2 MSD
Matrix: Water
Analysis Batch: 573935

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	104		ug/L		104	56 - 135	4	20
Acetone	15	F1	100	43.5	F1	ug/L		28	50 - 137	5	21
Benzene	ND		25.0	23.3		ug/L		93	69 - 126	7	20
Bromobenzene	ND		25.0	23.5		ug/L		94	75 - 122	5	20
Bromochloromethane	ND		25.0	23.9		ug/L		96	71 - 130	3	20
Bromodichloromethane	ND		25.0	23.9		ug/L		96	67 - 126	5	20
Bromoform	ND		25.0	21.6		ug/L		86	57 - 125	1	20
Bromomethane	ND	F1	25.0	ND	F1	ug/L		0	25 - 163	NC	40
Carbon disulfide	ND		25.0	20.4		ug/L		82	56 - 128	7	20
Carbon tetrachloride	ND		25.0	21.8		ug/L		87	60 - 133	7	20
Chlorobenzene	ND		25.0	23.8		ug/L		95	78 - 118	4	20
Chloroethane	ND		25.0	26.1		ug/L		104	52 - 144	6	30
Chloroform	ND		25.0	24.4		ug/L		95	68 - 128	6	20
Chloromethane	ND		25.0	22.3		ug/L		89	43 - 142	4	20
cis-1,2-Dichloroethene	ND		25.0	23.6		ug/L		94	69 - 126	3	20
cis-1,3-Dichloropropene	ND	F2 F1	25.0	ND	F2 F1	ug/L		3	75 - 120	53	20
Dibromochloromethane	ND		25.0	23.7		ug/L		95	71 - 122	4	20
Dibromomethane	ND		25.0	24.2		ug/L		97	68 - 129	4	20
Dichlorodifluoromethane	ND		25.0	25.1		ug/L		101	26 - 152	6	21
Ethylbenzene	ND		25.0	23.2		ug/L		93	76 - 121	4	20
Hexachlorobutadiene	ND		25.0	20.1		ug/L		81	69 - 133	3	20
Isopropylbenzene	ND		25.0	23.0		ug/L		92	70 - 127	6	20
Methylene Chloride	ND		25.0	22.1		ug/L		89	64 - 128	4	20
Naphthalene	ND		25.0	25.1		ug/L		100	63 - 129	0	21
n-Butylbenzene	ND		25.0	22.7		ug/L		91	69 - 130	6	20
N-Propylbenzene	ND		25.0	23.0		ug/L		92	73 - 127	6	20
sec-Butylbenzene	ND		25.0	22.6		ug/L		90	72 - 127	7	20
Styrene	ND	F1	25.0	ND	F1	ug/L		3	79 - 120	6	20
tert-Butylbenzene	ND		25.0	26.1		ug/L		105	72 - 126	6	20
Tetrachloroethene	ND		25.0	22.9		ug/L		92	72 - 127	7	20
Toluene	ND		25.0	23.7		ug/L		95	68 - 127	5	20
trans-1,2-Dichloroethene	ND		25.0	21.5		ug/L		86	66 - 129	8	20
trans-1,3-Dichloropropene	ND	F2 F1	25.0	7.69	F2 F1	ug/L		31	66 - 127	23	20
Trichloroethene	ND		25.0	21.6		ug/L		86	70 - 125	10	20
Trichlorofluoromethane	ND		25.0	24.4		ug/L		98	57 - 144	8	28
Vinyl chloride	ND	F2 F1	25.0	10.3	F2 F1	ug/L		41	53 - 141	35	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-574184/1-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/06/22 17:04	05/06/22 23:39	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/06/22 23:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*05/06/22 17:04*	*05/06/22 23:39*	*1*

Lab Sample ID: LCS 280-574184/2-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574184

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.253		ug/L		101	60 - 140		
1,2-Dibromoethane			0.250	0.272		ug/L		109	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*117*		*70 - 130*

Lab Sample ID: LCSD 280-574184/3-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 574184

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.250		ug/L		100	60 - 140	1	10
1,2-Dibromoethane			0.250	0.270		ug/L		108	60 - 140	1	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*117*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573718/1-A
Matrix: Water
Analysis Batch: 574034

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 09:47	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 09:47	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 09:47	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 09:47	1

Lab Sample ID: LCS 280-573718/2-A
Matrix: Water
Analysis Batch: 574115

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	49400		ug/L		99	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-573718/2-A
Matrix: Water
Analysis Batch: 574115

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9800		ug/L		98	89 - 115
Magnesium	50000	48500		ug/L		97	90 - 113
Manganese	1000	960		ug/L		96	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	49600		ug/L		99	90 - 115

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-625182/28
Matrix: Water
Analysis Batch: 625182

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			05/09/22 22:42	1
Sulfate	ND		1.0		mg/L			05/09/22 22:42	1

Lab Sample ID: LCS 480-625182/29
Matrix: Water
Analysis Batch: 625182

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.9		mg/L		102	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: 280-161448-D-4 MS
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.3		mg/L		93	81 - 120
Sulfate	5.1		50.0	53.9		mg/L		97	80 - 120

Lab Sample ID: 280-161448-D-4 MSD
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.6		mg/L		93	81 - 120	0	15
Sulfate	5.1		50.0	54.0		mg/L		98	80 - 120	0	15

Lab Sample ID: 480-197307-J-1 MS
Matrix: Water
Analysis Batch: 625182

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	28		1000	990		mg/L		96	81 - 120
Sulfate	1300		1000	2260		mg/L		93	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574325/18
Matrix: Water
Analysis Batch: 574325

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			05/09/22 12:50	1

Lab Sample ID: LCS 280-574325/17
Matrix: Water
Analysis Batch: 574325

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			5.00	4.85		mg/L		97	90 - 110		

Lab Sample ID: 280-161446-C-4 MS
Matrix: Water
Analysis Batch: 574325

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	1.05		mg/L		105	90 - 110		

Lab Sample ID: 280-161446-C-4 MSD
Matrix: Water
Analysis Batch: 574325

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	1.05		mg/L		105	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573773/22
Matrix: Water
Analysis Batch: 573773

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			05/03/22 16:34	1

Lab Sample ID: LCS 280-573773/21
Matrix: Water
Analysis Batch: 573773

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	5.09		mg/L		102	90 - 110		

Lab Sample ID: 280-161382-D-2 MS
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.62		mg/L		101	90 - 110		

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-161382-D-2 MSD
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.67		mg/L		102	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-574005/4
Matrix: Water
Analysis Batch: 574005

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			05/04/22 19:53	1

Lab Sample ID: LCS 280-574005/3
Matrix: Water
Analysis Batch: 574005

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: 280-161462-B-2 MS
Matrix: Water
Analysis Batch: 574005

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	1.3		25.0	26.1		mg/L		99	88 - 112

Lab Sample ID: 280-161462-B-2 MSD
Matrix: Water
Analysis Batch: 574005

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	1.3		25.0	26.0		mg/L		99	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				meq/L			05/10/22 12:14	1
Potassium	0.000				meq/L			05/10/22 12:14	1
Sodium	0.000				meq/L			05/10/22 12:14	1
Ammonia as N	0.000				meq/L			05/10/22 12:14	1
Chloride	0.000				meq/L			05/10/22 12:14	1
Sulfate	0.000				meq/L			05/10/22 12:14	1
Alkalinity	0.000				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				meq/L			05/10/22 12:14	1
Iron	0.000				meq/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-574081/32
Matrix: Water
Analysis Batch: 574081

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			05/05/22 16:09	1

Lab Sample ID: MB 280-574081/58
Matrix: Water
Analysis Batch: 574081

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			05/05/22 19:22	1

Lab Sample ID: MB 280-574081/6
Matrix: Water
Analysis Batch: 574081

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			05/05/22 13:20	1

Lab Sample ID: 280-161446-A-5 DU
Matrix: Water
Analysis Batch: 574081

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573282/1
Matrix: Water
Analysis Batch: 573282

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			04/28/22 11:57	1

Lab Sample ID: LCS 280-573282/2
Matrix: Water
Analysis Batch: 573282

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			505	491		mg/L		97	88 - 114		

Lab Sample ID: 280-161448-A-3 DU
Matrix: Water
Analysis Batch: 573282

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

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

GC/MS VOA

Analysis Batch: 573931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-1	TB3	Total/NA	Water	8260B	
MB 280-573931/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573931/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573931/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 573935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	8260B	
280-161449-3	MW-14B	Total/NA	Water	8260B	
MB 280-573935/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573935/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573935/5	Lab Control Sample Dup	Total/NA	Water	8260B	
140-27331-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
140-27331-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 574184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-1	TB3	Total/NA	Water	8011	
280-161449-2	MW-14A	Total/NA	Water	8011	
280-161449-3	MW-14B	Total/NA	Water	8011	
MB 280-574184/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-574184/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-574184/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 574190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-1	TB3	Total/NA	Water	8011	574184
280-161449-2	MW-14A	Total/NA	Water	8011	574184
280-161449-3	MW-14B	Total/NA	Water	8011	574184
MB 280-574184/1-A	Method Blank	Total/NA	Water	8011	574184
LCS 280-574184/2-A	Lab Control Sample	Total/NA	Water	8011	574184
LCSD 280-574184/3-A	Lab Control Sample Dup	Total/NA	Water	8011	574184

Metals

Prep Batch: 573718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Dissolved	Water	3005A	
280-161449-3	MW-14B	Dissolved	Water	3005A	
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 574034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Dissolved	Water	6010B	573718
280-161449-3	MW-14B	Dissolved	Water	6010B	573718
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	6010B	573718

Metals

Analysis Batch: 574115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573718

General Chemistry

Analysis Batch: 573282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	SM 2540C	
280-161449-3	MW-14B	Total/NA	Water	SM 2540C	
MB 280-573282/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573282/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161448-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	353.2	
280-161449-3	MW-14B	Total/NA	Water	353.2	
MB 280-573773/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/21	Lab Control Sample	Total/NA	Water	353.2	
280-161382-D-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-161382-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 574005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	9060	
280-161449-3	MW-14B	Total/NA	Water	9060	
MB 280-574005/4	Method Blank	Total/NA	Water	9060	
LCS 280-574005/3	Lab Control Sample	Total/NA	Water	9060	
280-161462-B-2 MS	Matrix Spike	Total/NA	Water	9060	
280-161462-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 574081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	SM 2320B	
280-161449-3	MW-14B	Total/NA	Water	SM 2320B	
MB 280-574081/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-574081/58	Method Blank	Total/NA	Water	SM 2320B	
MB 280-574081/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-574081/57	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-574081/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-161446-A-5 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 574325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	350.1	
280-161449-3	MW-14B	Total/NA	Water	350.1	
MB 280-574325/18	Method Blank	Total/NA	Water	350.1	
LCS 280-574325/17	Lab Control Sample	Total/NA	Water	350.1	
280-161446-C-4 MS	Matrix Spike	Total/NA	Water	350.1	
280-161446-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

General Chemistry

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	SM 1030E	
280-161449-2	MW-14A	Total/NA	Water	SM 1030E (meq)	
280-161449-3	MW-14B	Total/NA	Water	SM 1030E	
280-161449-3	MW-14B	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	300.0	
280-161449-3	MW-14B	Total/NA	Water	300.0	
MB 480-625182/28	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/29	Lab Control Sample	Total/NA	Water	300.0	
280-161448-D-4 MS	Matrix Spike	Total/NA	Water	300.0	
280-161448-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-197307-J-1 MS	Matrix Spike	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161449-2	MW-14A	Total/NA	Water	Field Sampling	
280-161449-3	MW-14B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

Client Sample ID: TB3

Date Collected: 04/22/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-1

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	573931	05/05/22 09:29	TAW	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 03:37	KSA	EET DEN

Client Sample ID: MW-14A

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-2

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	573935	05/05/22 13:52	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 04:01	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 12:01	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 02:38	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:51	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:54	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 22:24	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			574081	05/05/22 21:16	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573282	04/28/22 12:14	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 13:00	TJ	EET DEN

Client Sample ID: MW-14B

Date Collected: 04/22/22 12:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161449-3

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	573935	05/05/22 14:14	MD	EET DEN
Total/NA	Prep	8011			35 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 04:25	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 12:05	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 02:57	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 14:08	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 17:08	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 23:09	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			574081	05/05/22 21:04	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573282	04/28/22 12:14	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 13:45	TJ	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161449-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET 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: 280-16511-866.1
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	Project #: 28002786			
Event Desc: Semiannual Compliance Wells - Apr 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)	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		
TB3	4/22/22	0700	G	W						X	X			5	
MW-14A	4/22/22	1200	G	W	X		X	X	X	X	X	X	X	11	
MW-14B	4/22/22	1245	G	W	X		X	X	X	X	X	X	X	11	

280-161449 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:

	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	4/22/22 @ 1630	SCS		4/23/22 1125	ENTACT
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.: 1442296

Cooler Temperature(s) °C and Other Remarks: 1.0, 2.6 IR12 CF +0.1

3/10/2023

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) 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)
4/22/22	11 :24	23 .60	.	13 .32	.	10 .28	X 1	1 .67
/ /	:	.	.	.	.		X 3	5 .01

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	4/22/22	12 :00	F	3	40 ml HCl	YES	NO		✓
VOA Glass	4/22/22	12 :00	F	3	40 ml $Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	12 :00	F	2	250, 500, 1L None	YES	NO	NA	✓
Yellow Glass	4/22/22	12 :00	F	2	250, 500, 1L H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/22/22	12 :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) (NH4) (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(1127)	0.00	5.68	92.5	420.1	10 .6	13.62	3 .66	clear/colorless
1	F(1137)	1 .70	6.05	85.5	341.1	10 .1	13.78	1 .57	clear/colorless
2	F(1147)	3 .40	6.00	90.9	327.8	10 .2	13.81	1 .38	clear/colorless
3	F(1157)	5 .10	6.02	95.9	325.7	10 .2	13.83	1 .39	clear/colorless
4	F(1159)	5 .25	6.02	96.3	325.0	10 .2	13.84	1 .40	clear/colorless
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Standard purge (20/10/20psi) ~ 300 ml/min

SAMPLER: I. Hughust (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 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)
4/22/22	12:19	44.00	.	12.80	.	-	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	4/22/22	12:45	F	3 40 ml	HCl	YES	NO		✓
VOA Glass	4/22/22	12:45	F	3 40 ml	$Na_2S_2O_3$	YES	NO		✓
Amber Glass	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	12:45	F	2 250, 500, 1L	None	YES	NO	NA	✓
Yellow Glass	4/22/22	12:45	F	2 250, 500, 1L	H_2SO_4	YES	NO		✓
Red Total Poly	/ /	:			HNO_3	YES	NO		
Red Diss. Poly	4/22/22	12:45	1	1 F,H 250, 500, 1L	HNO_3	YES	YES		✓
White Poly	/ /	:			None	YES	YES		
Clear Poly	/ /	:			$Na_2S_2O_3$	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:

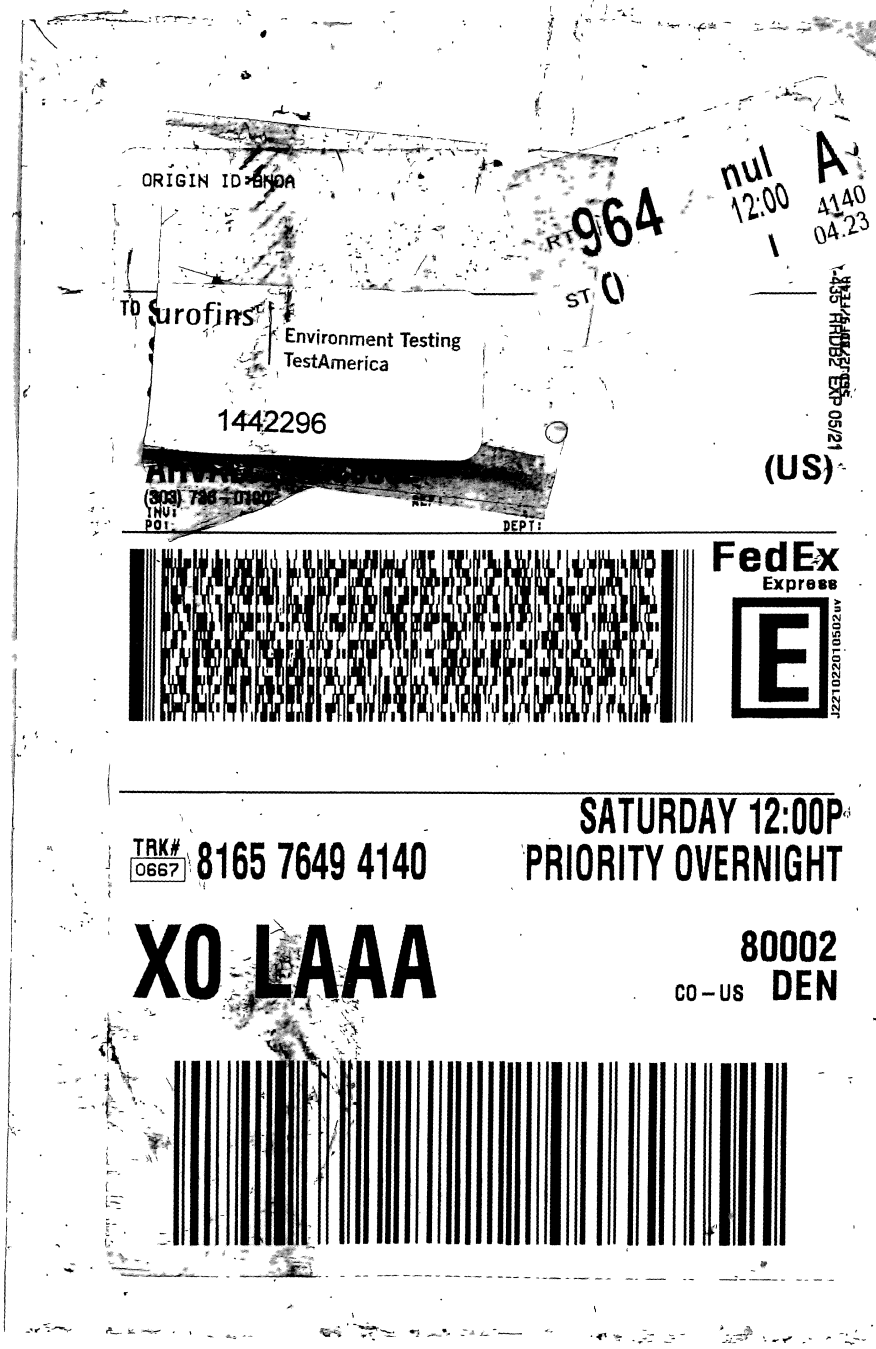
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1221)	0.00	6.87	111.5	426.6	10.9	12.83	3.65	clear/colorless
1	F(1233)	0.75	7.21	13.8	543.6	10.8	12.83	0.88	clear/colorless
2	F(1235)	0.85	7.21	-5.6	543.5	10.8	12.83	0.89	clear/colorless
3	F(1237)	0.95	7.20	-9.3	543.3	10.8	12.83	0.83	clear/colorless
4	F(1239)	IH 1.05	7.22	-11.4	543.3	10.8	12.83	0.81	clear/colorless
5	F(1241)	1.15	7.22	-16.3	543.5	10.9	12.83	0.80	clear/colorless
6			.			.	.	.	

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

Low flow purge method (20/10/20,ii) ~250ml/min

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

280-161449 Waybill



ORIGIN ID:BNOA

SHIP DATE: 22APR22
ACTWGT: 49.15 LB
CAD: /SSFE2300
DIMS: 22x14x13 IN

Part # 156297-435-FAMIS EXP 05/21

TO SAMPLE RECEIVING
EUROPHINS TEST AMERICA
4955 YARROW ST

2 of 2

ARVADA CO 80002 (US)
(303) 736-0100
INV:
PO:
REF:
DEPT:

FedEx Express

J221022010502aa

TRK# 0667 8165 7649 4130

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO LAAA

80002
CO-US DEN

RT 964 nul A
ST 0 12:00
1 4130
04,23

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-611880.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161449-1
Address: 10 Hazelwood Drive,	Due Date Requested: 5/12/2022			
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 (280-161449-2)	4/22/22	12:00 Pacific		Water			X	1	
MW-14B (280-161449-3)	4/22/22	12:45 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	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: [signature]	Date/Time: 4/26/22 1530	Company ETADSN	Received by: [signature]
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.7 #1 ICE

Date/Time:	Company
4/27/22 1000	TA

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161449-1

Login Number: 161449
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.	False	Refer to job narrative for details
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: 280-161449-1

Login Number: 161449
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:41 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	4.7 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 2022

Detection Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 3/10/2023 2:46:55 PM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Detection Wells - Apr Oct

JOB NUMBER

280-161462-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

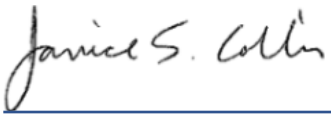
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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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.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
E	Result exceeded calibration range.

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: 280-161462-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161462-1

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 04/25/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 3.2°C and 7.5°C. The cooler temperature was above the recommended temperature of 6.0 C. The client was notified and requested to proceed with all analyses.

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron Method 6010B was detected in the Method Blank below the project established reporting limit. No corrective action is taken for any values in Method Blanks that are below the requested reporting limits.

All 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.

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

General Chemistry

The Continuing Calibration Blank (CCB) was outside control limits for Bicarbonate Alkalinity during Method 2320B analysis. Because the associated samples exhibited detections of Total Alkalinity and Bicarbonate Alkalinity greater than ten times the CCB result, corrective action was deemed unnecessary.

General Comments

Job ID: 280-161462-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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 SCS Engineers

Job ID: 280-161462-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-161462-1

No Detections.

Client Sample ID: MW-20A — Lab Sample ID: 280-161462-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	91000		500		ug/L	1		6010B	Dissolved
Iron	1800	B	30		ug/L	1		6010B	Dissolved
Magnesium	33000		200		ug/L	1		6010B	Dissolved
Manganese	2100		3.0		ug/L	1		6010B	Dissolved
Sodium	33000		1000		ug/L	1		6010B	Dissolved
Chloride	180		0.50		mg/L	1		300.0	Total/NA
Sulfate	6.0		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.22		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	9.0				meq/L	1		SM 1030E	Total/NA
Total Cations	8.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.1				%	1		SM 1030E	Total/NA
Calcium	91				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	33				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.22				mg/L	1		SM 1030E	Total/NA
Chloride	180				mg/L	1		SM 1030E	Total/NA
Sulfate	6.0				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	-1.1				%	1		SM 1030E	Total/NA
Calculated TDS	450				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	1.8				mg/L	1		SM 1030E	Total/NA
Calcium	4.5				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	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	5.1				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.12				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	0.097				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	190		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	510		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.64				SU	1		Field Sampling	Total/NA
Field Conductivity	1017				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.35				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-3.8				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 SCS Engineers

Job ID: 280-161462-1

Client Sample ID: MW-20B

Lab Sample ID: 280-161462-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	64000		500		ug/L	1		6010B	Dissolved
Magnesium	22000		200		ug/L	1		6010B	Dissolved
Manganese	230		3.0		ug/L	1		6010B	Dissolved
Sodium	30000		1000		ug/L	1		6010B	Dissolved
Chloride	66		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.11		0.030		mg/L	1		350.1	Total/NA
Total Anions	6.5				meq/L	1		SM 1030E	Total/NA
Total Cations	6.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.3				%	1		SM 1030E	Total/NA
Calcium	64				mg/L	1		SM 1030E	Total/NA
Magnesium	22				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	30				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.11				mg/L	1		SM 1030E	Total/NA
Chloride	66				mg/L	1		SM 1030E	Total/NA
Sulfate	1.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	230				mg/L	1		SM 1030E	Total/NA
Alkalinity	230				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	320				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	3.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.8				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	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.9				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.025				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	230				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.6				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	^2	10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	340		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.05				SU	1		Field Sampling	Total/NA
Field Conductivity	651.4				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.50				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	131.7				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: 280-161462-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161462-1	TRIP BLANK	Water	04/19/22 07:00	04/25/22 08:50
280-161462-2	MW-20A	Water	04/19/22 10:30	04/25/22 08:50
280-161462-3	MW-20B	Water	04/19/22 09:15	04/25/22 08:50

Method Summary

Client: Waste Management
Job ID: 280-161462-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161462-1

Client Sample ID: TRIP BLANK

Date Collected: 04/19/22 07:00
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-1

Matrix: Water

Method: SW846 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			05/01/22 11:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/01/22 11:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/01/22 11:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/01/22 11:17	1
1,1-Dichloroethane	ND		1.0		ug/L			05/01/22 11:17	1
1,1-Dichloroethene	ND		1.0		ug/L			05/01/22 11:17	1
1,1-Dichloropropene	ND		1.0		ug/L			05/01/22 11:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/01/22 11:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,2-Dichloroethane	ND		1.0		ug/L			05/01/22 11:17	1
1,2-Dichloropropane	ND		1.0		ug/L			05/01/22 11:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
1,3-Dichloropropane	ND		1.0		ug/L			05/01/22 11:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
2,2-Dichloropropane	ND		5.0		ug/L			05/01/22 11:17	1
2-Butanone (MEK)	ND		6.0		ug/L			05/01/22 11:17	1
2-Chlorotoluene	ND		1.0		ug/L			05/01/22 11:17	1
2-Hexanone	ND		5.0		ug/L			05/01/22 11:17	1
4-Chlorotoluene	ND		1.0		ug/L			05/01/22 11:17	1
4-Isopropyltoluene	ND		1.0		ug/L			05/01/22 11:17	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/01/22 11:17	1
Acetone	ND		10		ug/L			05/01/22 11:17	1
Benzene	ND		1.0		ug/L			05/01/22 11:17	1
Bromobenzene	ND		1.0		ug/L			05/01/22 11:17	1
Bromochloromethane	ND		1.0		ug/L			05/01/22 11:17	1
Bromodichloromethane	ND		1.0		ug/L			05/01/22 11:17	1
Bromoform	ND		1.0		ug/L			05/01/22 11:17	1
Bromomethane	ND		2.0		ug/L			05/01/22 11:17	1
Carbon disulfide	ND		2.0		ug/L			05/01/22 11:17	1
Carbon tetrachloride	ND		1.0		ug/L			05/01/22 11:17	1
Chlorobenzene	ND		1.0		ug/L			05/01/22 11:17	1
Chloroethane	ND		2.0		ug/L			05/01/22 11:17	1
Chloroform	ND		1.0		ug/L			05/01/22 11:17	1
Chloromethane	ND		2.0		ug/L			05/01/22 11:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 11:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/01/22 11:17	1
Dibromochloromethane	ND		1.0		ug/L			05/01/22 11:17	1
Dibromomethane	ND		1.0		ug/L			05/01/22 11:17	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/01/22 11:17	1
Ethylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
Hexachlorobutadiene	ND		1.0		ug/L			05/01/22 11:17	1
Isopropylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
Methylene Chloride	ND		5.0		ug/L			05/01/22 11:17	1
Naphthalene	ND		1.0		ug/L			05/01/22 11:17	1
n-Butylbenzene	ND		1.0		ug/L			05/01/22 11:17	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-161462-1

Date Collected: 04/19/22 07:00

Matrix: Water

Date Received: 04/25/22 08:50

Method: SW846 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			05/01/22 11:17	1
sec-Butylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
Styrene	ND		1.0		ug/L			05/01/22 11:17	1
tert-Butylbenzene	ND		1.0		ug/L			05/01/22 11:17	1
Tetrachloroethene	ND		1.0		ug/L			05/01/22 11:17	1
Toluene	ND		1.0		ug/L			05/01/22 11:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 11:17	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/01/22 11:17	1
Trichloroethene	ND		1.0		ug/L			05/01/22 11:17	1
Trichlorofluoromethane	ND		2.0		ug/L			05/01/22 11:17	1
Vinyl chloride	ND		1.0		ug/L			05/01/22 11:17	1
Xylenes (total)	ND		2.0		ug/L			05/01/22 11:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/01/22 11:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*05/01/22 11:17*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/01/22 11:17*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*05/01/22 11:17*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/01/22 11:17*	*1*

Method: SW846 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		04/28/22 16:41	04/29/22 06:53	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:41	04/29/22 06:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*101*		*70 - 130*	*04/28/22 16:41*	*04/29/22 06:53*	*1*

Client Sample ID: MW-20A

Lab Sample ID: 280-161462-2

Date Collected: 04/19/22 10:30

Matrix: Water

Date Received: 04/25/22 08:50

Method: SW846 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			05/01/22 12:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/01/22 12:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/01/22 12:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/01/22 12:42	1
1,1-Dichloroethane	ND		1.0		ug/L			05/01/22 12:42	1
1,1-Dichloroethene	ND		1.0		ug/L			05/01/22 12:42	1
1,1-Dichloropropene	ND		1.0		ug/L			05/01/22 12:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/01/22 12:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/01/22 12:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/01/22 12:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/01/22 12:42	1
1,2-Dichloroethane	ND		1.0		ug/L			05/01/22 12:42	1
1,2-Dichloropropane	ND		1.0		ug/L			05/01/22 12:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/01/22 12:42	1

Client Sample ID: MW-20A
Date Collected: 04/19/22 10:30
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-2
Matrix: Water

Method: SW846 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			05/01/22 12:42	1
1,3-Dichloropropane	ND		1.0		ug/L			05/01/22 12:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/01/22 12:42	1
2,2-Dichloropropane	ND		5.0		ug/L			05/01/22 12:42	1
2-Butanone (MEK)	ND		6.0		ug/L			05/01/22 12:42	1
2-Chlorotoluene	ND		1.0		ug/L			05/01/22 12:42	1
2-Hexanone	ND		5.0		ug/L			05/01/22 12:42	1
4-Chlorotoluene	ND		1.0		ug/L			05/01/22 12:42	1
4-Isopropyltoluene	ND		1.0		ug/L			05/01/22 12:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/01/22 12:42	1
Acetone	ND		10		ug/L			05/01/22 12:42	1
Benzene	ND		1.0		ug/L			05/01/22 12:42	1
Bromobenzene	ND		1.0		ug/L			05/01/22 12:42	1
Bromochloromethane	ND		1.0		ug/L			05/01/22 12:42	1
Bromodichloromethane	ND		1.0		ug/L			05/01/22 12:42	1
Bromoform	ND		1.0		ug/L			05/01/22 12:42	1
Bromomethane	ND		2.0		ug/L			05/01/22 12:42	1
Carbon disulfide	ND		2.0		ug/L			05/01/22 12:42	1
Carbon tetrachloride	ND		1.0		ug/L			05/01/22 12:42	1
Chlorobenzene	ND		1.0		ug/L			05/01/22 12:42	1
Chloroethane	ND		2.0		ug/L			05/01/22 12:42	1
Chloroform	ND		1.0		ug/L			05/01/22 12:42	1
Chloromethane	ND		2.0		ug/L			05/01/22 12:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 12:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/01/22 12:42	1
Dibromochloromethane	ND		1.0		ug/L			05/01/22 12:42	1
Dibromomethane	ND		1.0		ug/L			05/01/22 12:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/01/22 12:42	1
Ethylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
Hexachlorobutadiene	ND		1.0		ug/L			05/01/22 12:42	1
Isopropylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
Methylene Chloride	ND		5.0		ug/L			05/01/22 12:42	1
Naphthalene	ND		1.0		ug/L			05/01/22 12:42	1
n-Butylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
N-Propylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
sec-Butylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
Styrene	ND		1.0		ug/L			05/01/22 12:42	1
tert-Butylbenzene	ND		1.0		ug/L			05/01/22 12:42	1
Tetrachloroethene	ND		1.0		ug/L			05/01/22 12:42	1
Toluene	ND		1.0		ug/L			05/01/22 12:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 12:42	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/01/22 12:42	1
Trichloroethene	ND		1.0		ug/L			05/01/22 12:42	1
Trichlorofluoromethane	ND		2.0		ug/L			05/01/22 12:42	1
Vinyl chloride	ND		1.0		ug/L			05/01/22 12:42	1
Xylenes (total)	ND		2.0		ug/L			05/01/22 12:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/01/22 12:42*	*1*

Client Sample ID: MW-20A

Date Collected: 04/19/22 10:30
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*05/01/22 12:42*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/01/22 12:42*	*1*
Dibromofluoromethane (Surr)	*110*		*77 - 120*		*05/01/22 12:42*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*05/01/22 12:42*	*1*

Method: SW846 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		04/28/22 16:41	04/29/22 07:17	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:41	04/29/22 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*104*		*70 - 130*	*04/28/22 16:41*	*04/29/22 07:17*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**91000**		500		ug/L		05/05/22 09:44	05/06/22 04:04	1
Iron	**1800**	**B**	30		ug/L		05/05/22 09:44	05/06/22 04:04	1
Magnesium	**33000**		200		ug/L		05/05/22 09:44	05/06/22 04:04	1
Manganese	**2100**		3.0		ug/L		05/05/22 09:44	05/06/22 04:04	1
Potassium	ND		500		ug/L		05/05/22 09:44	05/06/22 04:04	1
Sodium	**33000**		1000		ug/L		05/05/22 09:44	05/06/22 04:04	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**9.0**				meq/L			05/10/22 12:17	1
Total Cations (SM 1030E)	**8.8**				meq/L			05/10/22 12:17	1
Percent Difference (SM 1030E)	**-1.1**				%			05/10/22 12:17	1
Calcium (SM 1030E)	**91**				mg/L			05/10/22 12:17	1
Magnesium (SM 1030E)	**33**				mg/L			05/10/22 12:17	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:17	1
Sodium (SM 1030E)	**33**				mg/L			05/10/22 12:17	1
Ammonia as N (SM 1030E)	**0.22**				mg/L			05/10/22 12:17	1
Chloride (SM 1030E)	**180**				mg/L			05/10/22 12:17	1
Sulfate (SM 1030E)	**6.0**				mg/L			05/10/22 12:17	1
Bicarbonate Alkalinity (SM 1030E)	**190**				mg/L			05/10/22 12:17	1
Alkalinity (SM 1030E)	**190**				mg/L			05/10/22 12:17	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:17	1
Anion/Cation Balance (SM 1030E)	**-1.1**				%			05/10/22 12:17	1
Calculated TDS (SM 1030E)	**450**				mg/L			05/10/22 12:17	1
TDS Ratio (SM 1030E)	**1.1**				NONE			05/10/22 12:17	1
Total Dissolved Solids (SM 1030E)	**510**				mg/L			05/10/22 12:17	1
Iron (SM 1030E)	**1.8**				mg/L			05/10/22 12:17	1
Calcium (SM 1030E (meq))	**4.5**				meq/L			05/10/22 12:17	1
Magnesium (SM 1030E (meq))	**2.7**				meq/L			05/10/22 12:17	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:17	1
Sodium (SM 1030E (meq))	**1.4**				meq/L			05/10/22 12:17	1
Ammonia as N (SM 1030E (meq))	**0.016**				meq/L			05/10/22 12:17	1
Chloride (SM 1030E (meq))	**5.1**				meq/L			05/10/22 12:17	1
Sulfate (SM 1030E (meq))	**0.12**				meq/L			05/10/22 12:17	1
Alkalinity (SM 1030E (meq))	**190**				mg/L			05/10/22 12:17	1

Client Sample ID: MW-20A

Date Collected: 04/19/22 10:30
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	3.8				meq/L			05/10/22 12:17	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			05/10/22 12:17	1
Iron (SM 1030E (meq))	0.097				meq/L			05/10/22 12:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	180		0.50		mg/L			05/10/22 03:17	1
Sulfate (EPA 300.0)	6.0		1.0		mg/L			05/10/22 03:17	1
Ammonia as N (EPA 350.1)	0.22		0.030		mg/L			05/09/22 14:16	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/04/22 19:08	1
Total Organic Carbon - Average (SW846 9060)	1.3		1.0		mg/L			05/04/22 20:21	1
Bicarbonate Alkalinity (SM 2320B)	190		10		mg/L			04/28/22 21:17	1
Total Dissolved Solids (SM 2540C)	510		10		mg/L			04/26/22 08:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.64				SU			04/19/22 11:30	1
Field Conductivity	1017				umhos/cm			04/19/22 11:30	1
Field Temperature	10.5				Degrees C			04/19/22 11:30	1
Field Dissolved Oxygen	0.35				mg/L			04/19/22 11:30	1
Field EH/ORP	-3.8				millivolts			04/19/22 11:30	1

Client Sample ID: MW-20B

Date Collected: 04/19/22 09:15
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-3

Matrix: Water

Method: SW846 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			05/01/22 13:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/01/22 13:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/01/22 13:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/01/22 13:04	1
1,1-Dichloroethane	ND		1.0		ug/L			05/01/22 13:04	1
1,1-Dichloroethene	ND		1.0		ug/L			05/01/22 13:04	1
1,1-Dichloropropene	ND		1.0		ug/L			05/01/22 13:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/01/22 13:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,2-Dichloroethane	ND		1.0		ug/L			05/01/22 13:04	1
1,2-Dichloropropane	ND		1.0		ug/L			05/01/22 13:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
1,3-Dichloropropane	ND		1.0		ug/L			05/01/22 13:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
2,2-Dichloropropane	ND		5.0		ug/L			05/01/22 13:04	1
2-Butanone (MEK)	ND		6.0		ug/L			05/01/22 13:04	1
2-Chlorotoluene	ND		1.0		ug/L			05/01/22 13:04	1
2-Hexanone	ND		5.0		ug/L			05/01/22 13:04	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161462-1

Client Sample ID: MW-20B
Date Collected: 04/19/22 09:15
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-3
Matrix: Water

Method: SW846 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			05/01/22 13:04	1
4-Isopropyltoluene	ND		1.0		ug/L			05/01/22 13:04	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/01/22 13:04	1
Acetone	ND		10		ug/L			05/01/22 13:04	1
Benzene	ND		1.0		ug/L			05/01/22 13:04	1
Bromobenzene	ND		1.0		ug/L			05/01/22 13:04	1
Bromochloromethane	ND		1.0		ug/L			05/01/22 13:04	1
Bromodichloromethane	ND		1.0		ug/L			05/01/22 13:04	1
Bromoform	ND		1.0		ug/L			05/01/22 13:04	1
Bromomethane	ND		2.0		ug/L			05/01/22 13:04	1
Carbon disulfide	ND		2.0		ug/L			05/01/22 13:04	1
Carbon tetrachloride	ND		1.0		ug/L			05/01/22 13:04	1
Chlorobenzene	ND		1.0		ug/L			05/01/22 13:04	1
Chloroethane	ND		2.0		ug/L			05/01/22 13:04	1
Chloroform	ND		1.0		ug/L			05/01/22 13:04	1
Chloromethane	ND		2.0		ug/L			05/01/22 13:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 13:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/01/22 13:04	1
Dibromochloromethane	ND		1.0		ug/L			05/01/22 13:04	1
Dibromomethane	ND		1.0		ug/L			05/01/22 13:04	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/01/22 13:04	1
Ethylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
Hexachlorobutadiene	ND		1.0		ug/L			05/01/22 13:04	1
Isopropylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
Methylene Chloride	ND		5.0		ug/L			05/01/22 13:04	1
Naphthalene	ND		1.0		ug/L			05/01/22 13:04	1
n-Butylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
N-Propylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
sec-Butylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
Styrene	ND		1.0		ug/L			05/01/22 13:04	1
tert-Butylbenzene	ND		1.0		ug/L			05/01/22 13:04	1
Tetrachloroethene	ND		1.0		ug/L			05/01/22 13:04	1
Toluene	ND		1.0		ug/L			05/01/22 13:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 13:04	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/01/22 13:04	1
Trichloroethene	ND		1.0		ug/L			05/01/22 13:04	1
Trichlorofluoromethane	ND		2.0		ug/L			05/01/22 13:04	1
Vinyl chloride	ND		1.0		ug/L			05/01/22 13:04	1
Xylenes (total)	ND		2.0		ug/L			05/01/22 13:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/01/22 13:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*05/01/22 13:04*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/01/22 13:04*	*1*
Dibromofluoromethane (Surr)	*91*		*77 - 120*		*05/01/22 13:04*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*05/01/22 13:04*	*1*

Client Sample ID: MW-20B

Date Collected: 04/19/22 09:15
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-3

Matrix: Water

Method: SW846 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		04/28/22 16:41	04/29/22 07:41	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:41	04/29/22 07:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*04/28/22 16:41*	*04/29/22 07:41*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**64000**		500		ug/L		05/05/22 09:44	05/06/22 04:08	1
Iron	ND		30		ug/L		05/05/22 09:44	05/06/22 04:08	1
Magnesium	**22000**		200		ug/L		05/05/22 09:44	05/06/22 04:08	1
Manganese	**230**		3.0		ug/L		05/05/22 09:44	05/06/22 04:08	1
Potassium	ND		500		ug/L		05/05/22 09:44	05/06/22 04:08	1
Sodium	**30000**		1000		ug/L		05/05/22 09:44	05/06/22 04:08	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**6.5**				meq/L			05/10/22 12:17	1
Total Cations (SM 1030E)	**6.3**				meq/L			05/10/22 12:17	1
Percent Difference (SM 1030E)	**-1.3**				%			05/10/22 12:17	1
Calcium (SM 1030E)	**64**				mg/L			05/10/22 12:17	1
Magnesium (SM 1030E)	**22**				mg/L			05/10/22 12:17	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:17	1
Sodium (SM 1030E)	**30**				mg/L			05/10/22 12:17	1
Ammonia as N (SM 1030E)	**0.11**				mg/L			05/10/22 12:17	1
Chloride (SM 1030E)	**66**				mg/L			05/10/22 12:17	1
Sulfate (SM 1030E)	**1.2**				mg/L			05/10/22 12:17	1
Bicarbonate Alkalinity (SM 1030E)	**230**				mg/L			05/10/22 12:17	1
Alkalinity (SM 1030E)	**230**				mg/L			05/10/22 12:17	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:17	1
Anion/Cation Balance (SM 1030E)	**-1.3**				%			05/10/22 12:17	1
Calculated TDS (SM 1030E)	**320**				mg/L			05/10/22 12:17	1
TDS Ratio (SM 1030E)	**1.1**				NONE			05/10/22 12:17	1
Total Dissolved Solids (SM 1030E)	**340**				mg/L			05/10/22 12:17	1
Iron (SM 1030E)	**0.00**				mg/L			05/10/22 12:17	1
Calcium (SM 1030E (meq))	**3.2**				meq/L			05/10/22 12:17	1
Magnesium (SM 1030E (meq))	**1.8**				meq/L			05/10/22 12:17	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:17	1
Sodium (SM 1030E (meq))	**1.3**				meq/L			05/10/22 12:17	1
Ammonia as N (SM 1030E (meq))	**0.0079**				meq/L			05/10/22 12:17	1
Chloride (SM 1030E (meq))	**1.9**				meq/L			05/10/22 12:17	1
Sulfate (SM 1030E (meq))	**0.025**				meq/L			05/10/22 12:17	1
Alkalinity (SM 1030E (meq))	**230**				mg/L			05/10/22 12:17	1
Bicarbonate Alkalinity (SM 1030E (meq))	**4.6**				meq/L			05/10/22 12:17	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:17	1
Iron (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**66**		0.50		mg/L			05/10/22 20:46	1
Sulfate (EPA 300.0)	**1.2**		1.0		mg/L			05/10/22 03:37	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161462-1

Client Sample ID: MW-20B

Date Collected: 04/19/22 09:15
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161462-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.11**		0.030		mg/L			05/09/22 14:26	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/04/22 19:10	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			05/04/22 21:08	1
Bicarbonate Alkalinity (SM 2320B)	**220**	**^2**	10		mg/L			04/28/22 22:07	1
Total Dissolved Solids (SM 2540C)	**340**		10		mg/L			04/26/22 08:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.05**				SU			04/19/22 10:15	1
Field Conductivity	**651.4**				umhos/cm			04/19/22 10:15	1
Field Temperature	**10.8**				Degrees C			04/19/22 10:15	1
Field Dissolved Oxygen	**0.50**				mg/L			04/19/22 10:15	1
Field EH/ORP	**131.7**				millivolts			04/19/22 10:15	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161462-1

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)
280-161462-1	TRIP BLANK	103	98	101	100
280-161462-2	MW-20A	98	98	110	98
280-161462-3	MW-20B	96	97	91	102
LCS 280-573498/1002	Lab Control Sample	104	98	101	100
LCSD 280-573498/5	Lab Control Sample Dup	95	98	93	101
MB 280-573498/9	Method Blank	103	98	100	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)
280-161462-1	TRIP BLANK	101
280-161462-2	MW-20A	104
280-161462-3	MW-20B	109
LCS 280-573322/2-A	Lab Control Sample	112
LCSD 280-573322/3-A	Lab Control Sample Dup	114
MB 280-573322/1-A	Method Blank	112

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573498/9
Matrix: Water
Analysis Batch: 573498

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			05/01/22 10:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/01/22 10:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/01/22 10:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/01/22 10:55	1
1,1-Dichloroethane	ND		1.0		ug/L			05/01/22 10:55	1
1,1-Dichloroethene	ND		1.0		ug/L			05/01/22 10:55	1
1,1-Dichloropropene	ND		1.0		ug/L			05/01/22 10:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/01/22 10:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,2-Dichloroethane	ND		1.0		ug/L			05/01/22 10:55	1
1,2-Dichloropropane	ND		1.0		ug/L			05/01/22 10:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
1,3-Dichloropropane	ND		1.0		ug/L			05/01/22 10:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
2,2-Dichloropropane	ND		5.0		ug/L			05/01/22 10:55	1
2-Butanone (MEK)	ND		6.0		ug/L			05/01/22 10:55	1
2-Chlorotoluene	ND		1.0		ug/L			05/01/22 10:55	1
2-Hexanone	ND		5.0		ug/L			05/01/22 10:55	1
4-Chlorotoluene	ND		1.0		ug/L			05/01/22 10:55	1
4-Isopropyltoluene	ND		1.0		ug/L			05/01/22 10:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/01/22 10:55	1
Acetone	ND		10		ug/L			05/01/22 10:55	1
Benzene	ND		1.0		ug/L			05/01/22 10:55	1
Bromobenzene	ND		1.0		ug/L			05/01/22 10:55	1
Bromochloromethane	ND		1.0		ug/L			05/01/22 10:55	1
Bromodichloromethane	ND		1.0		ug/L			05/01/22 10:55	1
Bromoform	ND		1.0		ug/L			05/01/22 10:55	1
Bromomethane	ND		2.0		ug/L			05/01/22 10:55	1
Carbon disulfide	ND		2.0		ug/L			05/01/22 10:55	1
Carbon tetrachloride	ND		1.0		ug/L			05/01/22 10:55	1
Chlorobenzene	ND		1.0		ug/L			05/01/22 10:55	1
Chloroethane	ND		2.0		ug/L			05/01/22 10:55	1
Chloroform	ND		1.0		ug/L			05/01/22 10:55	1
Chloromethane	ND		2.0		ug/L			05/01/22 10:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 10:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/01/22 10:55	1
Dibromochloromethane	ND		1.0		ug/L			05/01/22 10:55	1
Dibromomethane	ND		1.0		ug/L			05/01/22 10:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/01/22 10:55	1
Ethylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
Hexachlorobutadiene	ND		1.0		ug/L			05/01/22 10:55	1
Isopropylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
Methylene Chloride	ND		5.0		ug/L			05/01/22 10:55	1
Naphthalene	ND		1.0		ug/L			05/01/22 10:55	1

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

Lab Sample ID: MB 280-573498/9
Matrix: Water
Analysis Batch: 573498

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			05/01/22 10:55	1
N-Propylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
sec-Butylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
Styrene	ND		1.0		ug/L			05/01/22 10:55	1
tert-Butylbenzene	ND		1.0		ug/L			05/01/22 10:55	1
Tetrachloroethene	ND		1.0		ug/L			05/01/22 10:55	1
Toluene	ND		1.0		ug/L			05/01/22 10:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/01/22 10:55	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/01/22 10:55	1
Trichloroethene	ND		1.0		ug/L			05/01/22 10:55	1
Trichlorofluoromethane	ND		2.0		ug/L			05/01/22 10:55	1
Vinyl chloride	ND		1.0		ug/L			05/01/22 10:55	1
Xylenes (total)	ND		2.0		ug/L			05/01/22 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*			*N/A*		*05/01/22 10:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*05/01/22 10:55*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/01/22 10:55*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/01/22 10:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/01/22 10:55*	*1*

Lab Sample ID: LCS 280-573498/1002
Matrix: Water
Analysis Batch: 573498

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	27.3		ug/L		109	74 - 121
1,1,1-Trichloroethane	25.0	27.8		ug/L		111	62 - 132
1,1,2,2-Tetrachloroethane	25.0	27.1		ug/L		109	72 - 122
1,1,2-Trichloroethane	25.0	25.9		ug/L		104	72 - 128
1,1-Dichloroethane	25.0	26.6		ug/L		106	66 - 130
1,1-Dichloroethene	25.0	27.1		ug/L		108	62 - 130
1,1-Dichloropropene	25.0	27.6		ug/L		110	64 - 133
1,2,3-Trichlorobenzene	25.0	20.4		ug/L		82	70 - 127
1,2,3-Trichloropropane	25.0	26.9		ug/L		107	74 - 123
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	73 - 124
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	74 - 124
1,2-Dichlorobenzene	25.0	28.2		ug/L		113	77 - 121
1,2-Dichloroethane	25.0	28.8		ug/L		115	61 - 130
1,2-Dichloropropane	25.0	27.1		ug/L		108	68 - 127
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	73 - 127
1,3-Dichlorobenzene	25.0	28.2		ug/L		113	76 - 121
1,3-Dichloropropane	25.0	28.0		ug/L		112	80 - 118
1,4-Dichlorobenzene	25.0	28.0		ug/L		112	76 - 119
2,2-Dichloropropane	25.0	27.4		ug/L		109	57 - 140
2-Butanone (MEK)	100	92.1		ug/L		92	53 - 135

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

Lab Sample ID: LCS 280-573498/1002
Matrix: Water
Analysis Batch: 573498

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	75 - 123
2-Hexanone	100	97.7		ug/L		98	58 - 134
4-Chlorotoluene	25.0	26.5		ug/L		106	74 - 124
4-Isopropyltoluene	25.0	27.2		ug/L		109	74 - 127
4-Methyl-2-pentanone	100	79.4		ug/L		79	56 - 135
Acetone	100	90.6		ug/L		91	50 - 137
Benzene	25.0	26.2		ug/L		105	69 - 126
Bromobenzene	25.0	27.8		ug/L		111	75 - 122
Bromochloromethane	25.0	25.0		ug/L		100	71 - 130
Bromodichloromethane	25.0	26.6		ug/L		107	67 - 126
Bromoform	25.0	24.2		ug/L		97	57 - 125
Bromomethane	25.0	20.1		ug/L		80	25 - 163
Carbon disulfide	25.0	27.1		ug/L		108	56 - 128
Carbon tetrachloride	25.0	26.5		ug/L		106	60 - 133
Chlorobenzene	25.0	27.6		ug/L		111	78 - 118
Chloroethane	25.0	34.2		ug/L		137	52 - 144
Chloroform	25.0	27.5		ug/L		110	68 - 128
Chloromethane	25.0	26.7		ug/L		107	43 - 142
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	69 - 126
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	75 - 120
Dibromochloromethane	25.0	26.6		ug/L		106	71 - 122
Dibromomethane	25.0	26.2		ug/L		105	68 - 129
Dichlorodifluoromethane	25.0	29.3		ug/L		117	26 - 152
Ethylbenzene	25.0	26.7		ug/L		107	76 - 121
Hexachlorobutadiene	25.0	24.7		ug/L		99	69 - 133
Isopropylbenzene	25.0	27.3		ug/L		109	70 - 127
Methylene Chloride	25.0	27.7		ug/L		111	64 - 128
Naphthalene	25.0	19.4		ug/L		78	63 - 129
n-Butylbenzene	25.0	26.8		ug/L		107	69 - 130
N-Propylbenzene	25.0	27.0		ug/L		108	73 - 127
sec-Butylbenzene	25.0	26.8		ug/L		107	72 - 127
Styrene	25.0	26.4		ug/L		106	79 - 120
tert-Butylbenzene	25.0	23.0		ug/L		92	72 - 126
Tetrachloroethene	25.0	27.4		ug/L		110	72 - 127
Toluene	25.0	25.9		ug/L		104	68 - 127
trans-1,2-Dichloroethene	25.0	27.3		ug/L		109	66 - 129
trans-1,3-Dichloropropene	25.0	24.6		ug/L		99	66 - 127
Trichloroethene	25.0	28.6		ug/L		114	70 - 125
Trichlorofluoromethane	25.0	26.4		ug/L		106	57 - 144
Vinyl chloride	25.0	27.2		ug/L		109	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: LCSD 280-573498/5
Matrix: Water
Analysis Batch: 573498

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	26.2		ug/L		105	74 - 121	4	20
1,1,1-Trichloroethane			25.0	24.6		ug/L		99	62 - 132	12	20
1,1,2,2-Tetrachloroethane			25.0	25.5		ug/L		102	72 - 122	6	20
1,1,2-Trichloroethane			25.0	24.7		ug/L		99	72 - 128	5	20
1,1-Dichloroethane			25.0	24.2		ug/L		97	66 - 130	10	20
1,1-Dichloroethene			25.0	25.4		ug/L		102	62 - 130	6	21
1,1-Dichloropropene			25.0	24.8		ug/L		99	64 - 133	11	20
1,2,3-Trichlorobenzene			25.0	21.0		ug/L		84	70 - 127	3	20
1,2,3-Trichloropropane			25.0	25.9		ug/L		104	74 - 123	3	20
1,2,4-Trichlorobenzene			25.0	25.7		ug/L		103	73 - 124	2	20
1,2,4-Trimethylbenzene			25.0	26.0		ug/L		104	74 - 124	4	20
1,2-Dichlorobenzene			25.0	27.8		ug/L		111	77 - 121	1	20
1,2-Dichloroethane			25.0	25.2		ug/L		101	61 - 130	13	20
1,2-Dichloropropane			25.0	25.0		ug/L		100	68 - 127	8	20
1,3,5-Trimethylbenzene			25.0	25.8		ug/L		103	73 - 127	5	20
1,3-Dichlorobenzene			25.0	27.6		ug/L		110	76 - 121	2	20
1,3-Dichloropropane			25.0	27.0		ug/L		108	80 - 118	4	20
1,4-Dichlorobenzene			25.0	27.7		ug/L		111	76 - 119	1	20
2,2-Dichloropropane			25.0	24.0		ug/L		96	57 - 140	13	22
2-Butanone (MEK)			100	89.7		ug/L		90	53 - 135	3	20
2-Chlorotoluene			25.0	26.0		ug/L		104	75 - 123	5	20
2-Hexanone			100	97.2		ug/L		97	58 - 134	1	21
4-Chlorotoluene			25.0	26.0		ug/L		104	74 - 124	2	20
4-Isopropyltoluene			25.0	26.3		ug/L		105	74 - 127	3	20
4-Methyl-2-pentanone			100	76.9		ug/L		77	56 - 135	3	20
Acetone			100	90.1		ug/L		90	50 - 137	1	21
Benzene			25.0	24.5		ug/L		98	69 - 126	7	20
Bromobenzene			25.0	27.2		ug/L		109	75 - 122	2	20
Bromochloromethane			25.0	24.0		ug/L		96	71 - 130	4	20
Bromodichloromethane			25.0	23.9		ug/L		96	67 - 126	11	20
Bromoform			25.0	22.3		ug/L		89	57 - 125	8	20
Bromomethane			25.0	21.9		ug/L		88	25 - 163	9	40
Carbon disulfide			25.0	24.9		ug/L		100	56 - 128	8	20
Carbon tetrachloride			25.0	23.5		ug/L		94	60 - 133	12	20
Chlorobenzene			25.0	27.1		ug/L		108	78 - 118	2	20
Chloroethane			25.0	31.1		ug/L		124	52 - 144	10	30
Chloroform			25.0	24.8		ug/L		99	68 - 128	10	20
Chloromethane			25.0	23.7		ug/L		95	43 - 142	12	20
cis-1,2-Dichloroethene			25.0	24.3		ug/L		97	69 - 126	10	20
cis-1,3-Dichloropropene			25.0	23.0		ug/L		92	75 - 120	5	20
Dibromochloromethane			25.0	24.9		ug/L		100	71 - 122	7	20
Dibromomethane			25.0	24.3		ug/L		97	68 - 129	7	20
Dichlorodifluoromethane			25.0	26.4		ug/L		105	26 - 152	11	21
Ethylbenzene			25.0	25.9		ug/L		103	76 - 121	3	20
Hexachlorobutadiene			25.0	25.5		ug/L		102	69 - 133	3	20
Isopropylbenzene			25.0	26.1		ug/L		104	70 - 127	4	20
Methylene Chloride			25.0	25.6		ug/L		102	64 - 128	8	20
Naphthalene			25.0	20.7		ug/L		83	63 - 129	6	21

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

Lab Sample ID: LCSD 280-573498/5
Matrix: Water
Analysis Batch: 573498

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	25.9		ug/L		104	69 - 130	3	20
N-Propylbenzene			25.0	26.0		ug/L		104	73 - 127	4	20
sec-Butylbenzene			25.0	25.9		ug/L		103	72 - 127	3	20
Styrene			25.0	25.6		ug/L		102	79 - 120	3	20
tert-Butylbenzene			25.0	22.2		ug/L		89	72 - 126	3	20
Tetrachloroethene			25.0	26.3		ug/L		105	72 - 127	4	20
Toluene			25.0	24.3		ug/L		97	68 - 127	6	20
trans-1,2-Dichloroethene			25.0	24.3		ug/L		97	66 - 129	11	20
trans-1,3-Dichloropropene			25.0	22.8		ug/L		91	66 - 127	8	20
Trichloroethene			25.0	28.1		ug/L		112	70 - 125	2	20
Trichlorofluoromethane			25.0	23.7		ug/L		95	57 - 144	11	28
Vinyl chloride			25.0	25.4		ug/L		102	53 - 141	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*93*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-573322/1-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/28/22 16:41	04/28/22 22:56	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:41	04/28/22 22:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*04/28/22 16:41*	*04/28/22 22:56*	*1*

Lab Sample ID: LCS 280-573322/2-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.258		ug/L		103	60 - 140
1,2-Dibromoethane			0.250	0.245		ug/L		98	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-573322/3-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573322

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.257		ug/L		103	60 - 140	0	10
1,2-Dibromoethane			0.250	0.246		ug/L		98	60 - 140	1	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*114*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573815/1-A
Matrix: Water
Analysis Batch: 574159

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/05/22 09:44	05/06/22 02:43	1
Iron	37.3		30		ug/L		05/05/22 09:44	05/06/22 02:43	1
Magnesium	ND		200		ug/L		05/05/22 09:44	05/06/22 02:43	1
Manganese	ND		3.0		ug/L		05/05/22 09:44	05/06/22 02:43	1
Potassium	ND		500		ug/L		05/05/22 09:44	05/06/22 02:43	1
Sodium	ND		1000		ug/L		05/05/22 09:44	05/06/22 02:43	1

Lab Sample ID: LCS 280-573815/2-A
Matrix: Water
Analysis Batch: 574159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573815

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	50900		ug/L		102	90 - 111		
Iron			10000	10400		ug/L		104	89 - 115		
Magnesium			50000	48500		ug/L		97	90 - 113		
Manganese			1000	993		ug/L		99	90 - 110		
Potassium			50000	50600		ug/L		101	89 - 114		
Sodium			50000	51500		ug/L		103	90 - 115		

Lab Sample ID: 280-161736-A-3-B MS
Matrix: Water
Analysis Batch: 574159

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	69000		50000	116000		ug/L		95	48 - 153		
Iron	42000	B	10000	51100	4	ug/L		90	52 - 155		
Magnesium	12000		50000	60000		ug/L		96	62 - 146		
Manganese	190		1000	1160		ug/L		96	79 - 121		
Potassium	3300		50000	54000		ug/L		101	76 - 132		
Sodium	230000		50000	274000	4	ug/L		95	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-161736-A-3-C MSD
Matrix: Water
Analysis Batch: 574159

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	69000		50000	116000		ug/L		94	48 - 153	0	20
Iron	42000	B	10000	50800	4	ug/L		87	52 - 155	1	20
Magnesium	12000		50000	59800		ug/L		95	62 - 146	0	20
Manganese	190		1000	1150		ug/L		96	79 - 121	0	20
Potassium	3300		50000	54300		ug/L		102	76 - 132	1	20
Sodium	230000		50000	272000	4	ug/L		91	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-625182/28
Matrix: Water
Analysis Batch: 625182

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			05/09/22 22:42	1
Sulfate	ND		1.0		mg/L			05/09/22 22:42	1

Lab Sample ID: LCS 480-625182/29
Matrix: Water
Analysis Batch: 625182

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.9		mg/L		102	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: 280-161448-D-4 MS
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.3		mg/L		93	81 - 120
Sulfate	5.1		50.0	53.9		mg/L		97	80 - 120

Lab Sample ID: 280-161448-D-4 MSD
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.6		mg/L		93	81 - 120	0	15
Sulfate	5.1		50.0	54.0		mg/L		98	80 - 120	0	15

Lab Sample ID: 480-197307-J-1 MS
Matrix: Water
Analysis Batch: 625182

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	28		1000	990		mg/L		96	81 - 120
Sulfate	1300		1000	2260		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 480-625351/4
Matrix: Water
Analysis Batch: 625351

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			05/10/22 17:10	1
Sulfate	ND		1.0		mg/L			05/10/22 17:10	1

Lab Sample ID: LCS 480-625351/5
Matrix: Water
Analysis Batch: 625351

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	51.4		mg/L		103	90 - 110
Sulfate	50.0	52.7		mg/L		105	90 - 110

Lab Sample ID: 480-197247-J-7 MS
Matrix: Water
Analysis Batch: 625351

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		100	109		mg/L		96	81 - 120
Sulfate	130		100	224		mg/L		95	80 - 120

Lab Sample ID: 480-197247-J-7 MSD
Matrix: Water
Analysis Batch: 625351

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	13		100	110		mg/L		97	81 - 120	1	15
Sulfate	130		100	220		mg/L		91	80 - 120	2	15

Lab Sample ID: 480-197212-D-12 MS
Matrix: Water
Analysis Batch: 625351

Client Sample ID: Matrix Spike
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	170		50.1	206	E	mg/L		82	81 - 120
Sulfate	14		50.0	64.2		mg/L		101	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574325/18
Matrix: Water
Analysis Batch: 574325

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			05/09/22 12:50	1

Lab Sample ID: MB 280-574325/52
Matrix: Water
Analysis Batch: 574325

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			05/09/22 14:22	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-574325/17
Matrix: Water
Analysis Batch: 574325

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	5.00	4.85		mg/L		97	90 - 110

Lab Sample ID: LCS 280-574325/51
Matrix: Water
Analysis Batch: 574325

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	2.61		mg/L		104	90 - 110

Lab Sample ID: 280-161462-3 MS
Matrix: Water
Analysis Batch: 574325

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
Ammonia as N	0.11		1.00	1.15		mg/L		104	90 - 110

Lab Sample ID: 280-161462-3 MSD
Matrix: Water
Analysis Batch: 574325

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
Ammonia as N	0.11		1.00	1.16		mg/L		104	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573912/61
Matrix: Water
Analysis Batch: 573912

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			05/04/22 18:34	1

Lab Sample ID: LCS 280-573912/60
Matrix: Water
Analysis Batch: 573912

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	5.11		mg/L		102	90 - 110

Lab Sample ID: 280-161791-D-2 MS
Matrix: Water
Analysis Batch: 573912

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	1.8		4.00	5.99		mg/L		104	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-161791-D-2 MSD
Matrix: Water
Analysis Batch: 573912

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	1.8		4.00	5.94		mg/L		103	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-574005/4
Matrix: Water
Analysis Batch: 574005

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			05/04/22 19:53	1

Lab Sample ID: LCS 280-574005/3
Matrix: Water
Analysis Batch: 574005

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: 280-161462-2 MS
Matrix: Water
Analysis Batch: 574005

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
Total Organic Carbon - Average	1.3		25.0	26.1		mg/L		99	88 - 112

Lab Sample ID: 280-161462-2 MSD
Matrix: Water
Analysis Batch: 574005

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
Total Organic Carbon - Average	1.3		25.0	26.0		mg/L		99	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				meq/L			05/10/22 12:14	1
Potassium	0.000				meq/L			05/10/22 12:14	1
Sodium	0.000				meq/L			05/10/22 12:14	1
Ammonia as N	0.000				meq/L			05/10/22 12:14	1
Chloride	0.000				meq/L			05/10/22 12:14	1
Sulfate	0.000				meq/L			05/10/22 12:14	1
Alkalinity	0.000				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				meq/L			05/10/22 12:14	1
Iron	0.000				meq/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573361/58
Matrix: Water
Analysis Batch: 573361

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			04/28/22 20:24	1

Lab Sample ID: 280-161414-A-8 DU
Matrix: Water
Analysis Batch: 573361

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	350			353		mg/L				2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-572980/1
Matrix: Water
Analysis Batch: 572980

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			04/26/22 07:45	1

Lab Sample ID: LCS 280-572980/2
Matrix: Water
Analysis Batch: 572980

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			505	506		mg/L		100	88 - 114		

Lab Sample ID: LCSD 280-572980/3
Matrix: Water
Analysis Batch: 572980

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			505	494		mg/L		98	88 - 114	2	20

Lab Sample ID: 280-161409-A-5 DU
Matrix: Water
Analysis Batch: 572980

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	190			204		mg/L				6	10

GC/MS VOA

Analysis Batch: 573498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-1	TRIP BLANK	Total/NA	Water	8260B	
280-161462-2	MW-20A	Total/NA	Water	8260B	
280-161462-3	MW-20B	Total/NA	Water	8260B	
MB 280-573498/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573498/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573498/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 573322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-1	TRIP BLANK	Total/NA	Water	8011	
280-161462-2	MW-20A	Total/NA	Water	8011	
280-161462-3	MW-20B	Total/NA	Water	8011	
MB 280-573322/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-573322/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-573322/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 573329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-1	TRIP BLANK	Total/NA	Water	8011	573322
280-161462-2	MW-20A	Total/NA	Water	8011	573322
280-161462-3	MW-20B	Total/NA	Water	8011	573322
MB 280-573322/1-A	Method Blank	Total/NA	Water	8011	573322
LCS 280-573322/2-A	Lab Control Sample	Total/NA	Water	8011	573322
LCSD 280-573322/3-A	Lab Control Sample Dup	Total/NA	Water	8011	573322

Metals

Prep Batch: 573815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Dissolved	Water	3005A	
280-161462-3	MW-20B	Dissolved	Water	3005A	
MB 280-573815/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573815/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161736-A-3-B MS	Matrix Spike	Dissolved	Water	3005A	
280-161736-A-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 574159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Dissolved	Water	6010B	573815
280-161462-3	MW-20B	Dissolved	Water	6010B	573815
MB 280-573815/1-A	Method Blank	Total Recoverable	Water	6010B	573815
LCS 280-573815/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573815
280-161736-A-3-B MS	Matrix Spike	Dissolved	Water	6010B	573815
280-161736-A-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573815

General Chemistry

Analysis Batch: 572980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 572980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-3	MW-20B	Total/NA	Water	SM 2540C	
MB 280-572980/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-572980/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-572980/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-161409-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	SM 2320B	
280-161462-3	MW-20B	Total/NA	Water	SM 2320B	
MB 280-573361/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573361/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161414-A-8 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	353.2	
280-161462-3	MW-20B	Total/NA	Water	353.2	
MB 280-573912/61	Method Blank	Total/NA	Water	353.2	
LCS 280-573912/60	Lab Control Sample	Total/NA	Water	353.2	
280-161791-D-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-161791-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 574005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	9060	
280-161462-3	MW-20B	Total/NA	Water	9060	
MB 280-574005/4	Method Blank	Total/NA	Water	9060	
LCS 280-574005/3	Lab Control Sample	Total/NA	Water	9060	
280-161462-2 MS	MW-20A	Total/NA	Water	9060	
280-161462-2 MSD	MW-20A	Total/NA	Water	9060	

Analysis Batch: 574325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	350.1	
280-161462-3	MW-20B	Total/NA	Water	350.1	
MB 280-574325/18	Method Blank	Total/NA	Water	350.1	
MB 280-574325/52	Method Blank	Total/NA	Water	350.1	
LCS 280-574325/17	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-574325/51	Lab Control Sample	Total/NA	Water	350.1	
280-161462-3 MS	MW-20B	Total/NA	Water	350.1	
280-161462-3 MSD	MW-20B	Total/NA	Water	350.1	

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	SM 1030E	
280-161462-2	MW-20A	Total/NA	Water	SM 1030E (meq)	
280-161462-3	MW-20B	Total/NA	Water	SM 1030E	
280-161462-3	MW-20B	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

QC Association Summary

Client: Waste Management
Job ID: 280-161462-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

General Chemistry

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	300.0	
280-161462-3	MW-20B	Total/NA	Water	300.0	
MB 480-625182/28	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/29	Lab Control Sample	Total/NA	Water	300.0	
280-161448-D-4 MS	Matrix Spike	Total/NA	Water	300.0	
280-161448-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-197307-J-1 MS	Matrix Spike	Total/NA	Water	300.0	

Analysis Batch: 625351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-3	MW-20B	Total/NA	Water	300.0	
MB 480-625351/4	Method Blank	Total/NA	Water	300.0	
LCS 480-625351/5	Lab Control Sample	Total/NA	Water	300.0	
480-197212-D-12 MS	Matrix Spike	Dissolved	Water	300.0	
480-197247-J-7 MS	Matrix Spike	Total/NA	Water	300.0	
480-197247-J-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161462-2	MW-20A	Total/NA	Water	Field Sampling	
280-161462-3	MW-20B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161462-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-161462-1

Date Collected: 04/19/22 07:00

Matrix: Water

Date Received: 04/25/22 08:50

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	573498	05/01/22 11:17	TAW	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	573322	04/28/22 16:41	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 06:53	KSA	EET DEN

Client Sample ID: MW-20A

Lab Sample ID: 280-161462-2

Date Collected: 04/19/22 10:30

Matrix: Water

Date Received: 04/25/22 08:50

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	573498	05/01/22 12:42	TAW	EET DEN
Total/NA	Prep	8011			34.8 mL	35 mL	573322	04/28/22 16:41	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 07:17	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573815	05/05/22 09:44	MAB	EET DEN
Dissolved	Analysis	6010B		1			574159	05/06/22 04:04	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 03:17	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 14:16	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 19:08	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 20:21	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:17	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:17	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 21:17	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/19/22 11:30	TJ	EET DEN

Client Sample ID: MW-20B

Lab Sample ID: 280-161462-3

Date Collected: 04/19/22 09:15

Matrix: Water

Date Received: 04/25/22 08:50

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	573498	05/01/22 13:04	TAW	EET DEN
Total/NA	Prep	8011			35.1 mL	35 mL	573322	04/28/22 16:41	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 07:41	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573815	05/05/22 09:44	MAB	EET DEN
Dissolved	Analysis	6010B		1			574159	05/06/22 04:08	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 03:37	IMZ	EET BUF
Total/NA	Analysis	300.0		1			625351	05/10/22 20:46	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 14:26	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 19:10	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 21:08	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:17	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:17	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 22:07	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161462-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-20B
Lab Sample ID: 280-161462-3

Date Collected: 04/19/22 09:15
Matrix: Water

Date Received: 04/25/22 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			572963	04/19/22 10:15	TJ	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET 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:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-16508-865.1
Client Contact:	Phone:	E-Mail: Betsy.Sara@Eurofinset.com		Page: Page 1 of 1
Company: Waste Management				Job #:

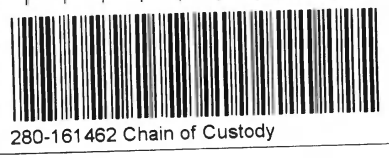
Address: 13469 SW Highway 18	Due Date Requested:	Analysis Requested
City: McMinnville	TAT Requested (days):	
State, Zip: OR, 97128		
Phone:	PO #:	
Email:	WO #:	
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786	
Site: Oregon	SSOW#:	

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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	4/19/22	0700	G	W						X	X			8	
MW-20A	4/19/22	1030	G	W	X		X	X	X	X	X	X	X	10	



Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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
	4/21/22 @ 1630	SCS		04/25/2022 0810	EPA 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: 7.4 CF +0.1 IR +1.2 3.1

3/10/2023

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
Address: 13469 SW Highway 18
City: McMinnville
State, Zip: OR, 97128
Phone:
Email:
Project Name: 1003|Riverbend Landfill SCS Engineers
Event Desc: Annual MW-20B - Apr
Site: Oregon

Due Date Requested:
TAT Requested (days):
PO #:
WO #:
Project #: 28002786
SSOW#:

Job #:

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:		X	X	N	D	S	A	R	N		
MW-20B	4/19/22	0915	G	W	X		X	X	X	X	X	X	10	
TB1	4/19/22	0700	G	W						X	X		2	

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: 4/21/2022 @ 1630	Company SCS	Received by:	Date/Time: 04/22/2022 0850	Company GEL
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: 7.4 CF +0.1 IR +3.1 = 3.1

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3/10/2023

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) 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)
4/17/22	07:41	23.60	.	2.87	.	20.87	X 1	3.37
/ /	:	.	.	.	.		X 3	10.17

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	4/19/22	10:30	F	3	(40 ml)	(HCl)	(YES)	NO		
VOA Glass	4/19/22	10:30	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/19/22	10:30	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/19/22	10:30	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	4/19/22	10:30	F	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

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)
YELLOW - Glass	(COD) (TOC) (NH_3) (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 (0948)	0.00	6.30	98.2	1603.0	10.5	4.51	2.71	c/c
1	F (0956)	2.30	6.58	40.2	1012.0	10.5	6.56	0.39	very tan/cloudy
2	F (1002)	5.0	6.64	17.7	1017.0	10.5	8.60	0.37	tan/clear
3	F (1070)	10.20	6.65	-0.04	1017.0	10.5	10.42	0.32	c/c
4	F (1072)	11.0	6.63	-2.0	1017.0	10.5	10.82	0.36	c/c
5	F (1074)	12.0	6.67	-4.1	1017.0	10.5	10.82	0.34	c/c
6	F (1076)	12.9	6.64	-3.8	1017.0	10.5	10.82	0.35	c/c

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

Standard Purge 9/11/20 PSI ~ 1L/min c/c = clear/colorless

SAMPLER: Edan Taylor
(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 . ° 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)
4/19/22	8:31	37.85	.	1.56	.	36.29	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	4/19/22	9:15	F	3	40 ml HCl	YES	NO		
VOA Glass	4/19/22	9:15	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	4/19/22	9:15	F	2	250, 500, 1L None	YES	NO	NA	
Yellow Glass	4/19/22	9:15	F	1	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	4/19/22	9:15	F	1	250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

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)
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:

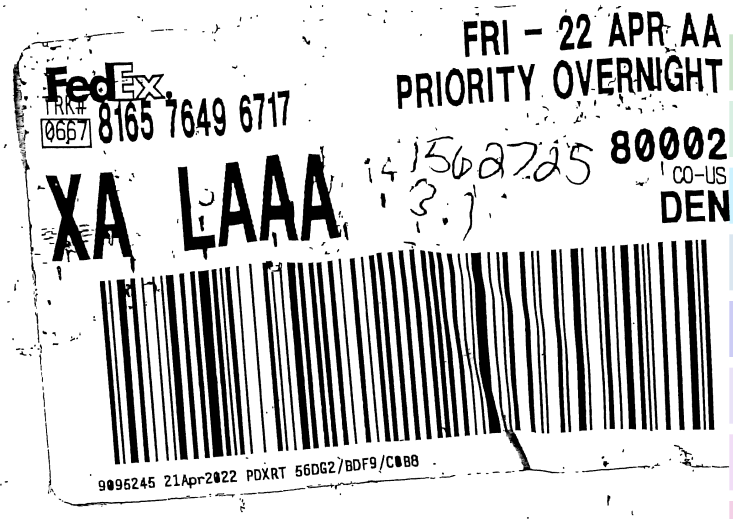
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	F 0851	0.00	5.82	184.6	658.2	10.3	1.56	11.2	C/C
1	F 0859	0.75	6.98	140.8	653.0	10.7	1.58	0.58	C/C
2	F 0901	0.95	7.01	139.6	651.5	10.8	1.58	0.52	C/C
3	F 0903	1.15	7.05	129.4	651.4	10.8	1.59	0.53	C/C
4	F 0905	1.35	7.01	134.6	651.4	10.8	1.59	0.54	C/C
5	F 0907	1.55	7.03	132.9	651.4	10.8	1.59	0.54	C/C
6	F 0909	1.65	7.05	131.7	651.4	10.8	1.59	0.50	C/C

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

low flow purge method 20/10/20 PSI ~ 250 mL/min C/C = clear/colorless

SAMPLER: Edan Taylor (PRINTED NAME) (SIGNATURE)

ORIGIN ID:PDXA
SHIP DATE: 21APR22
ACTWGT: 52.00 LB
CAD: 7SSFE2300
DIMS: 24x14x14 IN
TO SAMPLE RECEIVING
EUROFINS TESTAMERICA - DENVER
4955 YARROW ST
ARVADA CO 800
(US)
(303) 736-0100
INV:
PO:
Eurofins
Environment Testing
TestAmerica
1562723
FedEx
Express
FRI - 22 APR 10:30A
PRIORITY OVERNIGHT
TRK# 0667 8165 7649 6706
AHS
80002
CO-US DEN
XA LAAA
280-161462 Waybill
74


FedEx
TRK# 0667 8165 7649 6717
FRI - 22 APR AA
PRIORITY OVERNIGHT
XA LAAA
80002
CO-US
DEN
9096245 21Apr2022 PDXRT 56DG2/BDF9/C0B8

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-611883.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161462-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/15/2022			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 28002786			
Project Name: 1003|Riverbend Landfill SCS Engineers	SSOW#:			
Site: 1003|Riverbend Landfill				

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 (280-161462-2)	4/19/22	10:30 Pacific		Water			X	1	
MW-20B (280-161462-3)	4/19/22	09:15 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: [signature]	Date/Time: 4/26/22 1530	Company: EFAD&N	Received by: [signature] Date/Time: 4/28/22 1000 Company: TVA
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: 4.7 # ICE

Ver: 06/08/2021

3/10/2023

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161462-1

Login Number: 161462
List Number: 1
Creator: Kazenga, Oliver M

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.	False	Refer to job narrative for details
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: 280-161462-1

Login Number: 161462
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:40 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	4.7 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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 3/10/2023 2:35:57 PM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Detection Wells - Apr Oct

JOB NUMBER

280-161448-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

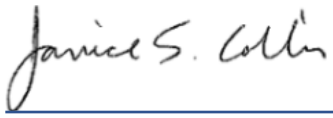
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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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: 280-161448-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161448-1

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 04/23/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 1.1°C and 2.7°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 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
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Job ID: 280-161448-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Phone: 716-691-2600

Detection Summary

Client: Waste Management
Job ID: 280-161448-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB3 — Lab Sample ID: 280-161448-1

No Detections.

Client Sample ID: MW-19A — Lab Sample ID: 280-161448-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	33000		500		ug/L	1		6010B	Dissolved
Iron	310		30		ug/L	1		6010B	Dissolved
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Manganese	190		3.0		ug/L	1		6010B	Dissolved
Potassium	1400		500		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	22		0.50		mg/L	1		300.0	Total/NA
Sulfate	5.1		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.039		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.12		0.050		mg/L	1		353.2	Total/NA
Total Anions	3.3				meq/L	1		SM 1030E	Total/NA
Total Cations	3.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.9				%	1		SM 1030E	Total/NA
Calcium	33				mg/L	1		SM 1030E	Total/NA
Magnesium	11				mg/L	1		SM 1030E	Total/NA
Potassium	1.4				mg/L	1		SM 1030E	Total/NA
Sodium	11				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.039				mg/L	1		SM 1030E	Total/NA
Chloride	22				mg/L	1		SM 1030E	Total/NA
Sulfate	5.1				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	0.12				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.9				%	1		SM 1030E	Total/NA
Calculated TDS	160				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	0.31				mg/L	1		SM 1030E	Total/NA
Calcium	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.91				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.036				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0028				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.62				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.11				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	0.0086				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.017				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10		mg/L	1		SM 2540C	Total/NA
Field pH	7.42				SU	1		Field Sampling	Total/NA
Field Conductivity	341.4				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.78				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-60.6				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 SCS Engineers

Job ID: 280-161448-1

Client Sample ID: FB4 — Lab Sample ID: 280-161448-3

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: DUP4 — Lab Sample ID: 280-161448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	34000		500		ug/L	1		6010B	Dissolved
Iron	360		30		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved
Manganese	200		3.0		ug/L	1		6010B	Dissolved
Potassium	1100		500		ug/L	1		6010B	Dissolved
Sodium	11000		1000		ug/L	1		6010B	Dissolved
Chloride	22		0.50		mg/L	1		300.0	Total/NA
Sulfate	5.1		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.12		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	3.3				meq/L	1		SM 1030E	Total/NA
Total Cations	3.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.9				%	1		SM 1030E	Total/NA
Calcium	34				mg/L	1		SM 1030E	Total/NA
Magnesium	12				mg/L	1		SM 1030E	Total/NA
Potassium	1.1				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

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP4 (Continued)

Lab Sample ID: 280-161448-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Chloride	22				mg/L	1		SM 1030E	Total/NA
Sulfate	5.1				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	0.12				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.9				%	1		SM 1030E	Total/NA
Calculated TDS	160				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	0.36				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	0.028				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	0.62				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.11				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	0.0086				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.019				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161448-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161448-1	TB3	Water	04/22/22 07:00	04/23/22 11:25
280-161448-2	MW-19A	Water	04/22/22 09:25	04/23/22 11:25
280-161448-3	FB4	Water	04/22/22 09:10	04/23/22 11:25
280-161448-4	DUP4	Water	04/22/22 09:30	04/23/22 11:25

Method Summary

Client: Waste Management
Job ID: 280-161448-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

Client Sample ID: TB3
Date Collected: 04/22/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-1
Matrix: Water

Method: SW846 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			05/05/22 09:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 09:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 09:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 09:50	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 09:50	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 09:50	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 09:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 09:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 09:50	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 09:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 09:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 09:50	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 09:50	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 09:50	1
2-Hexanone	ND		5.0		ug/L			05/05/22 09:50	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 09:50	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 09:50	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 09:50	1
Acetone	ND		10		ug/L			05/05/22 09:50	1
Benzene	ND		1.0		ug/L			05/05/22 09:50	1
Bromobenzene	ND		1.0		ug/L			05/05/22 09:50	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 09:50	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 09:50	1
Bromoform	ND		1.0		ug/L			05/05/22 09:50	1
Bromomethane	ND		2.0		ug/L			05/05/22 09:50	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 09:50	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 09:50	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 09:50	1
Chloroethane	ND		2.0		ug/L			05/05/22 09:50	1
Chloroform	ND		1.0		ug/L			05/05/22 09:50	1
Chloromethane	ND		2.0		ug/L			05/05/22 09:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 09:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 09:50	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 09:50	1
Dibromomethane	ND		1.0		ug/L			05/05/22 09:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 09:50	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 09:50	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 09:50	1
Naphthalene	ND		1.0		ug/L			05/05/22 09:50	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 09:50	1

Client Sample ID: TB3

Lab Sample ID: 280-161448-1

Date Collected: 04/22/22 07:00

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 09:50	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
Styrene	ND		1.0		ug/L			05/05/22 09:50	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 09:50	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 09:50	1
Toluene	ND		1.0		ug/L			05/05/22 09:50	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 09:50	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 09:50	1
Trichloroethene	ND		1.0		ug/L			05/05/22 09:50	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 09:50	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 09:50	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 09:50	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 09:50*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/05/22 09:50*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/05/22 09:50*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/05/22 09:50*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*05/05/22 09:50*	*1*

Method: SW846 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		05/06/22 17:04	05/07/22 02:02	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*106*		*70 - 130*	*05/06/22 17:04*	*05/07/22 02:02*	*1*

Client Sample ID: MW-19A

Lab Sample ID: 280-161448-2

Date Collected: 04/22/22 09:25

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 12:41	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 12:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 12:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 12:41	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 12:41	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 12:41	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 12:41	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 12:41	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 12:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 12:41	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 12:41	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 12:41	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 12:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 12:41	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

Client Sample ID: MW-19A
Date Collected: 04/22/22 09:25
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-2
Matrix: Water

Method: SW846 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			05/05/22 12:41	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 12:41	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 12:41	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 12:41	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 12:41	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 12:41	1
2-Hexanone	ND		5.0		ug/L			05/05/22 12:41	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 12:41	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 12:41	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 12:41	1
Acetone	ND		10		ug/L			05/05/22 12:41	1
Benzene	ND		1.0		ug/L			05/05/22 12:41	1
Bromobenzene	ND		1.0		ug/L			05/05/22 12:41	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 12:41	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 12:41	1
Bromoform	ND		1.0		ug/L			05/05/22 12:41	1
Bromomethane	ND		2.0		ug/L			05/05/22 12:41	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 12:41	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 12:41	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 12:41	1
Chloroethane	ND		2.0		ug/L			05/05/22 12:41	1
Chloroform	ND		1.0		ug/L			05/05/22 12:41	1
Chloromethane	ND		2.0		ug/L			05/05/22 12:41	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 12:41	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 12:41	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 12:41	1
Dibromomethane	ND		1.0		ug/L			05/05/22 12:41	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 12:41	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 12:41	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 12:41	1
Naphthalene	ND		1.0		ug/L			05/05/22 12:41	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
Styrene	ND		1.0		ug/L			05/05/22 12:41	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 12:41	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 12:41	1
Toluene	ND		1.0		ug/L			05/05/22 12:41	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 12:41	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 12:41	1
Trichloroethene	ND		1.0		ug/L			05/05/22 12:41	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 12:41	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 12:41	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 12:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 12:41*	*1*

Client Sample ID: MW-19A

Date Collected: 04/22/22 09:25
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*05/05/22 12:41*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/05/22 12:41*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*05/05/22 12:41*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/05/22 12:41*	*1*

Method: SW846 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		05/06/22 17:04	05/07/22 02:26	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*05/06/22 17:04*	*05/07/22 02:26*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**33000**		500		ug/L		05/04/22 09:55	05/05/22 11:27	1
Iron	**310**		30		ug/L		05/04/22 09:55	05/05/22 11:27	1
Magnesium	**11000**		200		ug/L		05/04/22 09:55	05/05/22 11:27	1
Manganese	**190**		3.0		ug/L		05/04/22 09:55	05/05/22 11:27	1
Potassium	**1400**		500		ug/L		05/04/22 09:55	05/05/22 11:27	1
Sodium	**11000**		1000		ug/L		05/04/22 09:55	05/05/22 11:27	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.3**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**3.1**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**-3.9**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**33**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**11**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**1.4**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**11**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.039**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**22**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**5.1**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.12**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**-3.9**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**160**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.2**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**190**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**0.31**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**1.6**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**0.91**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.036**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**0.48**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.0028**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.62**				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**0.11**				meq/L			05/10/22 12:14	1
Alkalinity (SM 1030E (meq))	**130**				mg/L			05/10/22 12:14	1

Client Sample ID: MW-19A

Date Collected: 04/22/22 09:25
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	2.6				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	0.0086				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	0.017				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	22		0.50		mg/L			05/10/22 00:20	1
Sulfate (EPA 300.0)	5.1		1.0		mg/L			05/10/22 00:20	1
Ammonia as N (EPA 350.1)	0.039		0.030		mg/L			05/09/22 13:43	1
Nitrate/Nitrite (EPA 353.2)	0.12		0.050		mg/L			05/02/22 18:02	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			05/04/22 21:53	1
Bicarbonate Alkalinity (SM 2320B)	130		10		mg/L			05/03/22 22:52	1
Total Dissolved Solids (SM 2540C)	190		10		mg/L			04/28/22 11:53	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.42				SU			04/22/22 10:25	1
Field Conductivity	341.4				umhos/cm			04/22/22 10:25	1
Field Temperature	11.6				Degrees C			04/22/22 10:25	1
Field Dissolved Oxygen	0.78				mg/L			04/22/22 10:25	1
Field EH/ORP	-60.6				millivolts			04/22/22 10:25	1

Client Sample ID: FB4

Date Collected: 04/22/22 09:10
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-3

Matrix: Water

Method: SW846 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			05/05/22 13:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 13:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 13:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 13:02	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 13:02	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 13:02	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 13:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 13:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 13:02	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 13:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 13:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 13:02	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 13:02	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 13:02	1
2-Hexanone	ND		5.0		ug/L			05/05/22 13:02	1

Client Sample ID: FB4
Date Collected: 04/22/22 09:10
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-3
Matrix: Water

Method: SW846 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			05/05/22 13:02	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 13:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 13:02	1
Acetone	ND		10		ug/L			05/05/22 13:02	1
Benzene	ND		1.0		ug/L			05/05/22 13:02	1
Bromobenzene	ND		1.0		ug/L			05/05/22 13:02	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 13:02	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 13:02	1
Bromoform	ND		1.0		ug/L			05/05/22 13:02	1
Bromomethane	ND		2.0		ug/L			05/05/22 13:02	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 13:02	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 13:02	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 13:02	1
Chloroethane	ND		2.0		ug/L			05/05/22 13:02	1
Chloroform	ND		1.0		ug/L			05/05/22 13:02	1
Chloromethane	ND		2.0		ug/L			05/05/22 13:02	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 13:02	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 13:02	1
Dibromomethane	ND		1.0		ug/L			05/05/22 13:02	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 13:02	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 13:02	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 13:02	1
Naphthalene	ND		1.0		ug/L			05/05/22 13:02	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
Styrene	ND		1.0		ug/L			05/05/22 13:02	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 13:02	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 13:02	1
Toluene	ND		1.0		ug/L			05/05/22 13:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:02	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 13:02	1
Trichloroethene	ND		1.0		ug/L			05/05/22 13:02	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 13:02	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 13:02	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 13:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 13:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*		*05/05/22 13:02*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/05/22 13:02*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*05/05/22 13:02*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*05/05/22 13:02*	*1*

Client Sample ID: FB4

Date Collected: 04/22/22 09:10
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-3

Matrix: Water

Method: SW846 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		05/06/22 17:04	05/07/22 02:50	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*106*		*70 - 130*	*05/06/22 17:04*	*05/07/22 02:50*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 11:53	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 11:53	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 11:53	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 11:53	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 11:53	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 11:53	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.00**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**0.00**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**NC**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Alkalinity (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**NC**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**NC**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Alkalinity (SM 1030E (meq))	**0.00**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			05/10/22 00:40	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			05/10/22 00:40	1

Client Sample ID: FB4

Lab Sample ID: 280-161448-3

Date Collected: 04/22/22 09:10

Matrix: Water

Date Received: 04/23/22 11:25

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			05/09/22 13:46	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/02/22 18:04	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			05/04/22 22:09	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 22:58	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			04/28/22 12:14	1

Client Sample ID: DUP4

Lab Sample ID: 280-161448-4

Date Collected: 04/22/22 09:30

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 13:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 13:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 13:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 13:23	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 13:23	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 13:23	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 13:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 13:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 13:23	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 13:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 13:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 13:23	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 13:23	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 13:23	1
2-Hexanone	ND		5.0		ug/L			05/05/22 13:23	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 13:23	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 13:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 13:23	1
Acetone	ND		10		ug/L			05/05/22 13:23	1
Benzene	ND		1.0		ug/L			05/05/22 13:23	1
Bromobenzene	ND		1.0		ug/L			05/05/22 13:23	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 13:23	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 13:23	1
Bromoform	ND		1.0		ug/L			05/05/22 13:23	1
Bromomethane	ND		2.0		ug/L			05/05/22 13:23	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 13:23	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 13:23	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 13:23	1
Chloroethane	ND		2.0		ug/L			05/05/22 13:23	1
Chloroform	ND		1.0		ug/L			05/05/22 13:23	1

Client Sample ID: DUP4

Date Collected: 04/22/22 09:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-4

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0		ug/L			05/05/22 13:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 13:23	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 13:23	1
Dibromomethane	ND		1.0		ug/L			05/05/22 13:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 13:23	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 13:23	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 13:23	1
Naphthalene	ND		1.0		ug/L			05/05/22 13:23	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
Styrene	ND		1.0		ug/L			05/05/22 13:23	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 13:23	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 13:23	1
Toluene	ND		1.0		ug/L			05/05/22 13:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 13:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 13:23	1
Trichloroethene	ND		1.0		ug/L			05/05/22 13:23	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 13:23	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 13:23	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 13:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 13:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*		*05/05/22 13:23*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/05/22 13:23*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*05/05/22 13:23*	*1*
Toluene-d8 (Surr)	*104*		*80 - 125*		*05/05/22 13:23*	*1*

Method: SW846 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		05/06/22 17:04	05/07/22 03:14	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/07/22 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*05/06/22 17:04*	*05/07/22 03:14*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**34000**		500		ug/L		05/04/22 09:55	05/05/22 11:57	1
Iron	**360**		30		ug/L		05/04/22 09:55	05/05/22 11:57	1
Magnesium	**12000**		200		ug/L		05/04/22 09:55	05/05/22 11:57	1
Manganese	**200**		3.0		ug/L		05/04/22 09:55	05/05/22 11:57	1
Potassium	**1100**		500		ug/L		05/04/22 09:55	05/05/22 11:57	1
Sodium	**11000**		1000		ug/L		05/04/22 09:55	05/05/22 11:57	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

Client Sample ID: DUP4

Date Collected: 04/22/22 09:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	3.3				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	3.2				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	-1.9				%			05/10/22 12:14	1
Calcium (SM 1030E)	34				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	12				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	1.1				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	11				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	22				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	5.1				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	130				mg/L			05/10/22 12:14	1
Alkalinity (SM 1030E)	130				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	0.12				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	-1.9				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	160				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	1.2				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	190				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	0.36				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	1.7				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	0.99				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	0.028				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	0.48				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	0.00				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	0.62				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	0.11				meq/L			05/10/22 12:14	1
Alkalinity (SM 1030E (meq))	130				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	2.6				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	0.0086				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	0.019				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	22		0.50		mg/L			05/10/22 01:00	1
Sulfate (EPA 300.0)	5.1		1.0		mg/L			05/10/22 01:00	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			05/09/22 13:48	1
Nitrate/Nitrite (EPA 353.2)	0.12		0.050		mg/L			05/02/22 18:06	1
Total Organic Carbon - Average (SW846 9060)	2.2		1.0		mg/L			05/02/22 17:08	1
Bicarbonate Alkalinity (SM 2320B)	130		10		mg/L			05/05/22 20:57	1
Total Dissolved Solids (SM 2540C)	190		10		mg/L			04/28/22 12:14	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

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)
280-161448-1	TB3	101	97	100	102
280-161448-2	MW-19A	100	98	101	101
280-161448-3	FB4	103	97	101	102
280-161448-4	DUP4	101	98	101	104
LCS 280-573931/4	Lab Control Sample	95	98	97	101
LCSD 280-573931/5	Lab Control Sample Dup	99	97	97	102
MB 280-573931/9	Method Blank	99	97	99	103

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)
280-161448-1	TB3	106
280-161448-2	MW-19A	114
280-161448-3	FB4	106
280-161448-4	DUP4	114
LCS 280-574184/2-A	Lab Control Sample	117
LCSD 280-574184/3-A	Lab Control Sample Dup	117
MB 280-574184/1-A	Method Blank	117

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573931/9
Matrix: Water
Analysis Batch: 573931

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			05/05/22 08:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 08:25	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 08:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 08:25	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 08:25	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 08:25	1
2-Hexanone	ND		5.0		ug/L			05/05/22 08:25	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 08:25	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 08:25	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 08:25	1
Acetone	ND		10		ug/L			05/05/22 08:25	1
Benzene	ND		1.0		ug/L			05/05/22 08:25	1
Bromobenzene	ND		1.0		ug/L			05/05/22 08:25	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Bromoform	ND		1.0		ug/L			05/05/22 08:25	1
Bromomethane	ND		2.0		ug/L			05/05/22 08:25	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 08:25	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 08:25	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 08:25	1
Chloroethane	ND		2.0		ug/L			05/05/22 08:25	1
Chloroform	ND		1.0		ug/L			05/05/22 08:25	1
Chloromethane	ND		2.0		ug/L			05/05/22 08:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 08:25	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 08:25	1
Dibromomethane	ND		1.0		ug/L			05/05/22 08:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 08:25	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 08:25	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 08:25	1
Naphthalene	ND		1.0		ug/L			05/05/22 08:25	1

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

Lab Sample ID: MB 280-573931/9
Matrix: Water
Analysis Batch: 573931

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			05/05/22 08:25	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Styrene	ND		1.0		ug/L			05/05/22 08:25	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 08:25	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 08:25	1
Toluene	ND		1.0		ug/L			05/05/22 08:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 08:25	1
Trichloroethene	ND		1.0		ug/L			05/05/22 08:25	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 08:25	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 08:25	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 08:25	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/05/22 08:25*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*05/05/22 08:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/05/22 08:25*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/05/22 08:25*	*1*
Toluene-d8 (Surr)	*103*		*80 - 125*		*05/05/22 08:25*	*1*

Lab Sample ID: LCS 280-573931/4
Matrix: Water
Analysis Batch: 573931

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	74 - 121
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	62 - 132
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	72 - 122
1,1,2-Trichloroethane	25.0	24.4		ug/L		98	72 - 128
1,1-Dichloroethane	25.0	24.2		ug/L		97	66 - 130
1,1-Dichloroethene	25.0	25.9		ug/L		104	62 - 130
1,1-Dichloropropene	25.0	25.2		ug/L		101	64 - 133
1,2,3-Trichlorobenzene	25.0	21.6		ug/L		86	70 - 127
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	74 - 123
1,2,4-Trichlorobenzene	25.0	21.6		ug/L		86	73 - 124
1,2,4-Trimethylbenzene	25.0	23.8		ug/L		95	74 - 124
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 121
1,2-Dichloroethane	25.0	23.1		ug/L		93	61 - 130
1,2-Dichloropropane	25.0	24.0		ug/L		96	68 - 127
1,3,5-Trimethylbenzene	25.0	24.7		ug/L		99	73 - 127
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	76 - 121
1,3-Dichloropropane	25.0	25.3		ug/L		101	80 - 118
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	76 - 119
2,2-Dichloropropane	25.0	23.5		ug/L		94	57 - 140
2-Butanone (MEK)	100	84.0		ug/L		84	53 - 135

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

Lab Sample ID: LCS 280-573931/4
Matrix: Water
Analysis Batch: 573931

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	24.5		ug/L		98	75 - 123
2-Hexanone	100	87.9		ug/L		88	58 - 134
4-Chlorotoluene	25.0	24.4		ug/L		98	74 - 124
4-Isopropyltoluene	25.0	24.1		ug/L		96	74 - 127
4-Methyl-2-pentanone	100	83.9		ug/L		84	56 - 135
Acetone	100	87.5		ug/L		88	50 - 137
Benzene	25.0	24.2		ug/L		97	69 - 126
Bromobenzene	25.0	24.1		ug/L		96	75 - 122
Bromochloromethane	25.0	25.0		ug/L		100	71 - 130
Bromodichloromethane	25.0	23.5		ug/L		94	67 - 126
Bromoform	25.0	23.1		ug/L		93	57 - 125
Bromomethane	25.0	25.6		ug/L		103	25 - 163
Carbon disulfide	25.0	26.3		ug/L		105	56 - 128
Carbon tetrachloride	25.0	24.8		ug/L		99	60 - 133
Chlorobenzene	25.0	24.7		ug/L		99	78 - 118
Chloroethane	25.0	26.6		ug/L		106	52 - 144
Chloroform	25.0	24.3		ug/L		97	68 - 128
Chloromethane	25.0	23.1		ug/L		92	43 - 142
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	69 - 126
cis-1,3-Dichloropropene	25.0	23.8		ug/L		95	75 - 120
Dibromochloromethane	25.0	24.6		ug/L		99	71 - 122
Dibromomethane	25.0	24.2		ug/L		97	68 - 129
Dichlorodifluoromethane	25.0	23.5		ug/L		94	26 - 152
Ethylbenzene	25.0	24.8		ug/L		99	76 - 121
Hexachlorobutadiene	25.0	23.1		ug/L		92	69 - 133
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 127
Methylene Chloride	25.0	25.7		ug/L		103	64 - 128
Naphthalene	25.0	20.7		ug/L		83	63 - 129
n-Butylbenzene	25.0	24.7		ug/L		99	69 - 130
N-Propylbenzene	25.0	25.2		ug/L		101	73 - 127
sec-Butylbenzene	25.0	25.4		ug/L		102	72 - 127
Styrene	25.0	23.8		ug/L		95	79 - 120
tert-Butylbenzene	25.0	24.5		ug/L		98	72 - 126
Tetrachloroethene	25.0	24.9		ug/L		100	72 - 127
Toluene	25.0	25.8		ug/L		103	68 - 127
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	66 - 129
trans-1,3-Dichloropropene	25.0	22.6		ug/L		90	66 - 127
Trichloroethene	25.0	24.6		ug/L		99	70 - 125
Trichlorofluoromethane	25.0	25.8		ug/L		103	57 - 144
Vinyl chloride	25.0	26.0		ug/L		104	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

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

Lab Sample ID: LCSD 280-573931/5
Matrix: Water
Analysis Batch: 573931

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	74 - 121	2	20
1,1,1-Trichloroethane			25.0	23.7		ug/L		95	62 - 132	3	20
1,1,2,2-Tetrachloroethane			25.0	23.9		ug/L		96	72 - 122	3	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		98	72 - 128	0	20
1,1-Dichloroethane			25.0	23.4		ug/L		94	66 - 130	3	20
1,1-Dichloroethene			25.0	25.0		ug/L		100	62 - 130	3	21
1,1-Dichloropropene			25.0	24.3		ug/L		97	64 - 133	4	20
1,2,3-Trichlorobenzene			25.0	21.8		ug/L		87	70 - 127	1	20
1,2,3-Trichloropropane			25.0	25.1		ug/L		100	74 - 123	2	20
1,2,4-Trichlorobenzene			25.0	21.8		ug/L		87	73 - 124	1	20
1,2,4-Trimethylbenzene			25.0	22.8		ug/L		91	74 - 124	4	20
1,2-Dichlorobenzene			25.0	24.3		ug/L		97	77 - 121	2	20
1,2-Dichloroethane			25.0	23.0		ug/L		92	61 - 130	1	20
1,2-Dichloropropane			25.0	23.7		ug/L		95	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	23.8		ug/L		95	73 - 127	4	20
1,3-Dichlorobenzene			25.0	23.2		ug/L		93	76 - 121	3	20
1,3-Dichloropropane			25.0	25.5		ug/L		102	80 - 118	1	20
1,4-Dichlorobenzene			25.0	24.3		ug/L		97	76 - 119	1	20
2,2-Dichloropropane			25.0	22.5		ug/L		90	57 - 140	4	22
2-Butanone (MEK)			100	84.2		ug/L		84	53 - 135	0	20
2-Chlorotoluene			25.0	23.8		ug/L		95	75 - 123	3	20
2-Hexanone			100	88.7		ug/L		89	58 - 134	1	21
4-Chlorotoluene			25.0	23.4		ug/L		94	74 - 124	4	20
4-Isopropyltoluene			25.0	23.1		ug/L		92	74 - 127	4	20
4-Methyl-2-pentanone			100	84.8		ug/L		85	56 - 135	1	20
Acetone			100	89.6		ug/L		90	50 - 137	2	21
Benzene			25.0	23.7		ug/L		95	69 - 126	2	20
Bromobenzene			25.0	23.4		ug/L		94	75 - 122	3	20
Bromochloromethane			25.0	24.2		ug/L		97	71 - 130	3	20
Bromodichloromethane			25.0	23.1		ug/L		92	67 - 126	2	20
Bromoform			25.0	23.2		ug/L		93	57 - 125	0	20
Bromomethane			25.0	25.5		ug/L		102	25 - 163	1	40
Carbon disulfide			25.0	25.5		ug/L		102	56 - 128	3	20
Carbon tetrachloride			25.0	24.0		ug/L		96	60 - 133	4	20
Chlorobenzene			25.0	24.3		ug/L		97	78 - 118	1	20
Chloroethane			25.0	25.4		ug/L		102	52 - 144	4	30
Chloroform			25.0	23.9		ug/L		96	68 - 128	2	20
Chloromethane			25.0	22.3		ug/L		89	43 - 142	3	20
cis-1,2-Dichloroethene			25.0	23.2		ug/L		93	69 - 126	2	20
cis-1,3-Dichloropropene			25.0	23.5		ug/L		94	75 - 120	1	20
Dibromochloromethane			25.0	24.5		ug/L		98	71 - 122	1	20
Dibromomethane			25.0	23.4		ug/L		94	68 - 129	3	20
Dichlorodifluoromethane			25.0	20.9		ug/L		84	26 - 152	12	21
Ethylbenzene			25.0	24.0		ug/L		96	76 - 121	3	20
Hexachlorobutadiene			25.0	22.9		ug/L		91	69 - 133	1	20
Isopropylbenzene			25.0	23.8		ug/L		95	70 - 127	4	20
Methylene Chloride			25.0	25.7		ug/L		103	64 - 128	0	20
Naphthalene			25.0	20.9		ug/L		84	63 - 129	1	21

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

Lab Sample ID: LCSD 280-573931/5
Matrix: Water
Analysis Batch: 573931

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	24.3		ug/L		97	69 - 130	1	20
N-Propylbenzene			25.0	24.3		ug/L		97	73 - 127	4	20
sec-Butylbenzene			25.0	24.6		ug/L		98	72 - 127	3	20
Styrene			25.0	23.5		ug/L		94	79 - 120	1	20
tert-Butylbenzene			25.0	23.7		ug/L		95	72 - 126	3	20
Tetrachloroethene			25.0	24.4		ug/L		98	72 - 127	2	20
Toluene			25.0	25.3		ug/L		101	68 - 127	2	20
trans-1,2-Dichloroethene			25.0	25.7		ug/L		103	66 - 129	2	20
trans-1,3-Dichloropropene			25.0	22.4		ug/L		90	66 - 127	1	20
Trichloroethene			25.0	24.5		ug/L		98	70 - 125	0	20
Trichlorofluoromethane			25.0	23.3		ug/L		93	57 - 144	10	28
Vinyl chloride			25.0	24.0		ug/L		96	53 - 141	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*102*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-574184/1-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/06/22 17:04	05/06/22 23:39	1
1,2-Dibromoethane	ND		0.050		ug/L		05/06/22 17:04	05/06/22 23:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*05/06/22 17:04*	*05/06/22 23:39*	*1*

Lab Sample ID: LCS 280-574184/2-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574184

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.253		ug/L		101	60 - 140
1,2-Dibromoethane			0.250	0.272		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*117*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-574184/3-A
Matrix: Water
Analysis Batch: 574190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 574184

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.250		ug/L		100	60 - 140	1	10
1,2-Dibromoethane			0.250	0.270		ug/L		108	60 - 140	1	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*117*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573718/1-A
Matrix: Water
Analysis Batch: 574034

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 09:47	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 09:47	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 09:47	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 09:47	1

Lab Sample ID: LCS 280-573718/2-A
Matrix: Water
Analysis Batch: 574115

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	49400		ug/L		99	90 - 111		
Iron			10000	9800		ug/L		98	89 - 115		
Magnesium			50000	48500		ug/L		97	90 - 113		
Manganese			1000	960		ug/L		96	90 - 110		
Potassium			50000	49300		ug/L		99	89 - 114		
Sodium			50000	49600		ug/L		99	90 - 115		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-625182/28
Matrix: Water
Analysis Batch: 625182

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			05/09/22 22:42	1
Sulfate	ND		1.0		mg/L			05/09/22 22:42	1

Lab Sample ID: LCS 480-625182/29
Matrix: Water
Analysis Batch: 625182

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.1	50.9		mg/L		102	90 - 110		
Sulfate			50.0	52.1		mg/L		104	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-161448-4 MS
Matrix: Water
Analysis Batch: 625182

Client Sample ID: DUP4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	22		50.1	68.3		mg/L		93	81 - 120
Sulfate	5.1		50.0	53.9		mg/L		97	80 - 120

Lab Sample ID: 280-161448-4 MSD
Matrix: Water
Analysis Batch: 625182

Client Sample ID: DUP4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22		50.1	68.6		mg/L		93	81 - 120	0	15
Sulfate	5.1		50.0	54.0		mg/L		98	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574325/18
Matrix: Water
Analysis Batch: 574325

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			05/09/22 12:50	1

Lab Sample ID: LCS 280-574325/17
Matrix: Water
Analysis Batch: 574325

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	5.00	4.85		mg/L		97	90 - 110

Lab Sample ID: 280-161446-C-4 MS
Matrix: Water
Analysis Batch: 574325

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	1.05		mg/L		105	90 - 110

Lab Sample ID: 280-161446-C-4 MSD
Matrix: Water
Analysis Batch: 574325

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	1.05		mg/L		105	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573635/22
Matrix: Water
Analysis Batch: 573635

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			05/02/22 16:56	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-573635/21
Matrix: Water
Analysis Batch: 573635

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	5.17		mg/L		103	90 - 110		

Lab Sample ID: 280-161417-B-2 MS
Matrix: Water
Analysis Batch: 573635

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	0.065		4.00	4.26		mg/L		105	90 - 110		

Lab Sample ID: 280-161417-B-2 MSD
Matrix: Water
Analysis Batch: 573635

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	0.065		4.00	4.29		mg/L		106	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573694/4
Matrix: Water
Analysis Batch: 573694

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			05/02/22 15:25	1

Lab Sample ID: LCS 280-573694/3
Matrix: Water
Analysis Batch: 573694

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	24.6		mg/L		98	88 - 112		

Lab Sample ID: 280-161491-A-1 MS
Matrix: Water
Analysis Batch: 573694

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	27.2		mg/L		102	88 - 112		

Lab Sample ID: 280-161491-A-1 MSD
Matrix: Water
Analysis Batch: 573694

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	27.5		mg/L		103	88 - 112	1	15

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 280-574005/4
Matrix: Water
Analysis Batch: 574005

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			05/04/22 19:53	1

Lab Sample ID: LCS 280-574005/3
Matrix: Water
Analysis Batch: 574005

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: 280-161462-B-2 MS
Matrix: Water
Analysis Batch: 574005

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	1.3		25.0	26.1		mg/L		99	88 - 112		

Lab Sample ID: 280-161462-B-2 MSD
Matrix: Water
Analysis Batch: 574005

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	1.3		25.0	26.0		mg/L		99	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				meq/L			05/10/22 12:14	1
Potassium	0.000				meq/L			05/10/22 12:14	1
Sodium	0.000				meq/L			05/10/22 12:14	1
Ammonia as N	0.000				meq/L			05/10/22 12:14	1
Chloride	0.000				meq/L			05/10/22 12:14	1
Sulfate	0.000				meq/L			05/10/22 12:14	1
Alkalinity	0.000				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				meq/L			05/10/22 12:14	1
Iron	0.000				meq/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573792/58
Matrix: Water
Analysis Batch: 573792

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			05/03/22 18:49	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-574081/32
Matrix: Water
Analysis Batch: 574081

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			05/05/22 16:09	1

Lab Sample ID: MB 280-574081/58
Matrix: Water
Analysis Batch: 574081

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			05/05/22 19:22	1

Lab Sample ID: MB 280-574081/6
Matrix: Water
Analysis Batch: 574081

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			05/05/22 13:20	1

Lab Sample ID: 280-161446-A-5 DU
Matrix: Water
Analysis Batch: 574081

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573280/1
Matrix: Water
Analysis Batch: 573280

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			04/28/22 11:53	1

Lab Sample ID: LCS 280-573280/2
Matrix: Water
Analysis Batch: 573280

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			505	493		mg/L		98	88 - 114		

Lab Sample ID: 280-161448-2 DU
Matrix: Water
Analysis Batch: 573280

Client Sample ID: MW-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	190			190		mg/L				1	10

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 280-573282/1
Matrix: Water
Analysis Batch: 573282

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			04/28/22 11:57	1

Lab Sample ID: LCS 280-573282/2
Matrix: Water
Analysis Batch: 573282

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			505	491		mg/L		97	88 - 114		

Lab Sample ID: 280-161448-3 DU
Matrix: Water
Analysis Batch: 573282

Client Sample ID: FB4
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

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

GC/MS VOA

Analysis Batch: 573931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-1	TB3	Total/NA	Water	8260B	
280-161448-2	MW-19A	Total/NA	Water	8260B	
280-161448-3	FB4	Total/NA	Water	8260B	
280-161448-4	DUP4	Total/NA	Water	8260B	
MB 280-573931/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573931/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573931/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 574184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-1	TB3	Total/NA	Water	8011	
280-161448-2	MW-19A	Total/NA	Water	8011	
280-161448-3	FB4	Total/NA	Water	8011	
280-161448-4	DUP4	Total/NA	Water	8011	
MB 280-574184/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-574184/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-574184/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 574190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-1	TB3	Total/NA	Water	8011	574184
280-161448-2	MW-19A	Total/NA	Water	8011	574184
280-161448-3	FB4	Total/NA	Water	8011	574184
280-161448-4	DUP4	Total/NA	Water	8011	574184
MB 280-574184/1-A	Method Blank	Total/NA	Water	8011	574184
LCS 280-574184/2-A	Lab Control Sample	Total/NA	Water	8011	574184
LCSD 280-574184/3-A	Lab Control Sample Dup	Total/NA	Water	8011	574184

Metals

Prep Batch: 573718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Dissolved	Water	3005A	
280-161448-3	FB4	Dissolved	Water	3005A	
280-161448-4	DUP4	Dissolved	Water	3005A	
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 574034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Dissolved	Water	6010B	573718
280-161448-3	FB4	Dissolved	Water	6010B	573718
280-161448-4	DUP4	Dissolved	Water	6010B	573718
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	6010B	573718

Analysis Batch: 574115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573718

General Chemistry

Analysis Batch: 573280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	SM 2540C	
MB 280-573280/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573280/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161448-2 DU	MW-19A	Total/NA	Water	SM 2540C	

Analysis Batch: 573282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-3	FB4	Total/NA	Water	SM 2540C	
280-161448-4	DUP4	Total/NA	Water	SM 2540C	
MB 280-573282/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573282/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161448-3 DU	FB4	Total/NA	Water	SM 2540C	

Analysis Batch: 573635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	353.2	
280-161448-3	FB4	Total/NA	Water	353.2	
280-161448-4	DUP4	Total/NA	Water	353.2	
MB 280-573635/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573635/21	Lab Control Sample	Total/NA	Water	353.2	
280-161417-B-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-161417-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-4	DUP4	Total/NA	Water	9060	
MB 280-573694/4	Method Blank	Total/NA	Water	9060	
LCS 280-573694/3	Lab Control Sample	Total/NA	Water	9060	
280-161491-A-1 MS	Matrix Spike	Total/NA	Water	9060	
280-161491-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	SM 2320B	
280-161448-3	FB4	Total/NA	Water	SM 2320B	
MB 280-573792/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573792/57	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 574005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	9060	
280-161448-3	FB4	Total/NA	Water	9060	
MB 280-574005/4	Method Blank	Total/NA	Water	9060	
LCS 280-574005/3	Lab Control Sample	Total/NA	Water	9060	
280-161462-B-2 MS	Matrix Spike	Total/NA	Water	9060	
280-161462-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 574081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-4	DUP4	Total/NA	Water	SM 2320B	
MB 280-574081/32	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 574081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-574081/58	Method Blank	Total/NA	Water	SM 2320B	
MB 280-574081/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-574081/57	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-574081/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-161446-A-5 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 574325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	350.1	
280-161448-3	FB4	Total/NA	Water	350.1	
280-161448-4	DUP4	Total/NA	Water	350.1	
MB 280-574325/18	Method Blank	Total/NA	Water	350.1	
LCS 280-574325/17	Lab Control Sample	Total/NA	Water	350.1	
280-161446-C-4 MS	Matrix Spike	Total/NA	Water	350.1	
280-161446-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	SM 1030E	
280-161448-2	MW-19A	Total/NA	Water	SM 1030E (meq)	
280-161448-3	FB4	Total/NA	Water	SM 1030E	
280-161448-3	FB4	Total/NA	Water	SM 1030E (meq)	
280-161448-4	DUP4	Total/NA	Water	SM 1030E	
280-161448-4	DUP4	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	300.0	
280-161448-3	FB4	Total/NA	Water	300.0	
280-161448-4	DUP4	Total/NA	Water	300.0	
MB 480-625182/28	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/29	Lab Control Sample	Total/NA	Water	300.0	
280-161448-4 MS	DUP4	Total/NA	Water	300.0	
280-161448-4 MSD	DUP4	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161448-2	MW-19A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-161448-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB3
Lab Sample ID: 280-161448-1
Date Collected: 04/22/22 07:00
Matrix: Water
Date Received: 04/23/22 11:25

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	573931	05/05/22 09:50	TAW	EET DEN
Total/NA	Prep	8011			34.7 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 02:02	KSA	EET DEN

Client Sample ID: MW-19A
Lab Sample ID: 280-161448-2
Date Collected: 04/22/22 09:25
Matrix: Water
Date Received: 04/23/22 11:25

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	573931	05/05/22 12:41	TAW	EET DEN
Total/NA	Prep	8011			35 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 02:26	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:27	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 00:20	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:43	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 18:02	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 21:53	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 22:52	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573280	04/28/22 11:53	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 10:25	TJ	EET DEN

Client Sample ID: FB4
Lab Sample ID: 280-161448-3
Date Collected: 04/22/22 09:10
Matrix: Water
Date Received: 04/23/22 11:25

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	573931	05/05/22 13:02	TAW	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 02:50	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:53	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 00:40	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:46	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 18:04	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	574005	05/04/22 22:09	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 22:58	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573282	04/28/22 12:14	ABW	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161448-1

Client Sample ID: DUP4

Date Collected: 04/22/22 09:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161448-4

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	573931	05/05/22 13:23	TAW	EET DEN
Total/NA	Prep	8011			34.9 mL	35 mL	574184	05/06/22 17:04	KSA	EET DEN
Total/NA	Analysis	8011		1			574190	05/07/22 03:14	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:57	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 01:00	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:48	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 18:06	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573694	05/02/22 17:08	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			574081	05/05/22 20:57	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573282	04/28/22 12:14	ABW	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET 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:							N	D	S	A	R		N								
TB3	4/22/22	0700	G	W						X	X									5	
MW-19A	4/22/22	0925	G	W	X		X	X	X	X	X	X	X							11	
FB4	4/22/22	0910	G	W	X		X	X	X	X	X	X	X							11	
DUP4	4/22/22	0930	G	W	X		X	X	X	X	X	X	X							11	

280-161448 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: 4/22/22 @ 1630	Company: SCS	Received by:	Date/Time: 4/23/22 1125	Company: EA/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.: 1442296

Cooler Temperature(s) °C and Other Remarks: 2.6/1.0 IR12 CF+0.1

3/10/2023

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 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 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									
TB3	4/22/22	0700	G	W		~~X~~				X	X										5	
MW-19A	4/22/22	0925	G	W	X		X	X	X	X	X	X	X								11	
FB4	4/22/22	0910	G	W	X		X	X	X	X	X	X	X								11	
DUP4	4/22/22	0930	G	W	X		X	X	X	X	X	X	X								11	

280-161448 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		4/22/22 @ 1630	SCS		4/23/22 1125	EA/DEN
2						
3						

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: 14142296

Cooler Temperature(s) °C and Other Remarks: 2.6/1.0 IR12 CF+0.1

3/10/2023

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) 50.0 °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)
4/22/22	08:04	32.00	.	4.79	.	27.21	X 1	4.43
/ /	:	.	.	.	.		X 3	13.29

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	4/22/22	09:25	F	3	(40 ml)	HCl	YES (NO)		✓
VOA Glass	4/22/22	09:25	F	3	(40 ml)	$Na_2S_2O_3$	YES (NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	09:25	F	2	(250), 500, (1L)	None	(YES)	(NO)	NA	✓
Yellow Glass	4/22/22	09:25	F	1	250, (500), 1L	H_2SO_4	YES	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	09:25	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 [ ] 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	F(0807)	0.00	6.10	218.3	165.6	11.2	5.36	7.78	clear/colorless
1	F(0825)	4.50	7.22	38.0	362.7	11.5	~~6.88~~	4.70	cloudy/tan DTW 5.8
2	F(0857)	9.00	7.36	31.2	346.9	11.6	~~6.84~~	0.72	clear/colorless DTW 6.0
3	F(0922)	13.50	7.41	-59.2	343.0	11.6	6.06	0.76	clear/colorless
4	F(0924)	13.90	7.42	-60.6	341.4	11.6	6.07	0.78	clear/colorless
5		.	.			.	.	.	
6			.				.	.	

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

Standard purge method (7/5/25 psi) ~ 750 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:** 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	4/22/22	09:10	G	3	~~40 ml~~	~~HCl~~	YES	~~NO~~	
VOA Glass	4/22/22	09:10	G	3	40 ml	$Na_2S_2O_3$	YES	NO	
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/22/22	09:10	G	2	250, 500, 1L	None	YES	NO	NA
Yellow Glass	4/22/22	09:10	G	2	~~250~~, 500, 1L	~~H_2SO_4~~	YES	~~NO~~	
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/22/22	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 — 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 (0910)	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. 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) JH		?				**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 =

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	4/22/22	09:30	F	3	~~40 ml~~	HCl	YES	NO	
VOA Glass	4/22/22	09:30	F	3	~~40 ml~~	$Na_2S_2O_3$	YES	NO	
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/22/22	09:30	F	2	~~250~~, 500 1L	None	YES	NO	NA	
Yellow Glass	4/22/22	09:30	F	1	250, ~~500~~, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	09:30	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)

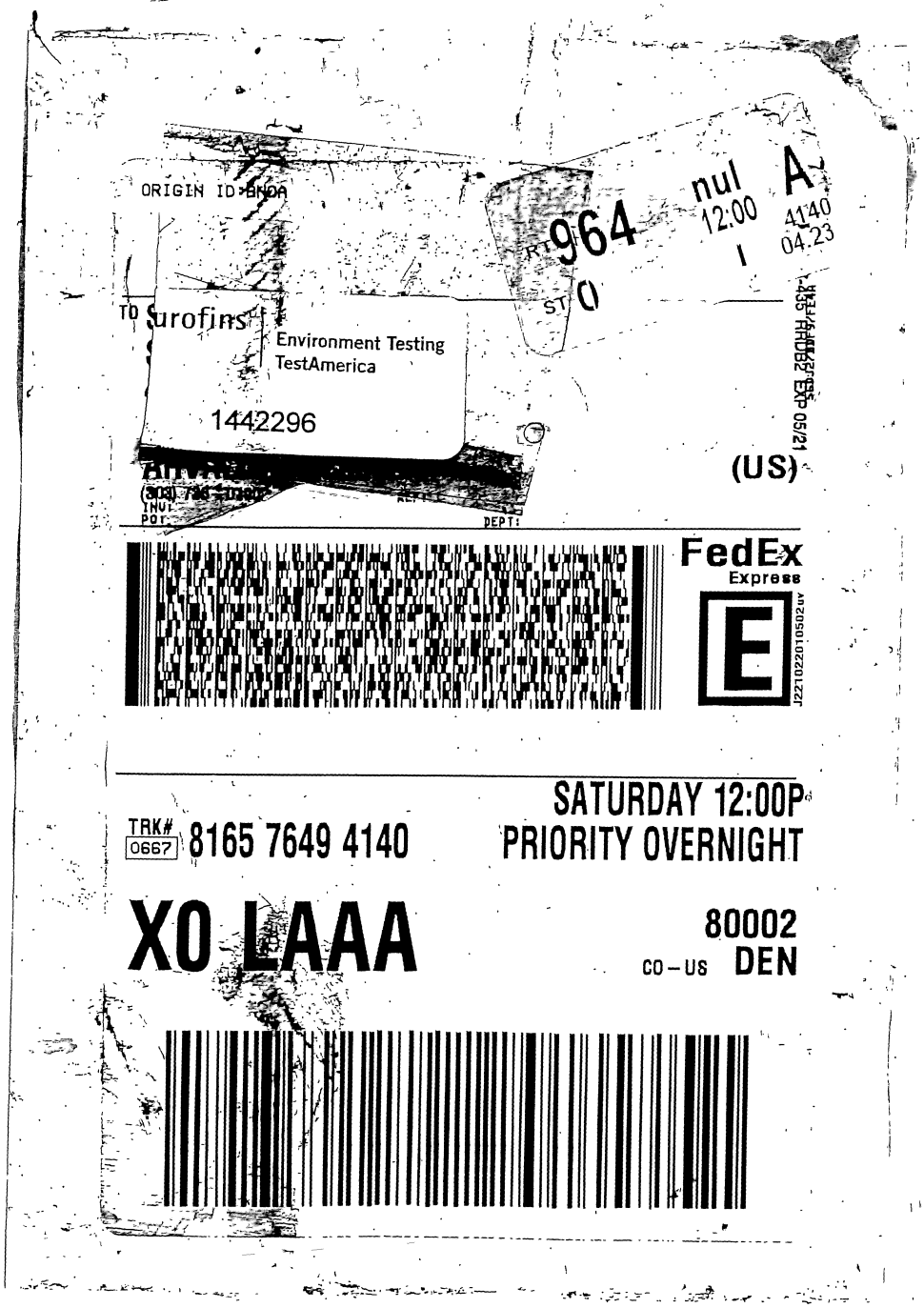
WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	F(0930)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected @ MW-19A

SAMPLER: I Hultquist (PRINTED NAME) (SIGNATURE)



280-161448 Waybill

ORIGIN ID:BNOA
SHIP DATE: 22APR22
ACTWGT: 49.15 LB
CAD: /SSFE2300
DIMS: 22x14x13 IN
TO SAMPLE RECEIVING
EUROPHINS TEST AMERICA
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:
(US)
FedEx
Express
TRK# 0667 8165 7649 4130
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO LAAA
80002
CO-US DEN
Part # 156297-435 REV 07 EXP 05/21
964
ST 0
nul
12:00
A
4130
04/23

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-611879.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161448-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/12/2022			
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, 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 (280-161448-2)	4/22/22	09:25 Pacific		Water			X	1	
FB4 (280-161448-3)	4/22/22	09:10 Pacific		Water			X	1	
DUP4 (280-161448-4)	4/22/22	09:30 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: Arnold Davis	Date/Time: 4/26/22 1530	Company ETADEN	Received by: [signature]	Date/Time: 4/28/22 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: 4.7 #1 ICE			

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161448-1

Login Number: 161448
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.	False	Refer to job narrative for details
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: 280-161448-1

Login Number: 161448
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:49 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	4.7 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

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 3/10/2023 2:47:56 PM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Downgradient Det. Wells - Apr

JOB NUMBER

280-161465-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

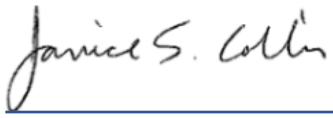
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-161465-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

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.

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: 280-161465-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161465-1

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 04/25/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.2 C.

Holding Times

The holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

1,2,3-Trichlorobenzene Method 8260B recovered outside control limits for the LCS associated with analytical batch 280-573456. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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) associated with analytical batch 280-573649. An LCS/LCSD pair was analyzed for batch precision and accuracy.

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.

Detection Summary

Client: Waste Management
Job ID: 280-161465-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-161465-1

No Detections.

Client Sample ID: MW-5A — Lab Sample ID: 280-161465-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	7.8		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	6.1		1.0		ug/L	1		8260B	Total/NA
Field pH	5.80				SU	1		Field Sampling	Total/NA
Field Conductivity	1290				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.60				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	22.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP2 — Lab Sample ID: 280-161465-3

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
Chlorobenzene	6.1		1.0		ug/L	1		8260B	Total/NA
Field pH	5.80				SU	1		Field Sampling	Total/NA
Field Conductivity	1290				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.60				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	22.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-5B — Lab Sample ID: 280-161465-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.06				SU	1		Field Sampling	Total/NA
Field Conductivity	614.40				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.78				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-54.7				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161465-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161465-1	TRIP BLANK	Water	04/19/22 07:00	04/25/22 08:50
280-161465-2	MW-5A	Water	04/20/22 13:30	04/25/22 08:50
280-161465-3	DUP2	Water	04/20/22 13:35	04/25/22 08:50
280-161465-4	MW-5B	Water	04/20/22 14:45	04/25/22 08:50

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161465-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET 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:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161465-1

Client Sample ID: TRIP BLANK
Date Collected: 04/19/22 07:00
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-1
Matrix: Water

Method: SW846 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			04/30/22 00:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 00:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 00:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 00:14	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 00:14	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 00:14	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 00:14	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			04/30/22 00:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 00:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 00:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/30/22 00:14	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 00:14	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 00:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/30/22 00:14	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 00:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/30/22 00:14	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 00:14	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 00:14	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 00:14	1
2-Hexanone	ND		5.0		ug/L			04/30/22 00:14	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 00:14	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 00:14	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 00:14	1
Acetone	ND		10		ug/L			04/30/22 00:14	1
Benzene	ND		1.0		ug/L			04/30/22 00:14	1
Bromobenzene	ND		1.0		ug/L			04/30/22 00:14	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 00:14	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 00:14	1
Bromoform	ND		1.0		ug/L			04/30/22 00:14	1
Bromomethane	ND		2.0		ug/L			04/30/22 00:14	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 00:14	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 00:14	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 00:14	1
Chloroethane	ND		2.0		ug/L			04/30/22 00:14	1
Chloroform	ND		1.0		ug/L			04/30/22 00:14	1
Chloromethane	ND		2.0		ug/L			04/30/22 00:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 00:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 00:14	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 00:14	1
Dibromomethane	ND		1.0		ug/L			04/30/22 00:14	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 00:14	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 00:14	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 00:14	1
Naphthalene	ND		1.0		ug/L			04/30/22 00:14	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 00:14	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-161465-1

Date Collected: 04/19/22 07:00

Matrix: Water

Date Received: 04/25/22 08:50

Method: SW846 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			04/30/22 00:14	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
Styrene	ND		1.0		ug/L			04/30/22 00:14	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 00:14	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 00:14	1
Toluene	ND		1.0		ug/L			04/30/22 00:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 00:14	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 00:14	1
Trichloroethene	ND		1.0		ug/L			04/30/22 00:14	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 00:14	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 00:14	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 00:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*6.6*	*T J*	*ug/L*		*1.45*	*N/A*		*04/30/22 00:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*		*04/30/22 00:14*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*04/30/22 00:14*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*04/30/22 00:14*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*04/30/22 00:14*	*1*

Method: SW846 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		04/28/22 16:47	04/29/22 16:03	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:47	04/29/22 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*111*		*70 - 130*	*04/28/22 16:47*	*04/29/22 16:03*	*1*

Client Sample ID: MW-5A

Lab Sample ID: 280-161465-2

Date Collected: 04/20/22 13:30

Matrix: Water

Date Received: 04/25/22 08:50

Method: SW846 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			05/03/22 14:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 14:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 14:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 14:19	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 14:19	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 14:19	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 14:19	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 14:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 14:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 14:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 14:19	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 14:19	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 14:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 14:19	1

Client Sample ID: MW-5A
Date Collected: 04/20/22 13:30
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-2
Matrix: Water

Method: SW846 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			05/03/22 14:19	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 14:19	1
1,4-Dichlorobenzene	**7.8**		1.0		ug/L			05/03/22 14:19	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 14:19	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 14:19	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 14:19	1
2-Hexanone	ND		5.0		ug/L			05/03/22 14:19	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 14:19	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 14:19	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 14:19	1
Acetone	ND		10		ug/L			05/03/22 14:19	1
Benzene	ND		1.0		ug/L			05/03/22 14:19	1
Bromobenzene	ND		1.0		ug/L			05/03/22 14:19	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 14:19	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 14:19	1
Bromoform	ND		1.0		ug/L			05/03/22 14:19	1
Bromomethane	ND		2.0		ug/L			05/03/22 14:19	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 14:19	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 14:19	1
Chlorobenzene	**6.1**		1.0		ug/L			05/03/22 14:19	1
Chloroethane	ND		2.0		ug/L			05/03/22 14:19	1
Chloroform	ND		1.0		ug/L			05/03/22 14:19	1
Chloromethane	ND		2.0		ug/L			05/03/22 14:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 14:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 14:19	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 14:19	1
Dibromomethane	ND		1.0		ug/L			05/03/22 14:19	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 14:19	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 14:19	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 14:19	1
Naphthalene	ND		1.0		ug/L			05/03/22 14:19	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
Styrene	ND		1.0		ug/L			05/03/22 14:19	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 14:19	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 14:19	1
Toluene	ND		1.0		ug/L			05/03/22 14:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 14:19	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 14:19	1
Trichloroethene	ND		1.0		ug/L			05/03/22 14:19	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 14:19	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 14:19	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 14:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 14:19*	*1*

Client Sample ID: MW-5A

Date Collected: 04/20/22 13:30
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 14:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 14:19*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 120*		*05/03/22 14:19*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 14:19*	*1*

Method: SW846 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		04/28/22 16:47	04/29/22 16:27	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:47	04/29/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*04/28/22 16:47*	*04/29/22 16:27*	*1*

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.80**				SU			04/20/22 14:30	1
Field Conductivity	**1290**				umhos/cm			04/20/22 14:30	1
Field Temperature	**13.9**				Degrees C			04/20/22 14:30	1
Field Dissolved Oxygen	**0.60**				mg/L			04/20/22 14:30	1
Field EH/ORP	**22.7**				millivolts			04/20/22 14:30	1

Client Sample ID: DUP2

Date Collected: 04/20/22 13:35
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-3

Matrix: Water

Method: SW846 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			05/03/22 14:40	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 14:40	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 14:40	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 14:40	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 14:40	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 14:40	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 14:40	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 14:40	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 14:40	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 14:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 14:40	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 14:40	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 14:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 14:40	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 14:40	1
1,4-Dichlorobenzene	**7.7**		1.0		ug/L			05/03/22 14:40	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 14:40	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 14:40	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 14:40	1
2-Hexanone	ND		5.0		ug/L			05/03/22 14:40	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 14:40	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 14:40	1

Client Sample ID: DUP2
Date Collected: 04/20/22 13:35
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-3
Matrix: Water

Method: SW846 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			05/03/22 14:40	1
Acetone	ND		10		ug/L			05/03/22 14:40	1
Benzene	ND		1.0		ug/L			05/03/22 14:40	1
Bromobenzene	ND		1.0		ug/L			05/03/22 14:40	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 14:40	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 14:40	1
Bromoform	ND		1.0		ug/L			05/03/22 14:40	1
Bromomethane	ND		2.0		ug/L			05/03/22 14:40	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 14:40	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 14:40	1
Chlorobenzene	**6.1**		1.0		ug/L			05/03/22 14:40	1
Chloroethane	ND		2.0		ug/L			05/03/22 14:40	1
Chloroform	ND		1.0		ug/L			05/03/22 14:40	1
Chloromethane	ND		2.0		ug/L			05/03/22 14:40	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 14:40	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 14:40	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 14:40	1
Dibromomethane	ND		1.0		ug/L			05/03/22 14:40	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 14:40	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 14:40	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 14:40	1
Naphthalene	ND		1.0		ug/L			05/03/22 14:40	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
Styrene	ND		1.0		ug/L			05/03/22 14:40	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 14:40	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 14:40	1
Toluene	ND		1.0		ug/L			05/03/22 14:40	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 14:40	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 14:40	1
Trichloroethene	ND		1.0		ug/L			05/03/22 14:40	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 14:40	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 14:40	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 14:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 14:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*05/03/22 14:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 14:40*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 120*		*05/03/22 14:40*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 14:40*	*1*

Method: SW846 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		04/28/22 16:47	04/29/22 16:51	1

Client Sample ID: DUP2

Date Collected: 04/20/22 13:35
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-3
Matrix: Water

Method: SW846 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		04/28/22 16:47	04/29/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/28/22 16:47*	*04/29/22 16:51*	*1*

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**5.80**				SU			04/20/22 14:35	1
Field Conductivity	**1290**				umhos/cm			04/20/22 14:35	1
Field Temperature	**13.9**				Degrees C			04/20/22 14:35	1
Field Dissolved Oxygen	**0.60**				mg/L			04/20/22 14:35	1
Field EH/ORP	**22.7**				millivolts			04/20/22 14:35	1

Client Sample ID: MW-5B

Date Collected: 04/20/22 14:45
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-4
Matrix: Water

Method: SW846 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			05/03/22 15:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 15:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 15:02	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 15:02	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 15:02	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 15:02	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 15:02	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 15:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 15:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:02	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 15:02	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 15:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:02	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 15:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:02	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 15:02	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 15:02	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:02	1
2-Hexanone	ND		5.0		ug/L			05/03/22 15:02	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:02	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 15:02	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 15:02	1
Acetone	ND		10		ug/L			05/03/22 15:02	1
Benzene	ND		1.0		ug/L			05/03/22 15:02	1
Bromobenzene	ND		1.0		ug/L			05/03/22 15:02	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 15:02	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 15:02	1
Bromoform	ND		1.0		ug/L			05/03/22 15:02	1

Client Sample ID: MW-5B
Date Collected: 04/20/22 14:45
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-4
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		2.0		ug/L			05/03/22 15:02	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 15:02	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 15:02	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 15:02	1
Chloroethane	ND		2.0		ug/L			05/03/22 15:02	1
Chloroform	ND		1.0		ug/L			05/03/22 15:02	1
Chloromethane	ND		2.0		ug/L			05/03/22 15:02	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 15:02	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 15:02	1
Dibromomethane	ND		1.0		ug/L			05/03/22 15:02	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 15:02	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 15:02	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 15:02	1
Naphthalene	ND		1.0		ug/L			05/03/22 15:02	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
Styrene	ND		1.0		ug/L			05/03/22 15:02	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 15:02	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 15:02	1
Toluene	ND		1.0		ug/L			05/03/22 15:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:02	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 15:02	1
Trichloroethene	ND		1.0		ug/L			05/03/22 15:02	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 15:02	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 15:02	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 15:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 15:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*		*05/03/22 15:02*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/22 15:02*	*1*
Dibromofluoromethane (Surr)	*86*		*77 - 120*		*05/03/22 15:02*	*1*
Toluene-d8 (Surr)	*112*		*80 - 125*		*05/03/22 15:02*	*1*

Method: SW846 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		04/28/22 16:47	04/29/22 17:16	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:47	04/29/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*04/28/22 16:47*	*04/29/22 17:16*	*1*

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.06**				SU			04/20/22 15:45	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161465-1

Client Sample ID: MW-5B
Date Collected: 04/20/22 14:45
Date Received: 04/25/22 08:50

Lab Sample ID: 280-161465-4
Matrix: Water

Method: EPA Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field Conductivity	614.40				umhos/cm			04/20/22 15:45	1
Field Temperature	14.0				Degrees C			04/20/22 15:45	1
Field Dissolved Oxygen	0.78				mg/L			04/20/22 15:45	1
Field EH/ORP	-54.7				millivolts			04/20/22 15:45	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161465-1

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)
280-161465-1	TRIP BLANK	105	101	104	97
280-161465-2	MW-5A	94	96	92	109
280-161465-3	DUP2	91	96	88	110
280-161465-4	MW-5B	92	97	86	112
LCS 280-573456/1002	Lab Control Sample	92	99	92	108
LCS 280-573649/4	Lab Control Sample	91	97	90	110
LCSD 280-573456/5	Lab Control Sample Dup	89	96	90	109
LCSD 280-573649/5	Lab Control Sample Dup	93	96	90	109
MB 280-573456/9	Method Blank	94	97	94	108
MB 280-573649/9	Method Blank	94	96	90	109

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)
280-161465-1	TRIP BLANK	111
280-161465-2	MW-5A	109
280-161465-3	DUP2	113
280-161465-4	MW-5B	113
LCS 280-573324/2-A	Lab Control Sample	116
LCSD 280-573324/3-A	Lab Control Sample Dup	116
MB 280-573324/1-A	Method Blank	110

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573456/9
Matrix: Water
Analysis Batch: 573456

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			04/29/22 22:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/29/22 22:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/29/22 22:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/29/22 22:48	1
1,1-Dichloroethane	ND		1.0		ug/L			04/29/22 22:48	1
1,1-Dichloroethene	ND		1.0		ug/L			04/29/22 22:48	1
1,1-Dichloropropene	ND		1.0		ug/L			04/29/22 22:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/29/22 22:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,2-Dichloroethane	ND		1.0		ug/L			04/29/22 22:48	1
1,2-Dichloropropane	ND		1.0		ug/L			04/29/22 22:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
1,3-Dichloropropane	ND		1.0		ug/L			04/29/22 22:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
2,2-Dichloropropane	ND		5.0		ug/L			04/29/22 22:48	1
2-Butanone (MEK)	ND		6.0		ug/L			04/29/22 22:48	1
2-Chlorotoluene	ND		1.0		ug/L			04/29/22 22:48	1
2-Hexanone	ND		5.0		ug/L			04/29/22 22:48	1
4-Chlorotoluene	ND		1.0		ug/L			04/29/22 22:48	1
4-Isopropyltoluene	ND		1.0		ug/L			04/29/22 22:48	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/29/22 22:48	1
Acetone	ND		10		ug/L			04/29/22 22:48	1
Benzene	ND		1.0		ug/L			04/29/22 22:48	1
Bromobenzene	ND		1.0		ug/L			04/29/22 22:48	1
Bromochloromethane	ND		1.0		ug/L			04/29/22 22:48	1
Bromodichloromethane	ND		1.0		ug/L			04/29/22 22:48	1
Bromoform	ND		1.0		ug/L			04/29/22 22:48	1
Bromomethane	ND		2.0		ug/L			04/29/22 22:48	1
Carbon disulfide	ND		2.0		ug/L			04/29/22 22:48	1
Carbon tetrachloride	ND		1.0		ug/L			04/29/22 22:48	1
Chlorobenzene	ND		1.0		ug/L			04/29/22 22:48	1
Chloroethane	ND		2.0		ug/L			04/29/22 22:48	1
Chloroform	ND		1.0		ug/L			04/29/22 22:48	1
Chloromethane	ND		2.0		ug/L			04/29/22 22:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/29/22 22:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/29/22 22:48	1
Dibromochloromethane	ND		1.0		ug/L			04/29/22 22:48	1
Dibromomethane	ND		1.0		ug/L			04/29/22 22:48	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/29/22 22:48	1
Ethylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
Hexachlorobutadiene	ND		1.0		ug/L			04/29/22 22:48	1
Isopropylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
Methylene Chloride	ND		5.0		ug/L			04/29/22 22:48	1
Naphthalene	ND		1.0		ug/L			04/29/22 22:48	1

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

Lab Sample ID: MB 280-573456/9
Matrix: Water
Analysis Batch: 573456

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			04/29/22 22:48	1
N-Propylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
sec-Butylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
Styrene	ND		1.0		ug/L			04/29/22 22:48	1
tert-Butylbenzene	ND		1.0		ug/L			04/29/22 22:48	1
Tetrachloroethene	ND		1.0		ug/L			04/29/22 22:48	1
Toluene	ND		1.0		ug/L			04/29/22 22:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/29/22 22:48	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/29/22 22:48	1
Trichloroethene	ND		1.0		ug/L			04/29/22 22:48	1
Trichlorofluoromethane	ND		2.0		ug/L			04/29/22 22:48	1
Vinyl chloride	ND		1.0		ug/L			04/29/22 22:48	1
Xylenes (total)	ND		2.0		ug/L			04/29/22 22:48	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/29/22 22:48*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*04/29/22 22:48*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*04/29/22 22:48*	*1*
Dibromofluoromethane (Surr)	*94*		*77 - 120*		*04/29/22 22:48*	*1*
Toluene-d8 (Surr)	*108*		*80 - 125*		*04/29/22 22:48*	*1*

Lab Sample ID: LCS 280-573456/1002
Matrix: Water
Analysis Batch: 573456

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	23.1		ug/L		92	74 - 121
1,1,1-Trichloroethane	25.0	21.5		ug/L		86	62 - 132
1,1,2,2-Tetrachloroethane	25.0	23.0		ug/L		92	72 - 122
1,1,2-Trichloroethane	25.0	21.8		ug/L		87	72 - 128
1,1-Dichloroethane	25.0	21.6		ug/L		86	66 - 130
1,1-Dichloroethene	25.0	20.0		ug/L		80	62 - 130
1,1-Dichloropropene	25.0	21.4		ug/L		86	64 - 133
1,2,3-Trichlorobenzene	25.0	17.3	*-	ug/L		69	70 - 127
1,2,3-Trichloropropane	25.0	20.8		ug/L		83	74 - 123
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	73 - 124
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	74 - 124
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	77 - 121
1,2-Dichloroethane	25.0	23.0		ug/L		92	61 - 130
1,2-Dichloropropane	25.0	21.9		ug/L		88	68 - 127
1,3,5-Trimethylbenzene	25.0	24.4		ug/L		97	73 - 127
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	76 - 121
1,3-Dichloropropane	25.0	25.5		ug/L		102	80 - 118
1,4-Dichlorobenzene	25.0	24.4		ug/L		98	76 - 119
2,2-Dichloropropane	25.0	22.0		ug/L		88	57 - 140
2-Butanone (MEK)	100	80.3		ug/L		80	53 - 135

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

Lab Sample ID: LCS 280-573456/1002
Matrix: Water
Analysis Batch: 573456

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	21.8		ug/L		87	75 - 123
2-Hexanone	100	95.3		ug/L		95	58 - 134
4-Chlorotoluene	25.0	21.7		ug/L		87	74 - 124
4-Isopropyltoluene	25.0	24.9		ug/L		100	74 - 127
4-Methyl-2-pentanone	100	75.7		ug/L		76	56 - 135
Acetone	100	73.1		ug/L		73	50 - 137
Benzene	25.0	23.0		ug/L		92	69 - 126
Bromobenzene	25.0	23.2		ug/L		93	75 - 122
Bromochloromethane	25.0	19.5		ug/L		78	71 - 130
Bromodichloromethane	25.0	21.5		ug/L		86	67 - 126
Bromoform	25.0	19.6		ug/L		78	57 - 125
Bromomethane	25.0	16.9		ug/L		68	25 - 163
Carbon disulfide	25.0	20.7		ug/L		83	56 - 128
Carbon tetrachloride	25.0	19.5		ug/L		78	60 - 133
Chlorobenzene	25.0	25.9		ug/L		104	78 - 118
Chloroethane	25.0	22.8		ug/L		91	52 - 144
Chloroform	25.0	22.3		ug/L		89	68 - 128
Chloromethane	25.0	22.4		ug/L		90	43 - 142
cis-1,2-Dichloroethene	25.0	21.0		ug/L		84	69 - 126
cis-1,3-Dichloropropene	25.0	21.8		ug/L		87	75 - 120
Dibromochloromethane	25.0	22.0		ug/L		88	71 - 122
Dibromomethane	25.0	20.8		ug/L		83	68 - 129
Dichlorodifluoromethane	25.0	21.1		ug/L		84	26 - 152
Ethylbenzene	25.0	23.3		ug/L		93	76 - 121
Hexachlorobutadiene	25.0	19.8		ug/L		79	69 - 133
Isopropylbenzene	25.0	24.8		ug/L		99	70 - 127
Methylene Chloride	25.0	22.5		ug/L		90	64 - 128
Naphthalene	25.0	18.3		ug/L		73	63 - 129
n-Butylbenzene	25.0	24.1		ug/L		96	69 - 130
N-Propylbenzene	25.0	21.8		ug/L		87	73 - 127
sec-Butylbenzene	25.0	21.6		ug/L		86	72 - 127
Styrene	25.0	25.0		ug/L		100	79 - 120
tert-Butylbenzene	25.0	23.8		ug/L		95	72 - 126
Tetrachloroethene	25.0	21.8		ug/L		87	72 - 127
Toluene	25.0	23.2		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	20.7		ug/L		83	66 - 129
trans-1,3-Dichloropropene	25.0	21.6		ug/L		86	66 - 127
Trichloroethene	25.0	23.4		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	22.3		ug/L		89	57 - 144
Vinyl chloride	25.0	23.6		ug/L		95	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*
Dibromofluoromethane (Surr)	*92*		*77 - 120*
Toluene-d8 (Surr)	*108*		*80 - 125*

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

Lab Sample ID: LCSD 280-573456/5
Matrix: Water
Analysis Batch: 573456

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	74 - 121	2	20
1,1,1-Trichloroethane			25.0	22.0		ug/L		88	62 - 132	2	20
1,1,2,2-Tetrachloroethane			25.0	23.3		ug/L		93	72 - 122	1	20
1,1,2-Trichloroethane			25.0	22.7		ug/L		91	72 - 128	4	20
1,1-Dichloroethane			25.0	21.8		ug/L		87	66 - 130	1	20
1,1-Dichloroethene			25.0	20.3		ug/L		81	62 - 130	2	21
1,1-Dichloropropene			25.0	21.2		ug/L		85	64 - 133	1	20
1,2,3-Trichlorobenzene			25.0	17.9		ug/L		72	70 - 127	3	20
1,2,3-Trichloropropane			25.0	21.3		ug/L		85	74 - 123	3	20
1,2,4-Trichlorobenzene			25.0	22.7		ug/L		91	73 - 124	1	20
1,2,4-Trimethylbenzene			25.0	25.2		ug/L		101	74 - 124	2	20
1,2-Dichlorobenzene			25.0	25.6		ug/L		103	77 - 121	4	20
1,2-Dichloroethane			25.0	23.4		ug/L		94	61 - 130	2	20
1,2-Dichloropropane			25.0	22.2		ug/L		89	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	24.8		ug/L		99	73 - 127	2	20
1,3-Dichlorobenzene			25.0	25.3		ug/L		101	76 - 121	2	20
1,3-Dichloropropane			25.0	26.0		ug/L		104	80 - 118	2	20
1,4-Dichlorobenzene			25.0	25.6		ug/L		102	76 - 119	5	20
2,2-Dichloropropane			25.0	21.6		ug/L		86	57 - 140	2	22
2-Butanone (MEK)			100	83.7		ug/L		84	53 - 135	4	20
2-Chlorotoluene			25.0	22.6		ug/L		90	75 - 123	4	20
2-Hexanone			100	98.6		ug/L		99	58 - 134	3	21
4-Chlorotoluene			25.0	22.5		ug/L		90	74 - 124	3	20
4-Isopropyltoluene			25.0	25.3		ug/L		101	74 - 127	2	20
4-Methyl-2-pentanone			100	78.3		ug/L		78	56 - 135	3	20
Acetone			100	76.3		ug/L		76	50 - 137	4	21
Benzene			25.0	23.3		ug/L		93	69 - 126	2	20
Bromobenzene			25.0	23.9		ug/L		96	75 - 122	3	20
Bromochloromethane			25.0	20.4		ug/L		81	71 - 130	4	20
Bromodichloromethane			25.0	21.4		ug/L		86	67 - 126	0	20
Bromoform			25.0	19.6		ug/L		78	57 - 125	0	20
Bromomethane			25.0	14.8		ug/L		59	25 - 163	14	40
Carbon disulfide			25.0	20.4		ug/L		82	56 - 128	1	20
Carbon tetrachloride			25.0	19.9		ug/L		80	60 - 133	2	20
Chlorobenzene			25.0	26.4		ug/L		106	78 - 118	2	20
Chloroethane			25.0	19.2		ug/L		77	52 - 144	17	30
Chloroform			25.0	22.3		ug/L		89	68 - 128	0	20
Chloromethane			25.0	18.5		ug/L		74	43 - 142	19	20
cis-1,2-Dichloroethene			25.0	21.5		ug/L		86	69 - 126	2	20
cis-1,3-Dichloropropene			25.0	22.0		ug/L		88	75 - 120	1	20
Dibromochloromethane			25.0	22.0		ug/L		88	71 - 122	0	20
Dibromomethane			25.0	21.1		ug/L		84	68 - 129	2	20
Dichlorodifluoromethane			25.0	17.9		ug/L		72	26 - 152	16	21
Ethylbenzene			25.0	24.1		ug/L		96	76 - 121	4	20
Hexachlorobutadiene			25.0	20.4		ug/L		81	69 - 133	3	20
Isopropylbenzene			25.0	24.8		ug/L		99	70 - 127	0	20
Methylene Chloride			25.0	22.7		ug/L		91	64 - 128	1	20
Naphthalene			25.0	19.6		ug/L		78	63 - 129	7	21

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

Lab Sample ID: LCSD 280-573456/5
Matrix: Water
Analysis Batch: 573456

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	24.1		ug/L		96	69 - 130	0	20
N-Propylbenzene			25.0	22.3		ug/L		89	73 - 127	2	20
sec-Butylbenzene			25.0	22.1		ug/L		88	72 - 127	2	20
Styrene			25.0	25.5		ug/L		102	79 - 120	2	20
tert-Butylbenzene			25.0	20.8		ug/L		83	72 - 126	13	20
Tetrachloroethene			25.0	22.7		ug/L		91	72 - 127	4	20
Toluene			25.0	23.7		ug/L		95	68 - 127	2	20
trans-1,2-Dichloroethene			25.0	20.9		ug/L		84	66 - 129	1	20
trans-1,3-Dichloropropene			25.0	21.5		ug/L		86	66 - 127	1	20
Trichloroethene			25.0	24.2		ug/L		97	70 - 125	3	20
Trichlorofluoromethane			25.0	19.1		ug/L		76	57 - 144	16	28
Vinyl chloride			25.0	19.6		ug/L		78	53 - 141	19	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 08:59	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 08:59	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
2-Hexanone	ND		5.0		ug/L			05/03/22 08:59	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 08:59	1

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

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
Acetone	ND		10		ug/L			05/03/22 08:59	1
Benzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromoform	ND		1.0		ug/L			05/03/22 08:59	1
Bromomethane	ND		2.0		ug/L			05/03/22 08:59	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 08:59	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 08:59	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Chloroethane	ND		2.0		ug/L			05/03/22 08:59	1
Chloroform	ND		1.0		ug/L			05/03/22 08:59	1
Chloromethane	ND		2.0		ug/L			05/03/22 08:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Dibromomethane	ND		1.0		ug/L			05/03/22 08:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 08:59	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 08:59	1
Naphthalene	ND		1.0		ug/L			05/03/22 08:59	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Styrene	ND		1.0		ug/L			05/03/22 08:59	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Toluene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 08:59	1
Trichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 08:59	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 08:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 08:59*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 08:59*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 08:59*	*1*

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	23.0		ug/L		92	74 - 121
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	62 - 132
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	72 - 122
1,1,2-Trichloroethane	25.0	20.2		ug/L		81	72 - 128
1,1-Dichloroethane	25.0	21.3		ug/L		85	66 - 130
1,1-Dichloroethene	25.0	20.3		ug/L		81	62 - 130
1,1-Dichloropropene	25.0	22.1		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	25.0	16.4	*-	ug/L		66	70 - 127
1,2,3-Trichloropropane	25.0	20.6		ug/L		82	74 - 123
1,2,4-Trichlorobenzene	25.0	21.9		ug/L		88	73 - 124
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	74 - 124
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 121
1,2-Dichloroethane	25.0	20.4		ug/L		82	61 - 130
1,2-Dichloropropane	25.0	20.9		ug/L		84	68 - 127
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	73 - 127
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	76 - 121
1,3-Dichloropropane	25.0	25.0		ug/L		100	80 - 118
1,4-Dichlorobenzene	25.0	26.1		ug/L		105	76 - 119
2,2-Dichloropropane	25.0	21.6		ug/L		87	57 - 140
2-Butanone (MEK)	100	69.3		ug/L		69	53 - 135
2-Chlorotoluene	25.0	23.6		ug/L		95	75 - 123
2-Hexanone	100	85.8		ug/L		86	58 - 134
4-Chlorotoluene	25.0	23.2		ug/L		93	74 - 124
4-Isopropyltoluene	25.0	26.1		ug/L		104	74 - 127
4-Methyl-2-pentanone	100	64.9		ug/L		65	56 - 135
Acetone	100	65.6		ug/L		66	50 - 137
Benzene	25.0	23.1		ug/L		92	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	19.2		ug/L		77	71 - 130
Bromodichloromethane	25.0	20.6		ug/L		83	67 - 126
Bromoform	25.0	18.2		ug/L		73	57 - 125
Bromomethane	25.0	17.4		ug/L		70	25 - 163
Carbon disulfide	25.0	19.8		ug/L		79	56 - 128
Carbon tetrachloride	25.0	20.4		ug/L		82	60 - 133
Chlorobenzene	25.0	27.2		ug/L		109	78 - 118
Chloroethane	25.0	24.0		ug/L		96	52 - 144
Chloroform	25.0	22.5		ug/L		90	68 - 128
Chloromethane	25.0	17.4		ug/L		70	43 - 142
cis-1,2-Dichloroethene	25.0	21.0		ug/L		84	69 - 126
cis-1,3-Dichloropropene	25.0	21.5		ug/L		86	75 - 120
Dibromochloromethane	25.0	21.4		ug/L		86	71 - 122
Dibromomethane	25.0	19.5		ug/L		78	68 - 129
Dichlorodifluoromethane	25.0	15.3		ug/L		61	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	21.2		ug/L		85	69 - 133
Isopropylbenzene	25.0	26.5		ug/L		106	70 - 127
Methylene Chloride	25.0	21.7		ug/L		87	64 - 128
Naphthalene	25.0	17.3		ug/L		69	63 - 129

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	25.6		ug/L		102	69 - 130		
N-Propylbenzene			25.0	23.9		ug/L		95	73 - 127		
sec-Butylbenzene			25.0	23.4		ug/L		93	72 - 127		
Styrene			25.0	26.1		ug/L		105	79 - 120		
tert-Butylbenzene			25.0	21.9		ug/L		87	72 - 126		
Tetrachloroethene			25.0	24.4		ug/L		98	72 - 127		
Toluene			25.0	23.3		ug/L		93	68 - 127		
trans-1,2-Dichloroethene			25.0	21.3		ug/L		85	66 - 129		
trans-1,3-Dichloropropene			25.0	19.7		ug/L		79	66 - 127		
Trichloroethene			25.0	26.1		ug/L		104	70 - 125		
Trichlorofluoromethane			25.0	20.2		ug/L		81	57 - 144		
Vinyl chloride			25.0	18.8		ug/L		75	53 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*110*		*80 - 125*

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	22.9		ug/L		92	74 - 121	0	20
1,1,1-Trichloroethane			25.0	20.8		ug/L		83	62 - 132	8	20
1,1,2,2-Tetrachloroethane			25.0	23.1		ug/L		92	72 - 122	4	20
1,1,2-Trichloroethane			25.0	20.5		ug/L		82	72 - 128	2	20
1,1-Dichloroethane			25.0	20.6		ug/L		82	66 - 130	3	20
1,1-Dichloroethene			25.0	19.0		ug/L		76	62 - 130	7	21
1,1-Dichloropropene			25.0	20.7		ug/L		83	64 - 133	6	20
1,2,3-Trichlorobenzene			25.0	18.5		ug/L		74	70 - 127	12	20
1,2,3-Trichloropropane			25.0	21.4		ug/L		86	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	22.7		ug/L		91	73 - 124	4	20
1,2,4-Trimethylbenzene			25.0	25.3		ug/L		101	74 - 124	3	20
1,2-Dichlorobenzene			25.0	25.2		ug/L		101	77 - 121	2	20
1,2-Dichloroethane			25.0	20.3		ug/L		81	61 - 130	1	20
1,2-Dichloropropane			25.0	20.7		ug/L		83	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	24.7		ug/L		99	73 - 127	4	20
1,3-Dichlorobenzene			25.0	25.0		ug/L		100	76 - 121	4	20
1,3-Dichloropropane			25.0	25.5		ug/L		102	80 - 118	2	20
1,4-Dichlorobenzene			25.0	25.3		ug/L		101	76 - 119	3	20
2,2-Dichloropropane			25.0	20.4		ug/L		82	57 - 140	6	22
2-Butanone (MEK)			100	78.2		ug/L		78	53 - 135	12	20
2-Chlorotoluene			25.0	22.5		ug/L		90	75 - 123	5	20
2-Hexanone			100	97.3		ug/L		97	58 - 134	13	21
4-Chlorotoluene			25.0	22.3		ug/L		89	74 - 124	4	20
4-Isopropyltoluene			25.0	24.9		ug/L		100	74 - 127	5	20

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

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	73.0		ug/L		73	56 - 135	12	20
Acetone			100	72.8		ug/L		73	50 - 137	10	21
Benzene			25.0	22.3		ug/L		89	69 - 126	4	20
Bromobenzene			25.0	23.9		ug/L		96	75 - 122	3	20
Bromochloromethane			25.0	19.1		ug/L		76	71 - 130	1	20
Bromodichloromethane			25.0	20.0		ug/L		80	67 - 126	3	20
Bromoform			25.0	19.0		ug/L		76	57 - 125	4	20
Bromomethane			25.0	17.5		ug/L		70	25 - 163	0	40
Carbon disulfide			25.0	18.7		ug/L		75	56 - 128	6	20
Carbon tetrachloride			25.0	19.0		ug/L		76	60 - 133	7	20
Chlorobenzene			25.0	26.7		ug/L		107	78 - 118	2	20
Chloroethane			25.0	19.8		ug/L		79	52 - 144	19	30
Chloroform			25.0	21.5		ug/L		86	68 - 128	5	20
Chloromethane			25.0	18.0		ug/L		72	43 - 142	3	20
cis-1,2-Dichloroethene			25.0	20.6		ug/L		82	69 - 126	2	20
cis-1,3-Dichloropropene			25.0	21.3		ug/L		85	75 - 120	1	20
Dibromochloromethane			25.0	21.5		ug/L		86	71 - 122	0	20
Dibromomethane			25.0	20.2		ug/L		81	68 - 129	4	20
Dichlorodifluoromethane			25.0	15.5		ug/L		62	26 - 152	2	21
Ethylbenzene			25.0	23.9		ug/L		95	76 - 121	4	20
Hexachlorobutadiene			25.0	20.1		ug/L		80	69 - 133	6	20
Isopropylbenzene			25.0	25.2		ug/L		101	70 - 127	5	20
Methylene Chloride			25.0	21.2		ug/L		85	64 - 128	2	20
Naphthalene			25.0	20.3		ug/L		81	63 - 129	16	21
n-Butylbenzene			25.0	24.6		ug/L		98	69 - 130	4	20
N-Propylbenzene			25.0	22.5		ug/L		90	73 - 127	6	20
sec-Butylbenzene			25.0	22.1		ug/L		88	72 - 127	6	20
Styrene			25.0	25.6		ug/L		102	79 - 120	2	20
tert-Butylbenzene			25.0	20.8		ug/L		83	72 - 126	5	20
Tetrachloroethene			25.0	22.4		ug/L		90	72 - 127	8	20
Toluene			25.0	22.3		ug/L		89	68 - 127	4	20
trans-1,2-Dichloroethene			25.0	19.7		ug/L		79	66 - 129	8	20
trans-1,3-Dichloropropene			25.0	19.7		ug/L		79	66 - 127	0	20
Trichloroethene			25.0	24.5		ug/L		98	70 - 125	6	20
Trichlorofluoromethane			25.0	19.9		ug/L		80	57 - 144	2	28
Vinyl chloride			25.0	19.4		ug/L		78	53 - 141	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-573324/1-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		04/28/22 16:47	04/29/22 08:29	1
1,2-Dibromoethane	ND		0.050		ug/L		04/28/22 16:47	04/29/22 08:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*110*		*70 - 130*	*04/28/22 16:47*	*04/29/22 08:29*	*1*

Lab Sample ID: LCS 280-573324/2-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573324

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.253		ug/L		101	60 - 140		
1,2-Dibromoethane			0.250	0.257		ug/L		103	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*116*		*70 - 130*

Lab Sample ID: LCSD 280-573324/3-A
Matrix: Water
Analysis Batch: 573329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573324

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.252		ug/L		101	60 - 140	0	10
1,2-Dibromoethane			0.250	0.251		ug/L		100	60 - 140	2	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*116*		*70 - 130*

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161465-1

GC/MS VOA

Analysis Batch: 573456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161465-1	TRIP BLANK	Total/NA	Water	8260B	
MB 280-573456/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573456/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573456/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 573649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161465-2	MW-5A	Total/NA	Water	8260B	
280-161465-3	DUP2	Total/NA	Water	8260B	
280-161465-4	MW-5B	Total/NA	Water	8260B	
MB 280-573649/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573649/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573649/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 573324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161465-1	TRIP BLANK	Total/NA	Water	8011	
280-161465-2	MW-5A	Total/NA	Water	8011	
280-161465-3	DUP2	Total/NA	Water	8011	
280-161465-4	MW-5B	Total/NA	Water	8011	
MB 280-573324/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-573324/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-573324/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 573329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161465-1	TRIP BLANK	Total/NA	Water	8011	573324
280-161465-2	MW-5A	Total/NA	Water	8011	573324
280-161465-3	DUP2	Total/NA	Water	8011	573324
280-161465-4	MW-5B	Total/NA	Water	8011	573324
MB 280-573324/1-A	Method Blank	Total/NA	Water	8011	573324
LCS 280-573324/2-A	Lab Control Sample	Total/NA	Water	8011	573324
LCSD 280-573324/3-A	Lab Control Sample Dup	Total/NA	Water	8011	573324

Field Service / Mobile Lab

Analysis Batch: 573210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161465-2	MW-5A	Total/NA	Water	Field Sampling	
280-161465-3	DUP2	Total/NA	Water	Field Sampling	
280-161465-4	MW-5B	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-161465-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-161465-1
Date Collected: 04/19/22 07:00
Matrix: Water
Date Received: 04/25/22 08:50

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	573456	04/30/22 00:14	AJP	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	573324	04/28/22 16:47	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 16:03	KSA	EET DEN

Client Sample ID: MW-5A
Lab Sample ID: 280-161465-2
Date Collected: 04/20/22 13:30
Matrix: Water
Date Received: 04/25/22 08:50

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	573649	05/03/22 14:19	TAW	EET DEN
Total/NA	Prep	8011			35 mL	35 mL	573324	04/28/22 16:47	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 16:27	KSA	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/20/22 14:30	TJ	EET DEN

Client Sample ID: DUP2
Lab Sample ID: 280-161465-3
Date Collected: 04/20/22 13:35
Matrix: Water
Date Received: 04/25/22 08:50

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	573649	05/03/22 14:40	TAW	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	573324	04/28/22 16:47	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 16:51	KSA	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/20/22 14:35	TJ	EET DEN

Client Sample ID: MW-5B
Lab Sample ID: 280-161465-4
Date Collected: 04/20/22 14:45
Matrix: Water
Date Received: 04/25/22 08:50

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	573649	05/03/22 15:02	TAW	EET DEN
Total/NA	Prep	8011			35.1 mL	35 mL	573324	04/28/22 16:47	KSA	EET DEN
Total/NA	Analysis	8011		1			573329	04/29/22 17:16	KSA	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/20/22 15:45	TJ	EET DEN

Laboratory References:
EET 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: 280-16514-867.1
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, 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	8011	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	R		
TB1	4/19/22	0700	G	W			X	X	8	
MW-5A	4/20/22	1330	G	W			X	X	6	
DUP2	4/20/22	1335	G	W			X	X	6	
MW-5B	4/20/22	1445	G	W			X	X	6	

280-161465 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
		4/21/22 0630	SCS		4/21/2022 0930	Eurofins
	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: 3.1 + R12 CF+0.1

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: T. Hultquist	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

Address: 13469 SW Highway 18
City: McMinnville
State, Zip: OR, 97128
Phone:
Email:
Project Name:1003|Riverbend Landfill SCS Engineers
Event Desc: Downgradient Det. Wells - Apr
Site: Oregon

Due Date Requested:
TAT Requested (days):
PO #:
WO #:
Project #: 28002786
SSOW#:

Job #:

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		
TB1	4/19/22	0700	G	W			X	X	3	
MW-5A	4/20/22	1330	G	W			X	X	6	
DUP2	4/20/22	1335	G	W			X	X	6	
MW-5B	4/20/22	1445	G	W			X	X	6	

280-161465 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:

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	4/21/22 @1630	SCS	Received by:	4/25/2022 0850	
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: 3.1 IR 12 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:** 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 .	° 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)
4/20/22	12:17	34.40	.	16.09	.	18.31	X 1	2.98
/ /	:	.	.	.	.		X 3	8.95

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	4/20/22	13:30	F	3	40 ml HCl	YES	NO		
VOA Glass	4/20/22	13:30	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: : 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(1220)	0.00	5.74	38.4	1263	12.1	16.50	4.69	clear/colorless
1	F(1243)	3.00	5.82	27.1	1234	13.6	14.94	1.18	C/C
2	F(1304)	6.00	5.80	23.8	1254	13.8	25.81	0.89	C/C
3	F(1325)	9.00	5.80	23.0	1287	13.9	26.76	0.64	C/C
4	F(1327)	9.30	5.80	22.7	1292	13.9	26.97	0.62	C/C
5	F(1329)	9.60	5.80	22.7	1290	13.9	27.11	0.60	C/C
6			.			.	.	.	

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

Ran out of CO2 before filling bottles. Purged ~0.5 gal before filling bottles. Standard Purge 450 mL/min (11/9/25 psi)

SAMPLER: [signature] (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:**	48 .	° 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	4/20/22	13:35	F	3 40 ml	HCl	YES	NO		✓
VOA Glass	4/20/22	13:35	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 — 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 (1335)	0.00	:	—	—	—	.	:	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected at MW-5A

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-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 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)
4/20/22	14:55	42.40	.	24.74	.	—	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	4/20/22	14:45	F	3	40 ml HCl	YES	NO		✓
VOA Glass	4/20/22	14:45	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)

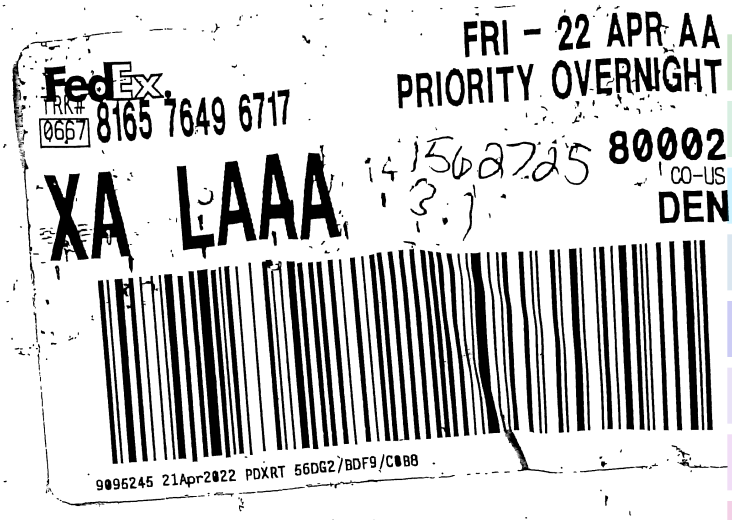
WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp °C	DTW	Diss O_2 (mg/l)	Water Quality
0	1425	0.00	7.12	2.8	625.20	13.2	24.88	4.55	C/C
1	1432	0.70	7.06	-38.2	611.30	13.7	25.15	2.13	tan, clear
2	1434	1.0	7.07	-50.2	613.60	13.8	25.25	0.80	tan, clear
3	1437	1.25	7.07	-55.5	613.40	13.9	25.25	0.82	
4	1439	1.35	7.06	-54.7	614.40	14.0	25.26	0.78	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Low flow Purge method: ~280 mL/min (20/10/20 psi)

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


FedEx
TRK# 8165 7649 6717
0667
FRI - 22 APR AA
PRIORITY OVERNIGHT
80002
CO-US
DEN
XA LAAA
9096245 21Apr2022 PDXRT 56DG2/BDF9/C8B8

280-161465 Waybill

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161465-1

Login Number: 161465
List Number: 1
Creator: Kazenga, Oliver M

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	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Annual MW-22A - Apr

JOB NUMBER

280-161418-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

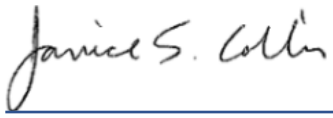
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-161418-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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.

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: 280-161418-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161418-1

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 04/22/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.4°C, 2.1°C and 3.2°C.

Holding Times

All holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

1,2-Dichlorobenzene and 1,3-Dichlorobenzene Method 8260B recovered outside control limits for the LCS associated with analytical batch 280-573474. This is not indicative of a systematic control problem because these were random marginal exceedances.

The Method 8260B laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with the sample TRIP BLANK recovered low for the analyte 1,4-Dichlorobenzene (both recovered at 75, lower limit 76). The %RPD between the two is within acceptable limits and the analyte is within acceptable limits in the continuing calibration verification (CCV). There is no remaining volume for reanalysis of the sample; therefore, data was reported.

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 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 multiple spike compounds Method 8260B. In addition, the RPD was outside of the RPD limits for multiple spike compounds 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.

Sample DUP3 was selected to fulfill the laboratory batch quality control requirements for Method 350.1. Analysis of the laboratory

Job ID: 280-161418-1 (Continued)

Laboratory: Eurofins Denver (Continued)

generated MS/MSD for this sample exhibited recoveries of Ammonia above the upper control limit. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, this anomaly may be due to matrix interference and no corrective action was taken.

All other MS and MSD 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 SCS Engineers

Job ID: 280-161418-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-161418-1

No Detections.

Client Sample ID: MW-22A — Lab Sample ID: 280-161418-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	29000		500		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved
Sodium	9500		1000		ug/L	1		6010B	Dissolved
Chloride	5.1		0.50		mg/L	1		300.0	Total/NA
Sulfate	8.2		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.057		0.030		mg/L	1		350.1	Total/NA
Total Anions	2.9				meq/L	1		SM 1030E	Total/NA
Total Cations	2.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.0				%	1		SM 1030E	Total/NA
Calcium	29				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	9.5				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.057				mg/L	1		SM 1030E	Total/NA
Chloride	5.1				mg/L	1		SM 1030E	Total/NA
Sulfate	8.2				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.0				%	1		SM 1030E	Total/NA
Calculated TDS	130				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.3				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	29000				ug/L	1		SM 1030E (meq)	Total/NA
Magnesium	12000				ug/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				ug/L	1		SM 1030E (meq)	Total/NA
Sodium	9500				ug/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.057				mg/L	1		SM 1030E (meq)	Total/NA
Chloride	5.1				mg/L	1		SM 1030E (meq)	Total/NA
Sulfate	8.2				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				ug/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	170		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.04				SU	1		Field Sampling	Total/NA
Field Conductivity	288.9				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	3.54				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	181.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP3 — Lab Sample ID: 280-161418-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	28000		500		ug/L	1		6010B	Dissolved
Magnesium	12000		200		ug/L	1		6010B	Dissolved
Sodium	9500		1000		ug/L	1		6010B	Dissolved
Chloride	5.2		0.50		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP3 (Continued)

Lab Sample ID: 280-161418-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	8.1		1.0		mg/L	1		300.0	Total/NA
Total Organic Carbon - Average	1.0		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	-2.0				%	1		SM 1030E	Total/NA
Calcium	28				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	9.5				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	8.1				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-2.0				%	1		SM 1030E	Total/NA
Calculated TDS	130				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	160				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	28000				ug/L	1		SM 1030E (meq)	Total/NA
Magnesium	12000				ug/L	1		SM 1030E (meq)	Total/NA
Potassium	0.00				ug/L	1		SM 1030E (meq)	Total/NA
Sodium	9500				ug/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Chloride	5.2				mg/L	1		SM 1030E (meq)	Total/NA
Sulfate	8.1				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130				mg/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				ug/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	130		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	160		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.04				SU	1		Field Sampling	Total/NA
Field Conductivity	288.9				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	3.54				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	181.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB3

Lab Sample ID: 280-161418-4

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

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB3 (Continued)

Lab Sample ID: 280-161418-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
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

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161418-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161418-1	TRIP BLANK	Water	04/19/22 07:00	04/22/22 11:00
280-161418-2	MW-22A	Water	04/21/22 09:15	04/22/22 11:00
280-161418-3	DUP3	Water	04/21/22 09:20	04/22/22 11:00
280-161418-4	FB3	Water	04/21/22 10:30	04/22/22 11:00

Method Summary

Client: Waste Management
Job ID: 280-161418-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

Client Sample ID: TRIP BLANK
Date Collected: 04/19/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-1
Matrix: Water

Method: SW846 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			04/30/22 15:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 15:54	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 15:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 15:54	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 15:54	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 15:54	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 15:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 15:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 15:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
1,2-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:54	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 15:54	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 15:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
1,3-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:54	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 15:54	1
1,4-Dichlorobenzene	ND	*-	1.0		ug/L			04/30/22 15:54	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 15:54	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 15:54	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:54	1
2-Hexanone	ND		5.0		ug/L			04/30/22 15:54	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 15:54	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 15:54	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 15:54	1
Acetone	ND		10		ug/L			04/30/22 15:54	1
Benzene	ND		1.0		ug/L			04/30/22 15:54	1
Bromobenzene	ND		1.0		ug/L			04/30/22 15:54	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 15:54	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 15:54	1
Bromoform	ND		1.0		ug/L			04/30/22 15:54	1
Bromomethane	ND		2.0		ug/L			04/30/22 15:54	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 15:54	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 15:54	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 15:54	1
Chloroethane	ND		2.0		ug/L			04/30/22 15:54	1
Chloroform	ND		1.0		ug/L			04/30/22 15:54	1
Chloromethane	ND		2.0		ug/L			04/30/22 15:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:54	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 15:54	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 15:54	1
Dibromomethane	ND		1.0		ug/L			04/30/22 15:54	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 15:54	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 15:54	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 15:54	1
Naphthalene	ND		1.0		ug/L			04/30/22 15:54	1
n-Butylbenzene	ND		1.0		ug/L			04/30/22 15:54	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-161418-1

Date Collected: 04/19/22 07:00

Matrix: Water

Date Received: 04/22/22 11:00

Method: SW846 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			04/30/22 15:54	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
Styrene	ND		1.0		ug/L			04/30/22 15:54	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 15:54	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 15:54	1
Toluene	ND		1.0		ug/L			04/30/22 15:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 15:54	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 15:54	1
Trichloroethene	ND		1.0		ug/L			04/30/22 15:54	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 15:54	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 15:54	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 15:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/30/22 15:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*04/30/22 15:54*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/30/22 15:54*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*04/30/22 15:54*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*04/30/22 15:54*	*1*

Method: SW846 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		05/03/22 16:34	05/04/22 22:03	1
1,2-Dibromoethane	ND		0.050		ug/L		05/03/22 16:34	05/04/22 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*113*		*70 - 130*	*05/03/22 16:34*	*05/04/22 22:03*	*1*

Client Sample ID: MW-22A

Lab Sample ID: 280-161418-2

Date Collected: 04/21/22 09:15

Matrix: Water

Date Received: 04/22/22 11:00

Method: SW846 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			05/04/22 10:08	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 10:08	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 10:08	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 10:08	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 10:08	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 10:08	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 10:08	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:08	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 10:08	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:08	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:08	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 10:08	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 10:08	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:08	1

Client Sample ID: MW-22A
Date Collected: 04/21/22 09:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-2
Matrix: Water

Method: SW846 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			05/04/22 10:08	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 10:08	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:08	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 10:08	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 10:08	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:08	1
2-Hexanone	ND		5.0		ug/L			05/04/22 10:08	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:08	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 10:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 10:08	1
Acetone	ND		10		ug/L			05/04/22 10:08	1
Benzene	ND		1.0		ug/L			05/04/22 10:08	1
Bromobenzene	ND		1.0		ug/L			05/04/22 10:08	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 10:08	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 10:08	1
Bromoform	ND		1.0		ug/L			05/04/22 10:08	1
Bromomethane	ND		2.0		ug/L			05/04/22 10:08	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 10:08	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 10:08	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 10:08	1
Chloroethane	ND		2.0		ug/L			05/04/22 10:08	1
Chloroform	ND		1.0		ug/L			05/04/22 10:08	1
Chloromethane	ND		2.0		ug/L			05/04/22 10:08	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:08	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 10:08	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 10:08	1
Dibromomethane	ND		1.0		ug/L			05/04/22 10:08	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 10:08	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 10:08	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 10:08	1
Naphthalene	ND		1.0		ug/L			05/04/22 10:08	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
Styrene	ND		1.0		ug/L			05/04/22 10:08	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 10:08	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 10:08	1
Toluene	ND		1.0		ug/L			05/04/22 10:08	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:08	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 10:08	1
Trichloroethene	ND		1.0		ug/L			05/04/22 10:08	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 10:08	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 10:08	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 10:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/04/22 10:08*	*1*

Client Sample ID: MW-22A

Date Collected: 04/21/22 09:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*05/04/22 10:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/04/22 10:08*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/04/22 10:08*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/04/22 10:08*	*1*

Method: SW846 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		05/03/22 16:34	05/04/22 22:27	1
1,2-Dibromoethane	ND		0.050		ug/L		05/03/22 16:34	05/04/22 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*05/03/22 16:34*	*05/04/22 22:27*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**29000**		500		ug/L		05/03/22 19:17	05/04/22 22:02	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 22:02	1
Magnesium	**12000**		200		ug/L		05/03/22 19:17	05/04/22 22:02	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 22:02	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 22:02	1
Sodium	**9500**		1000		ug/L		05/03/22 19:17	05/04/22 22:02	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**2.9**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**2.9**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**-1.0**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**29**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**12**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**9.5**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.057**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**5.1**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**8.2**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**-1.0**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.3**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**170**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**29000**				ug/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**12000**				ug/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.00**				ug/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**9500**				ug/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.057**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**5.1**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**8.2**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				mg/L			05/10/22 12:14	1

Client Sample ID: MW-22A

Date Collected: 04/21/22 09:15
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Iron (SM 1030E (meq))	**0.00**				ug/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**5.1**		0.50		mg/L			05/09/22 23:22	1
Sulfate (EPA 300.0)	**8.2**		1.0		mg/L			05/09/22 23:22	1
Ammonia as N (EPA 350.1)	**0.057**		0.030		mg/L			05/05/22 14:09	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/03/22 16:52	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			04/28/22 21:55	1
Bicarbonate Alkalinity (SM 2320B)	**130**		10		mg/L			05/03/22 18:54	1
Total Dissolved Solids (SM 2540C)	**170**		10		mg/L			04/28/22 11:53	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.04**				SU			04/21/22 10:15	1
Field Conductivity	**288.9**				umhos/cm			04/21/22 10:15	1
Field Temperature	**9.9**				Degrees C			04/21/22 10:15	1
Field Dissolved Oxygen	**3.54**				mg/L			04/21/22 10:15	1
Field EH/ORP	**181.3**				millivolts			04/21/22 10:15	1

Client Sample ID: DUP3

Date Collected: 04/21/22 09:20
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-3

Matrix: Water

Method: SW846 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			05/04/22 10:30	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 10:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 10:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 10:30	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 10:30	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 10:30	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 10:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 10:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 10:30	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 10:30	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 10:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 10:30	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 10:30	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:30	1
2-Hexanone	ND		5.0		ug/L			05/04/22 10:30	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 10:30	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 10:30	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 10:30	1

Client Sample ID: DUP3

Date Collected: 04/21/22 09:20
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			05/04/22 10:30	1
Benzene	ND		1.0		ug/L			05/04/22 10:30	1
Bromobenzene	ND		1.0		ug/L			05/04/22 10:30	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 10:30	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 10:30	1
Bromoform	ND		1.0		ug/L			05/04/22 10:30	1
Bromomethane	ND		2.0		ug/L			05/04/22 10:30	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 10:30	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 10:30	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 10:30	1
Chloroethane	ND		2.0		ug/L			05/04/22 10:30	1
Chloroform	ND		1.0		ug/L			05/04/22 10:30	1
Chloromethane	ND		2.0		ug/L			05/04/22 10:30	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 10:30	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 10:30	1
Dibromomethane	ND		1.0		ug/L			05/04/22 10:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 10:30	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 10:30	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 10:30	1
Naphthalene	ND		1.0		ug/L			05/04/22 10:30	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
Styrene	ND		1.0		ug/L			05/04/22 10:30	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 10:30	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 10:30	1
Toluene	ND		1.0		ug/L			05/04/22 10:30	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 10:30	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 10:30	1
Trichloroethene	ND		1.0		ug/L			05/04/22 10:30	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 10:30	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 10:30	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 10:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/04/22 10:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*05/04/22 10:30*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/04/22 10:30*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 120*		*05/04/22 10:30*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/04/22 10:30*	*1*

Method: SW846 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		05/03/22 16:34	05/04/22 22:51	1
1,2-Dibromoethane	ND		0.050		ug/L		05/03/22 16:34	05/04/22 22:51	1

Client Sample ID: DUP3

Date Collected: 04/21/22 09:20
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*05/03/22 16:34*	*05/04/22 22:51*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**28000**		500		ug/L		05/03/22 19:17	05/04/22 22:22	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 22:22	1
Magnesium	**12000**		200		ug/L		05/03/22 19:17	05/04/22 22:22	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 22:22	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 22:22	1
Sodium	**9500**		1000		ug/L		05/03/22 19:17	05/04/22 22:22	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**2.9**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**2.8**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**-2.0**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**28**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**12**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**9.5**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**5.2**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**8.1**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**-2.0**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**130**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.2**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**160**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**28000**				ug/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**12000**				ug/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.00**				ug/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**9500**				ug/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.00**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**5.2**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**8.1**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**130**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				mg/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	**0.00**				ug/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**5.2**		0.50		mg/L			05/09/22 23:41	1
Sulfate (EPA 300.0)	**8.1**		1.0		mg/L			05/09/22 23:41	1
Ammonia as N (EPA 350.1)	ND	F1	0.030		mg/L			05/05/22 14:34	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/02/22 17:46	1
Total Organic Carbon - Average (SW846 9060)	**1.0**		1.0		mg/L			04/28/22 22:12	1
Bicarbonate Alkalinity (SM 2320B)	**130**		10		mg/L			05/03/22 19:06	1
Total Dissolved Solids (SM 2540C)	**160**		10		mg/L			04/28/22 11:53	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

Client Sample ID: DUP3

Lab Sample ID: 280-161418-3
Matrix: Water
Date Collected: 04/21/22 09:20
Date Received: 04/22/22 11:00

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.04				SU			04/21/22 10:20	1
Field Conductivity	288.9				umhos/cm			04/21/22 10:20	1
Field Temperature	9.9				Degrees C			04/21/22 10:20	1
Field Dissolved Oxygen	3.54				mg/L			04/21/22 10:20	1
Field EH/ORP	181.3				millivolts			04/21/22 10:20	1

Client Sample ID: FB3

Lab Sample ID: 280-161418-4
Matrix: Water
Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Method: SW846 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			05/04/22 09:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 09:47	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 09:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 09:47	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 09:47	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 09:47	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 09:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 09:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 09:47	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 09:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 09:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 09:47	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 09:47	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:47	1
2-Hexanone	ND		5.0		ug/L			05/04/22 09:47	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:47	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 09:47	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 09:47	1
Acetone	ND		10		ug/L			05/04/22 09:47	1
Benzene	ND		1.0		ug/L			05/04/22 09:47	1
Bromobenzene	ND		1.0		ug/L			05/04/22 09:47	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 09:47	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 09:47	1
Bromoform	ND		1.0		ug/L			05/04/22 09:47	1
Bromomethane	ND		2.0		ug/L			05/04/22 09:47	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 09:47	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 09:47	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 09:47	1
Chloroethane	ND		2.0		ug/L			05/04/22 09:47	1
Chloroform	ND		1.0		ug/L			05/04/22 09:47	1
Chloromethane	ND		2.0		ug/L			05/04/22 09:47	1

Client Sample ID: FB3

Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-4

Matrix: Water

Method: SW846 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			05/04/22 09:47	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 09:47	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 09:47	1
Dibromomethane	ND		1.0		ug/L			05/04/22 09:47	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 09:47	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 09:47	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 09:47	1
Naphthalene	ND		1.0		ug/L			05/04/22 09:47	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
Styrene	ND		1.0		ug/L			05/04/22 09:47	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 09:47	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 09:47	1
Toluene	ND		1.0		ug/L			05/04/22 09:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 09:47	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 09:47	1
Trichloroethene	ND		1.0		ug/L			05/04/22 09:47	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 09:47	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 09:47	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 09:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/04/22 09:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*		*05/04/22 09:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/04/22 09:47*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 120*		*05/04/22 09:47*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/04/22 09:47*	*1*

Method: SW846 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		05/03/22 16:34	05/04/22 23:15	1
1,2-Dibromoethane	ND		0.050		ug/L		05/03/22 16:34	05/04/22 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*114*		*70 - 130*	*05/03/22 16:34*	*05/04/22 23:15*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/03/22 19:17	05/04/22 22:26	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 22:26	1
Magnesium	ND		200		ug/L		05/03/22 19:17	05/04/22 22:26	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 22:26	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 22:26	1
Sodium	ND		1000		ug/L		05/03/22 19:17	05/04/22 22:26	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

Client Sample ID: FB3
Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	0.00				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	0.00				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	NC				%			05/10/22 12:14	1
Calcium (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	NC				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	NC				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	0.00				mg/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			05/10/22 00:01	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			05/10/22 00:01	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			05/05/22 14:07	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/02/22 17:48	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			04/28/22 18:05	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 19:11	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			04/28/22 11:53	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

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)
280-161418-1	TRIP BLANK	97	96	99	101
280-161418-2	MW-22A	95	98	90	110
280-161418-3	DUP3	93	96	89	110
280-161418-4	FB3	92	98	88	110
280-161623-D-1 MS	Matrix Spike	96	96	94	104
280-161623-E-1 MSD	Matrix Spike Duplicate	95	97	94	104
280-161669-A-17 MS	Matrix Spike	95	94	88	111
280-161669-B-17 MSD	Matrix Spike Duplicate	90	93	89	109
LCS 280-573474/4	Lab Control Sample	106	95	115	85
LCS 280-573782/5	Lab Control Sample	89	96	85	111
LCSD 280-573474/5	Lab Control Sample Dup	107	96	116	84
LCSD 280-573782/6	Lab Control Sample Dup	92	96	89	111
MB 280-573474/9	Method Blank	104	96	118	83
MB 280-573782/10	Method Blank	94	99	90	109

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)
280-161418-1	TRIP BLANK	113
280-161418-2	MW-22A	115
280-161418-3	DUP3	112
280-161418-4	FB3	114
LCS 280-573754/2-A	Lab Control Sample	112
LCSD 280-573754/3-A	Lab Control Sample Dup	115
MB 280-573754/1-A	Method Blank	108

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-573474/9
Matrix: Water
Analysis Batch: 573474

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			04/30/22 09:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
1,1-Dichloropropene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichloroethane	ND		1.0		ug/L			04/30/22 09:13	1
1,2-Dichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
1,3-Dichloropropane	ND		1.0		ug/L			04/30/22 09:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
2,2-Dichloropropane	ND		5.0		ug/L			04/30/22 09:13	1
2-Butanone (MEK)	ND		6.0		ug/L			04/30/22 09:13	1
2-Chlorotoluene	ND		1.0		ug/L			04/30/22 09:13	1
2-Hexanone	ND		5.0		ug/L			04/30/22 09:13	1
4-Chlorotoluene	ND		1.0		ug/L			04/30/22 09:13	1
4-Isopropyltoluene	ND		1.0		ug/L			04/30/22 09:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			04/30/22 09:13	1
Acetone	ND		10		ug/L			04/30/22 09:13	1
Benzene	ND		1.0		ug/L			04/30/22 09:13	1
Bromobenzene	ND		1.0		ug/L			04/30/22 09:13	1
Bromochloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Bromodichloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Bromoform	ND		1.0		ug/L			04/30/22 09:13	1
Bromomethane	ND		2.0		ug/L			04/30/22 09:13	1
Carbon disulfide	ND		2.0		ug/L			04/30/22 09:13	1
Carbon tetrachloride	ND		1.0		ug/L			04/30/22 09:13	1
Chlorobenzene	ND		1.0		ug/L			04/30/22 09:13	1
Chloroethane	ND		2.0		ug/L			04/30/22 09:13	1
Chloroform	ND		1.0		ug/L			04/30/22 09:13	1
Chloromethane	ND		2.0		ug/L			04/30/22 09:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/30/22 09:13	1
Dibromochloromethane	ND		1.0		ug/L			04/30/22 09:13	1
Dibromomethane	ND		1.0		ug/L			04/30/22 09:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			04/30/22 09:13	1
Ethylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Hexachlorobutadiene	ND		1.0		ug/L			04/30/22 09:13	1
Isopropylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Methylene Chloride	ND		5.0		ug/L			04/30/22 09:13	1
Naphthalene	ND		1.0		ug/L			04/30/22 09:13	1

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

Lab Sample ID: MB 280-573474/9
Matrix: Water
Analysis Batch: 573474

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			04/30/22 09:13	1
N-Propylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
sec-Butylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Styrene	ND		1.0		ug/L			04/30/22 09:13	1
tert-Butylbenzene	ND		1.0		ug/L			04/30/22 09:13	1
Tetrachloroethene	ND		1.0		ug/L			04/30/22 09:13	1
Toluene	ND		1.0		ug/L			04/30/22 09:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			04/30/22 09:13	1
Trichloroethene	ND		1.0		ug/L			04/30/22 09:13	1
Trichlorofluoromethane	ND		2.0		ug/L			04/30/22 09:13	1
Vinyl chloride	ND		1.0		ug/L			04/30/22 09:13	1
Xylenes (total)	ND		2.0		ug/L			04/30/22 09:13	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*04/30/22 09:13*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*		*04/30/22 09:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*04/30/22 09:13*	*1*
Dibromofluoromethane (Surr)	*118*		*77 - 120*		*04/30/22 09:13*	*1*
Toluene-d8 (Surr)	*83*		*80 - 125*		*04/30/22 09:13*	*1*

Lab Sample ID: LCS 280-573474/4
Matrix: Water
Analysis Batch: 573474

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	42.0		ug/L		84	74 - 121
1,1,1-Trichloroethane	50.0	53.9		ug/L		108	62 - 132
1,1,2,2-Tetrachloroethane	50.0	37.6		ug/L		75	72 - 122
1,1,2-Trichloroethane	50.0	58.7		ug/L		117	72 - 128
1,1-Dichloroethane	50.0	52.4		ug/L		105	66 - 130
1,1-Dichloroethene	50.0	46.6		ug/L		93	62 - 130
1,1-Dichloropropene	50.0	53.4		ug/L		107	64 - 133
1,2,3-Trichlorobenzene	50.0	35.1		ug/L		70	70 - 127
1,2,3-Trichloropropane	50.0	38.5		ug/L		77	74 - 123
1,2,4-Trichlorobenzene	50.0	36.8		ug/L		74	73 - 124
1,2,4-Trimethylbenzene	50.0	37.6		ug/L		75	74 - 124
1,2-Dichlorobenzene	50.0	37.3	*-	ug/L		75	77 - 121
1,2-Dichloroethane	50.0	55.0		ug/L		110	61 - 130
1,2-Dichloropropane	50.0	55.2		ug/L		110	68 - 127
1,3,5-Trimethylbenzene	50.0	37.6		ug/L		75	73 - 127
1,3-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 121
1,3-Dichloropropane	50.0	41.5		ug/L		83	80 - 118
1,4-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 119
2,2-Dichloropropane	50.0	53.3		ug/L		107	57 - 140
2-Butanone (MEK)	200	195		ug/L		97	53 - 135

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

Lab Sample ID: LCS 280-573474/4
Matrix: Water
Analysis Batch: 573474

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	50.0	37.9		ug/L		76	75 - 123
2-Hexanone	200	150		ug/L		75	58 - 134
4-Chlorotoluene	50.0	38.3		ug/L		77	74 - 124
4-Isopropyltoluene	50.0	37.6		ug/L		75	74 - 127
4-Methyl-2-pentanone	200	224		ug/L		112	56 - 135
Acetone	200	198		ug/L		99	50 - 137
Benzene	50.0	55.6		ug/L		111	69 - 126
Bromobenzene	50.0	39.2		ug/L		78	75 - 122
Bromochloromethane	50.0	59.6		ug/L		119	71 - 130
Bromodichloromethane	50.0	57.6		ug/L		115	67 - 126
Bromoform	50.0	40.5		ug/L		81	57 - 125
Bromomethane	50.0	54.9		ug/L		110	25 - 163
Carbon disulfide	50.0	40.3		ug/L		81	56 - 128
Carbon tetrachloride	50.0	53.7		ug/L		107	60 - 133
Chlorobenzene	50.0	41.1		ug/L		82	78 - 118
Chloroethane	50.0	57.2		ug/L		114	52 - 144
Chloroform	50.0	55.8		ug/L		112	68 - 128
Chloromethane	50.0	48.4		ug/L		97	43 - 142
cis-1,2-Dichloroethene	50.0	57.2		ug/L		114	69 - 126
cis-1,3-Dichloropropene	50.0	40.3		ug/L		81	75 - 120
Dibromochloromethane	50.0	40.8		ug/L		82	71 - 122
Dibromomethane	50.0	58.4		ug/L		117	68 - 129
Dichlorodifluoromethane	50.0	47.6		ug/L		95	26 - 152
Ethylbenzene	50.0	40.2		ug/L		80	76 - 121
Hexachlorobutadiene	50.0	34.7		ug/L		69	69 - 133
Isopropylbenzene	50.0	37.1		ug/L		74	70 - 127
Methylene Chloride	50.0	56.2		ug/L		112	64 - 128
Naphthalene	50.0	35.5		ug/L		71	63 - 129
n-Butylbenzene	50.0	37.1		ug/L		74	69 - 130
N-Propylbenzene	50.0	37.0		ug/L		74	73 - 127
sec-Butylbenzene	50.0	37.5		ug/L		75	72 - 127
Styrene	50.0	41.9		ug/L		84	79 - 120
tert-Butylbenzene	50.0	40.6		ug/L		81	72 - 126
Tetrachloroethene	50.0	40.1		ug/L		80	72 - 127
Toluene	50.0	57.0		ug/L		114	68 - 127
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	66 - 129
trans-1,3-Dichloropropene	50.0	57.4		ug/L		115	66 - 127
Trichloroethene	50.0	57.0		ug/L		114	70 - 125
Trichlorofluoromethane	50.0	59.6		ug/L		119	57 - 144
Vinyl chloride	50.0	51.5		ug/L		103	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 127*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*
Dibromofluoromethane (Surr)	*115*		*77 - 120*
Toluene-d8 (Surr)	*85*		*80 - 125*

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

Lab Sample ID: LCSD 280-573474/5
Matrix: Water
Analysis Batch: 573474

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	41.5		ug/L		83	74 - 121	1	20
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	62 - 132	0	20
1,1,2,2-Tetrachloroethane	50.0	39.2		ug/L		78	72 - 122	4	20
1,1,2-Trichloroethane	50.0	60.7		ug/L		121	72 - 128	3	20
1,1-Dichloroethane	50.0	52.7		ug/L		105	66 - 130	1	20
1,1-Dichloroethene	50.0	46.7		ug/L		93	62 - 130	0	21
1,1-Dichloropropene	50.0	53.7		ug/L		107	64 - 133	0	20
1,2,3-Trichlorobenzene	50.0	38.1		ug/L		76	70 - 127	8	20
1,2,3-Trichloropropane	50.0	40.0		ug/L		80	74 - 123	4	20
1,2,4-Trichlorobenzene	50.0	38.1		ug/L		76	73 - 124	4	20
1,2,4-Trimethylbenzene	50.0	37.7		ug/L		75	74 - 124	0	20
1,2-Dichlorobenzene	50.0	38.6		ug/L		77	77 - 121	3	20
1,2-Dichloroethane	50.0	56.3		ug/L		113	61 - 130	2	20
1,2-Dichloropropane	50.0	55.3		ug/L		111	68 - 127	0	20
1,3,5-Trimethylbenzene	50.0	37.8		ug/L		76	73 - 127	1	20
1,3-Dichlorobenzene	50.0	38.1		ug/L		76	76 - 121	1	20
1,3-Dichloropropane	50.0	42.3		ug/L		85	80 - 118	2	20
1,4-Dichlorobenzene	50.0	37.6	*-	ug/L		75	76 - 119	0	20
2,2-Dichloropropane	50.0	54.4		ug/L		109	57 - 140	2	22
2-Butanone (MEK)	200	210		ug/L		105	53 - 135	7	20
2-Chlorotoluene	50.0	38.5		ug/L		77	75 - 123	2	20
2-Hexanone	200	157		ug/L		79	58 - 134	5	21
4-Chlorotoluene	50.0	38.5		ug/L		77	74 - 124	0	20
4-Isopropyltoluene	50.0	38.0		ug/L		76	74 - 127	1	20
4-Methyl-2-pentanone	200	237		ug/L		119	56 - 135	6	20
Acetone	200	218		ug/L		109	50 - 137	10	21
Benzene	50.0	55.6		ug/L		111	69 - 126	0	20
Bromobenzene	50.0	39.3		ug/L		79	75 - 122	0	20
Bromochloromethane	50.0	60.7		ug/L		121	71 - 130	2	20
Bromodichloromethane	50.0	58.0		ug/L		116	67 - 126	1	20
Bromoform	50.0	40.9		ug/L		82	57 - 125	1	20
Bromomethane	50.0	57.3		ug/L		115	25 - 163	4	40
Carbon disulfide	50.0	39.3		ug/L		79	56 - 128	2	20
Carbon tetrachloride	50.0	53.3		ug/L		107	60 - 133	1	20
Chlorobenzene	50.0	40.9		ug/L		82	78 - 118	1	20
Chloroethane	50.0	56.5		ug/L		113	52 - 144	1	30
Chloroform	50.0	56.2		ug/L		112	68 - 128	1	20
Chloromethane	50.0	47.7		ug/L		95	43 - 142	1	20
cis-1,2-Dichloroethene	50.0	57.1		ug/L		114	69 - 126	0	20
cis-1,3-Dichloropropene	50.0	40.4		ug/L		81	75 - 120	0	20
Dibromochloromethane	50.0	41.7		ug/L		83	71 - 122	2	20
Dibromomethane	50.0	60.5		ug/L		121	68 - 129	4	20
Dichlorodifluoromethane	50.0	48.1		ug/L		96	26 - 152	1	21
Ethylbenzene	50.0	39.7		ug/L		79	76 - 121	1	20
Hexachlorobutadiene	50.0	36.3		ug/L		73	69 - 133	5	20
Isopropylbenzene	50.0	37.1		ug/L		74	70 - 127	0	20
Methylene Chloride	50.0	56.4		ug/L		113	64 - 128	0	20
Naphthalene	50.0	37.4		ug/L		75	63 - 129	5	21

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

Lab Sample ID: LCSD 280-573474/5
Matrix: Water
Analysis Batch: 573474

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			50.0	37.5		ug/L		75	69 - 130	1	20
N-Propylbenzene			50.0	37.4		ug/L		75	73 - 127	1	20
sec-Butylbenzene			50.0	37.8		ug/L		76	72 - 127	1	20
Styrene			50.0	41.6		ug/L		83	79 - 120	1	20
tert-Butylbenzene			50.0	41.0		ug/L		82	72 - 126	1	20
Tetrachloroethene			50.0	40.3		ug/L		81	72 - 127	0	20
Toluene			50.0	57.6		ug/L		115	68 - 127	1	20
trans-1,2-Dichloroethene			50.0	53.8		ug/L		108	66 - 129	0	20
trans-1,3-Dichloropropene			50.0	59.4		ug/L		119	66 - 127	3	20
Trichloroethene			50.0	55.5		ug/L		111	70 - 125	3	20
Trichlorofluoromethane			50.0	58.9		ug/L		118	57 - 144	1	28
Vinyl chloride			50.0	50.4		ug/L		101	53 - 141	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*116*		*77 - 120*
Toluene-d8 (Surr)	*84*		*80 - 125*

Lab Sample ID: 280-161623-D-1 MS
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	28.0		ug/L		112	74 - 121
1,1,1-Trichloroethane	ND	F1 F2	25.0	21.9		ug/L		87	62 - 132
1,1,2,2-Tetrachloroethane	ND	F1 F2	25.0	29.2		ug/L		117	72 - 122
1,1,2-Trichloroethane	ND	F1 F2	25.0	25.3		ug/L		101	72 - 128
1,1-Dichloroethane	ND	F1 F2	25.0	21.7		ug/L		87	66 - 130
1,1-Dichloroethene	ND	F1 F2	25.0	19.1		ug/L		76	62 - 130
1,1-Dichloropropene	ND	F1 F2	25.0	22.0		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	ND	F1 F2	25.0	28.8		ug/L		115	70 - 127
1,2,3-Trichloropropane	ND	F1 F2	25.0	30.4		ug/L		121	74 - 123
1,2,4-Trichlorobenzene	ND	F1 F2	25.0	28.4		ug/L		113	73 - 124
1,2,4-Trimethylbenzene	ND	F1 F2	25.0	28.8		ug/L		115	74 - 124
1,2-Dichlorobenzene	ND	*- F1 F2	25.0	29.2		ug/L		117	77 - 121
1,2-Dichloroethane	ND	F1 F2	25.0	23.1		ug/L		92	61 - 130
1,2-Dichloropropane	ND	F1 F2	25.0	22.8		ug/L		91	68 - 127
1,3,5-Trimethylbenzene	ND	F1 F2	25.0	28.9		ug/L		116	73 - 127
1,3-Dichlorobenzene	ND	*- F1 F2	25.0	29.3		ug/L		117	76 - 121
1,3-Dichloropropane	ND	F1 F2	25.0	29.2		ug/L		117	80 - 118
1,4-Dichlorobenzene	ND	*- F1 F2	25.0	28.7		ug/L		115	76 - 119
2,2-Dichloropropane	ND	F1 F2	25.0	19.4		ug/L		77	57 - 140
2-Butanone (MEK)	ND	F1 F2	100	81.0		ug/L		81	53 - 135
2-Chlorotoluene	ND	F1 F2	25.0	29.1		ug/L		116	75 - 123
2-Hexanone	ND	F2	100	103		ug/L		103	58 - 134
4-Chlorotoluene	ND	F1 F2	25.0	29.4		ug/L		118	74 - 124
4-Isopropyltoluene	ND	F1 F2	25.0	28.9		ug/L		116	74 - 127

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

Lab Sample ID: 280-161623-D-1 MS
Matrix: Water
Analysis Batch: 573474

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	F1 F2	100	92.3		ug/L		92	56 - 135
Acetone	ND	F1 F2	100	81.8		ug/L		82	50 - 137
Benzene	ND	F1 F2	25.0	23.1		ug/L		92	69 - 126
Bromobenzene	ND	F1 F2	25.0	30.5		ug/L		122	75 - 122
Bromochloromethane	ND	F1 F2	25.0	25.0		ug/L		100	71 - 130
Bromodichloromethane	ND	F1 F2	25.0	23.6		ug/L		94	67 - 126
Bromoform	ND	F2	25.0	25.8		ug/L		103	57 - 125
Bromomethane	ND		25.0	18.3		ug/L		73	25 - 163
Carbon disulfide	ND	F1 F2	25.0	15.8		ug/L		63	56 - 128
Carbon tetrachloride	ND	F1 F2	25.0	21.4		ug/L		86	60 - 133
Chlorobenzene	ND	F1 F2	25.0	28.6		ug/L		114	78 - 118
Chloroethane	ND		25.0	20.4		ug/L		82	52 - 144
Chloroform	ND	F1 F2	25.0	23.6		ug/L		95	68 - 128
Chloromethane	ND	F2	25.0	16.6		ug/L		66	43 - 142
cis-1,2-Dichloroethene	ND	F1 F2	25.0	23.1		ug/L		92	69 - 126
cis-1,3-Dichloropropene	ND	F1 F2	25.0	26.0		ug/L		104	75 - 120
Dibromochloromethane	ND	F1 F2	25.0	27.3		ug/L		109	71 - 122
Dibromomethane	ND	F1 F2	25.0	24.9		ug/L		100	68 - 129
Dichlorodifluoromethane	ND		25.0	16.9		ug/L		68	26 - 152
Ethylbenzene	ND	F1 F2	25.0	27.7		ug/L		111	76 - 121
Hexachlorobutadiene	ND	F1 F2	25.0	26.1		ug/L		104	69 - 133
Isopropylbenzene	ND	F2	25.0	28.4		ug/L		114	70 - 127
Methylene Chloride	ND	F1 F2	25.0	22.5		ug/L		90	64 - 128
Naphthalene	ND	F2	25.0	28.4		ug/L		114	63 - 129
n-Butylbenzene	ND	F1 F2	25.0	27.7		ug/L		111	69 - 130
N-Propylbenzene	ND	F1 F2	25.0	28.8		ug/L		115	73 - 127
sec-Butylbenzene	ND	F1 F2	25.0	28.6		ug/L		114	72 - 127
Styrene	ND	F1 F2	25.0	28.6		ug/L		115	79 - 120
tert-Butylbenzene	ND	F2	25.0	31.2		ug/L		125	72 - 126
Tetrachloroethene	ND	F1 F2	25.0	28.0		ug/L		112	72 - 127
Toluene	ND	F1 F2	25.0	24.1		ug/L		96	68 - 127
trans-1,2-Dichloroethene	ND	F1 F2	25.0	22.3		ug/L		89	66 - 129
trans-1,3-Dichloropropene	ND	F1 F2	25.0	22.6		ug/L		90	66 - 127
Trichloroethene	ND	F1 F2	25.0	23.3		ug/L		93	70 - 125
Trichlorofluoromethane	ND		25.0	21.3		ug/L		85	57 - 144
Vinyl chloride	ND		25.0	18.0		ug/L		72	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*94*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 125*

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

Lab Sample ID: 280-161623-E-1 MSD
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	16.7	F1 F2	ug/L		67	74 - 121	51	20
1,1,1-Trichloroethane	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	62 - 132	49	20
1,1,2,2-Tetrachloroethane	ND	F1 F2	25.0	17.4	F1 F2	ug/L		70	72 - 122	51	20
1,1,2-Trichloroethane	ND	F1 F2	25.0	14.6	F1 F2	ug/L		58	72 - 128	54	20
1,1-Dichloroethane	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	66 - 130	48	20
1,1-Dichloroethene	ND	F1 F2	25.0	11.7	F1 F2	ug/L		47	62 - 130	48	21
1,1-Dichloropropene	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	64 - 133	50	20
1,2,3-Trichlorobenzene	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	70 - 127	50	20
1,2,3-Trichloropropane	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	74 - 123	55	20
1,2,4-Trichlorobenzene	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	73 - 124	50	20
1,2,4-Trimethylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		71	74 - 124	48	20
1,2-Dichlorobenzene	ND	*- F1 F2	25.0	18.2	F1 F2	ug/L		73	77 - 121	47	20
1,2-Dichloroethane	ND	F1 F2	25.0	14.0	F1 F2	ug/L		56	61 - 130	49	20
1,2-Dichloropropane	ND	F1 F2	25.0	13.9	F1 F2	ug/L		56	68 - 127	48	20
1,3,5-Trimethylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		70	73 - 127	49	20
1,3-Dichlorobenzene	ND	*- F1 F2	25.0	17.8	F1 F2	ug/L		71	76 - 121	49	20
1,3-Dichloropropane	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	80 - 118	53	20
1,4-Dichlorobenzene	ND	*- F1 F2	25.0	17.7	F1 F2	ug/L		71	76 - 119	47	20
2,2-Dichloropropane	ND	F1 F2	25.0	11.5	F1 F2	ug/L		46	57 - 140	51	22
2-Butanone (MEK)	ND	F1 F2	100	46.5	F1 F2	ug/L		47	53 - 135	54	20
2-Chlorotoluene	ND	F1 F2	25.0	18.0	F1 F2	ug/L		72	75 - 123	47	20
2-Hexanone	ND	F2	100	59.6	F2	ug/L		60	58 - 134	53	21
4-Chlorotoluene	ND	F1 F2	25.0	17.7	F1 F2	ug/L		71	74 - 124	50	20
4-Isopropyltoluene	ND	F1 F2	25.0	17.1	F1 F2	ug/L		69	74 - 127	51	20
4-Methyl-2-pentanone	ND	F1 F2	100	52.2	F1 F2	ug/L		52	56 - 135	55	20
Acetone	ND	F1 F2	100	47.8	F1 F2	ug/L		48	50 - 137	52	21
Benzene	ND	F1 F2	25.0	14.0	F1 F2	ug/L		56	69 - 126	49	20
Bromobenzene	ND	F1 F2	25.0	18.4	F1 F2	ug/L		74	75 - 122	49	20
Bromochloromethane	ND	F1 F2	25.0	15.4	F1 F2	ug/L		62	71 - 130	47	20
Bromodichloromethane	ND	F1 F2	25.0	14.1	F1 F2	ug/L		56	67 - 126	50	20
Bromoform	ND	F2	25.0	14.6	F2	ug/L		58	57 - 125	56	20
Bromomethane	ND		25.0	14.8		ug/L		59	25 - 163	21	40
Carbon disulfide	ND	F1 F2	25.0	9.76	F1 F2	ug/L		39	56 - 128	47	20
Carbon tetrachloride	ND	F1 F2	25.0	12.6	F1 F2	ug/L		50	60 - 133	52	20
Chlorobenzene	ND	F1 F2	25.0	17.2	F1 F2	ug/L		69	78 - 118	49	20
Chloroethane	ND		25.0	15.8		ug/L		63	52 - 144	26	30
Chloroform	ND	F1 F2	25.0	14.6	F1 F2	ug/L		58	68 - 128	48	20
Chloromethane	ND	F2	25.0	13.3	F2	ug/L		53	43 - 142	22	20
cis-1,2-Dichloroethene	ND	F1 F2	25.0	14.3	F1 F2	ug/L		57	69 - 126	47	20
cis-1,3-Dichloropropene	ND	F1 F2	25.0	15.5	F1 F2	ug/L		62	75 - 120	51	20
Dibromochloromethane	ND	F1 F2	25.0	16.0	F1 F2	ug/L		64	71 - 122	52	20
Dibromomethane	ND	F1 F2	25.0	15.0	F1 F2	ug/L		60	68 - 129	50	20
Dichlorodifluoromethane	ND		25.0	13.8		ug/L		55	26 - 152	21	21
Ethylbenzene	ND	F1 F2	25.0	17.0	F1 F2	ug/L		68	76 - 121	48	20
Hexachlorobutadiene	ND	F1 F2	25.0	15.7	F1 F2	ug/L		63	69 - 133	49	20
Isopropylbenzene	ND	F2	25.0	17.5	F2	ug/L		70	70 - 127	48	20
Methylene Chloride	ND	F1 F2	25.0	13.5	F1 F2	ug/L		54	64 - 128	50	20
Naphthalene	ND	F2	25.0	17.0	F2	ug/L		68	63 - 129	50	21

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

Lab Sample ID: 280-161623-E-1 MSD
Matrix: Water
Analysis Batch: 573474

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	F1 F2	25.0	16.6	F1 F2	ug/L		67	69 - 130	50	20
N-Propylbenzene	ND	F1 F2	25.0	17.6	F1 F2	ug/L		71	73 - 127	48	20
sec-Butylbenzene	ND	F1 F2	25.0	17.4	F1 F2	ug/L		70	72 - 127	49	20
Styrene	ND	F1 F2	25.0	17.3	F1 F2	ug/L		69	79 - 120	50	20
tert-Butylbenzene	ND	F2	25.0	19.1	F2	ug/L		76	72 - 126	48	20
Tetrachloroethene	ND	F1 F2	25.0	16.9	F1 F2	ug/L		68	72 - 127	49	20
Toluene	ND	F1 F2	25.0	14.6	F1 F2	ug/L		59	68 - 127	49	20
trans-1,2-Dichloroethene	ND	F1 F2	25.0	13.7	F1 F2	ug/L		55	66 - 129	48	20
trans-1,3-Dichloropropene	ND	F1 F2	25.0	13.3	F1 F2	ug/L		53	66 - 127	52	20
Trichloroethene	ND	F1 F2	25.0	14.3	F1 F2	ug/L		57	70 - 125	48	20
Trichlorofluoromethane	ND		25.0	17.0		ug/L		68	57 - 144	22	28
Vinyl chloride	ND		25.0	14.5		ug/L		58	53 - 141	22	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*94*		*77 - 120*
Toluene-d8 (Surr)	*104*		*80 - 125*

Lab Sample ID: MB 280-573782/10
Matrix: Water
Analysis Batch: 573782

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			05/04/22 09:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 09:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 09:25	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 09:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 09:25	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 09:25	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:25	1
2-Hexanone	ND		5.0		ug/L			05/04/22 09:25	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 09:25	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 09:25	1

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

Lab Sample ID: MB 280-573782/10
Matrix: Water
Analysis Batch: 573782

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			05/04/22 09:25	1
Acetone	ND		10		ug/L			05/04/22 09:25	1
Benzene	ND		1.0		ug/L			05/04/22 09:25	1
Bromobenzene	ND		1.0		ug/L			05/04/22 09:25	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Bromoform	ND		1.0		ug/L			05/04/22 09:25	1
Bromomethane	ND		2.0		ug/L			05/04/22 09:25	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 09:25	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 09:25	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 09:25	1
Chloroethane	ND		2.0		ug/L			05/04/22 09:25	1
Chloroform	ND		1.0		ug/L			05/04/22 09:25	1
Chloromethane	ND		2.0		ug/L			05/04/22 09:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 09:25	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 09:25	1
Dibromomethane	ND		1.0		ug/L			05/04/22 09:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 09:25	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 09:25	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 09:25	1
Naphthalene	ND		1.0		ug/L			05/04/22 09:25	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Styrene	ND		1.0		ug/L			05/04/22 09:25	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 09:25	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 09:25	1
Toluene	ND		1.0		ug/L			05/04/22 09:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 09:25	1
Trichloroethene	ND		1.0		ug/L			05/04/22 09:25	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 09:25	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 09:25	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 09:25	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/04/22 09:25*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/04/22 09:25*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/04/22 09:25*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/04/22 09:25*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/04/22 09:25*	*1*

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

Lab Sample ID: LCS 280-573782/5
Matrix: Water
Analysis Batch: 573782

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	74 - 121
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	62 - 132
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/L		97	72 - 122
1,1,2-Trichloroethane	25.0	20.8		ug/L		83	72 - 128
1,1-Dichloroethane	25.0	20.2		ug/L		81	66 - 130
1,1-Dichloroethene	25.0	20.0		ug/L		80	62 - 130
1,1-Dichloropropene	25.0	22.2		ug/L		89	64 - 133
1,2,3-Trichlorobenzene	25.0	18.9		ug/L		76	70 - 127
1,2,3-Trichloropropane	25.0	22.4		ug/L		89	74 - 123
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	73 - 124
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	74 - 124
1,2-Dichlorobenzene	25.0	26.6		ug/L		106	77 - 121
1,2-Dichloroethane	25.0	22.7		ug/L		91	61 - 130
1,2-Dichloropropane	25.0	21.4		ug/L		86	68 - 127
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	73 - 127
1,3-Dichlorobenzene	25.0	26.6		ug/L		106	76 - 121
1,3-Dichloropropane	25.0	26.5		ug/L		106	80 - 118
1,4-Dichlorobenzene	25.0	26.2		ug/L		105	76 - 119
2,2-Dichloropropane	25.0	20.4		ug/L		82	57 - 140
2-Butanone (MEK)	100	76.6		ug/L		77	53 - 135
2-Chlorotoluene	25.0	23.6		ug/L		94	75 - 123
2-Hexanone	100	103		ug/L		103	58 - 134
4-Chlorotoluene	25.0	23.6		ug/L		94	74 - 124
4-Isopropyltoluene	25.0	26.8		ug/L		107	74 - 127
4-Methyl-2-pentanone	100	75.5		ug/L		75	56 - 135
Acetone	100	70.4		ug/L		70	50 - 137
Benzene	25.0	23.7		ug/L		95	69 - 126
Bromobenzene	25.0	25.6		ug/L		103	75 - 122
Bromochloromethane	25.0	18.9		ug/L		75	71 - 130
Bromodichloromethane	25.0	20.7		ug/L		83	67 - 126
Bromoform	25.0	20.3		ug/L		81	57 - 125
Bromomethane	25.0	17.6		ug/L		71	25 - 163
Carbon disulfide	25.0	21.0		ug/L		84	56 - 128
Carbon tetrachloride	25.0	20.8		ug/L		83	60 - 133
Chlorobenzene	25.0	28.2		ug/L		113	78 - 118
Chloroethane	25.0	25.1		ug/L		100	52 - 144
Chloroform	25.0	21.9		ug/L		88	68 - 128
Chloromethane	25.0	20.9		ug/L		83	43 - 142
cis-1,2-Dichloroethene	25.0	19.8		ug/L		79	69 - 126
cis-1,3-Dichloropropene	25.0	22.6		ug/L		91	75 - 120
Dibromochloromethane	25.0	22.5		ug/L		90	71 - 122
Dibromomethane	25.0	20.5		ug/L		82	68 - 129
Dichlorodifluoromethane	25.0	22.7		ug/L		91	26 - 152
Ethylbenzene	25.0	25.8		ug/L		103	76 - 121
Hexachlorobutadiene	25.0	21.5		ug/L		86	69 - 133
Isopropylbenzene	25.0	27.4		ug/L		109	70 - 127
Methylene Chloride	25.0	21.0		ug/L		84	64 - 128
Naphthalene	25.0	20.3		ug/L		81	63 - 129

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

Lab Sample ID: LCS 280-573782/5
Matrix: Water
Analysis Batch: 573782

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	25.9		ug/L		104	69 - 130		
N-Propylbenzene			25.0	24.7		ug/L		99	73 - 127		
sec-Butylbenzene			25.0	23.7		ug/L		95	72 - 127		
Styrene			25.0	27.3		ug/L		109	79 - 120		
tert-Butylbenzene			25.0	25.8		ug/L		103	72 - 126		
Tetrachloroethene			25.0	25.0		ug/L		100	72 - 127		
Toluene			25.0	23.8		ug/L		95	68 - 127		
trans-1,2-Dichloroethene			25.0	20.2		ug/L		81	66 - 129		
trans-1,3-Dichloropropene			25.0	20.3		ug/L		81	66 - 127		
Trichloroethene			25.0	26.7		ug/L		107	70 - 125		
Trichlorofluoromethane			25.0	21.6		ug/L		87	57 - 144		
Vinyl chloride			25.0	21.2		ug/L		85	53 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*85*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

Lab Sample ID: LCSD 280-573782/6
Matrix: Water
Analysis Batch: 573782

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	74 - 121	0	20
1,1,1-Trichloroethane			25.0	22.5		ug/L		90	62 - 132	1	20
1,1,2,2-Tetrachloroethane			25.0	24.5		ug/L		98	72 - 122	1	20
1,1,2-Trichloroethane			25.0	20.8		ug/L		83	72 - 128	0	20
1,1-Dichloroethane			25.0	20.0		ug/L		80	66 - 130	1	20
1,1-Dichloroethene			25.0	20.4		ug/L		82	62 - 130	2	21
1,1-Dichloropropene			25.0	22.0		ug/L		88	64 - 133	1	20
1,2,3-Trichlorobenzene			25.0	19.8		ug/L		79	70 - 127	5	20
1,2,3-Trichloropropane			25.0	23.4		ug/L		94	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	24.4		ug/L		97	73 - 124	5	20
1,2,4-Trimethylbenzene			25.0	26.9		ug/L		108	74 - 124	0	20
1,2-Dichlorobenzene			25.0	27.7		ug/L		111	77 - 121	4	20
1,2-Dichloroethane			25.0	22.4		ug/L		89	61 - 130	2	20
1,2-Dichloropropane			25.0	21.4		ug/L		86	68 - 127	0	20
1,3,5-Trimethylbenzene			25.0	26.6		ug/L		106	73 - 127	1	20
1,3-Dichlorobenzene			25.0	27.7		ug/L		111	76 - 121	4	20
1,3-Dichloropropane			25.0	26.6		ug/L		106	80 - 118	0	20
1,4-Dichlorobenzene			25.0	27.0		ug/L		108	76 - 119	3	20
2,2-Dichloropropane			25.0	21.1		ug/L		84	57 - 140	3	22
2-Butanone (MEK)			100	78.4		ug/L		78	53 - 135	2	20
2-Chlorotoluene			25.0	23.9		ug/L		96	75 - 123	1	20
2-Hexanone			100	101		ug/L		101	58 - 134	2	21
4-Chlorotoluene			25.0	23.9		ug/L		95	74 - 124	1	20
4-Isopropyltoluene			25.0	26.7		ug/L		107	74 - 127	1	20

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

Lab Sample ID: LCSD 280-573782/6
Matrix: Water
Analysis Batch: 573782

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	74.8		ug/L		75	56 - 135	1	20
Acetone			100	70.7		ug/L		71	50 - 137	0	21
Benzene			25.0	23.5		ug/L		94	69 - 126	1	20
Bromobenzene			25.0	25.8		ug/L		103	75 - 122	1	20
Bromochloromethane			25.0	19.4		ug/L		78	71 - 130	3	20
Bromodichloromethane			25.0	20.7		ug/L		83	67 - 126	0	20
Bromoform			25.0	19.8		ug/L		79	57 - 125	3	20
Bromomethane			25.0	17.7		ug/L		71	25 - 163	1	40
Carbon disulfide			25.0	20.9		ug/L		84	56 - 128	0	20
Carbon tetrachloride			25.0	20.3		ug/L		81	60 - 133	3	20
Chlorobenzene			25.0	27.8		ug/L		111	78 - 118	1	20
Chloroethane			25.0	25.9		ug/L		104	52 - 144	3	30
Chloroform			25.0	21.8		ug/L		87	68 - 128	1	20
Chloromethane			25.0	20.0		ug/L		80	43 - 142	4	20
cis-1,2-Dichloroethene			25.0	20.5		ug/L		82	69 - 126	3	20
cis-1,3-Dichloropropene			25.0	22.5		ug/L		90	75 - 120	0	20
Dibromochloromethane			25.0	22.8		ug/L		91	71 - 122	1	20
Dibromomethane			25.0	20.5		ug/L		82	68 - 129	0	20
Dichlorodifluoromethane			25.0	23.4		ug/L		94	26 - 152	3	21
Ethylbenzene			25.0	26.1		ug/L		105	76 - 121	1	20
Hexachlorobutadiene			25.0	21.6		ug/L		86	69 - 133	1	20
Isopropylbenzene			25.0	27.4		ug/L		110	70 - 127	0	20
Methylene Chloride			25.0	20.9		ug/L		84	64 - 128	0	20
Naphthalene			25.0	22.3		ug/L		89	63 - 129	9	21
n-Butylbenzene			25.0	25.7		ug/L		103	69 - 130	1	20
N-Propylbenzene			25.0	24.3		ug/L		97	73 - 127	2	20
sec-Butylbenzene			25.0	23.3		ug/L		93	72 - 127	1	20
Styrene			25.0	26.9		ug/L		108	79 - 120	1	20
tert-Butylbenzene			25.0	26.1		ug/L		104	72 - 126	1	20
Tetrachloroethene			25.0	25.5		ug/L		102	72 - 127	2	20
Toluene			25.0	23.8		ug/L		95	68 - 127	0	20
trans-1,2-Dichloroethene			25.0	19.9		ug/L		80	66 - 129	1	20
trans-1,3-Dichloropropene			25.0	20.6		ug/L		82	66 - 127	2	20
Trichloroethene			25.0	26.4		ug/L		106	70 - 125	1	20
Trichlorofluoromethane			25.0	21.4		ug/L		86	57 - 144	1	28
Vinyl chloride			25.0	21.1		ug/L		84	53 - 141	0	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*89*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

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

Lab Sample ID: 280-161669-A-17 MS
Matrix: Water
Analysis Batch: 573782

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		250	231		ug/L		92	74 - 121
1,1,1-Trichloroethane	ND		250	222		ug/L		89	62 - 132
1,1,2,2-Tetrachloroethane	ND		250	227		ug/L		91	72 - 122
1,1,2-Trichloroethane	ND		250	206		ug/L		83	72 - 128
1,1-Dichloroethane	ND		250	221		ug/L		88	66 - 130
1,1-Dichloroethene	ND		250	216		ug/L		86	62 - 130
1,1-Dichloropropene	ND		250	219		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	ND	F1	250	171	F1	ug/L		68	70 - 127
1,2,3-Trichloropropane	ND		250	206		ug/L		82	74 - 123
1,2,4-Trichlorobenzene	ND		250	212		ug/L		85	73 - 124
1,2,4-Trimethylbenzene	ND		250	251		ug/L		100	74 - 124
1,2-Dichlorobenzene	ND		250	251		ug/L		100	77 - 121
1,2-Dichloroethane	ND		250	227		ug/L		91	61 - 130
1,2-Dichloropropane	ND		250	213		ug/L		85	68 - 127
1,3,5-Trimethylbenzene	ND		250	249		ug/L		100	73 - 127
1,3-Dichlorobenzene	ND		250	252		ug/L		101	76 - 121
1,3-Dichloropropane	ND		250	256		ug/L		102	80 - 118
1,4-Dichlorobenzene	ND		250	258		ug/L		103	76 - 119
2,2-Dichloropropane	ND		250	182		ug/L		73	57 - 140
2-Butanone (MEK)	ND		1000	704		ug/L		70	53 - 135
2-Chlorotoluene	ND		250	223		ug/L		89	75 - 123
2-Hexanone	ND		1000	953		ug/L		95	58 - 134
4-Chlorotoluene	ND		250	218		ug/L		87	74 - 124
4-Isopropyltoluene	ND		250	250		ug/L		100	74 - 127
4-Methyl-2-pentanone	ND		1000	711		ug/L		71	56 - 135
Acetone	ND		1000	740		ug/L		74	50 - 137
Benzene	ND		250	234		ug/L		94	69 - 126
Bromobenzene	ND		250	235		ug/L		94	75 - 122
Bromochloromethane	ND		250	193		ug/L		77	71 - 130
Bromodichloromethane	ND		250	204		ug/L		82	67 - 126
Bromoform	ND		250	187		ug/L		75	57 - 125
Bromomethane	ND		250	160		ug/L		64	25 - 163
Carbon disulfide	ND		250	221		ug/L		88	56 - 128
Carbon tetrachloride	ND		250	200		ug/L		80	60 - 133
Chlorobenzene	ND		250	271		ug/L		108	78 - 118
Chloroethane	ND		250	219		ug/L		88	52 - 144
Chloroform	ND		250	224		ug/L		90	68 - 128
Chloromethane	ND		250	221		ug/L		89	43 - 142
cis-1,2-Dichloroethene	630	F1	250	795	F1	ug/L		67	69 - 126
cis-1,3-Dichloropropene	ND		250	208		ug/L		83	75 - 120
Dibromochloromethane	ND		250	216		ug/L		86	71 - 122
Dibromomethane	ND		250	197		ug/L		79	68 - 129
Dichlorodifluoromethane	ND		250	234		ug/L		94	26 - 152
Ethylbenzene	ND		250	250		ug/L		100	76 - 121
Hexachlorobutadiene	ND		250	192		ug/L		77	69 - 133
Isopropylbenzene	ND		250	254		ug/L		102	70 - 127
Methylene Chloride	ND		250	222		ug/L		89	64 - 128
Naphthalene	ND		250	182		ug/L		73	63 - 129

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

Lab Sample ID: 280-161669-A-17 MS
Matrix: Water
Analysis Batch: 573782

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		250	237		ug/L		95	69 - 130
N-Propylbenzene	ND		250	223		ug/L		89	73 - 127
sec-Butylbenzene	ND		250	218		ug/L		87	72 - 127
Styrene	ND		250	259		ug/L		103	79 - 120
tert-Butylbenzene	ND		250	240		ug/L		96	72 - 126
Tetrachloroethene	ND		250	243		ug/L		97	72 - 127
Toluene	ND		250	233		ug/L		93	68 - 127
trans-1,2-Dichloroethene	ND		250	220		ug/L		88	66 - 129
trans-1,3-Dichloropropene	ND		250	194		ug/L		77	66 - 127
Trichloroethene	5.6		250	264		ug/L		103	70 - 125
Trichlorofluoromethane	ND		250	223		ug/L		89	57 - 144
Vinyl chloride	410		250	598		ug/L		77	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*88*		*77 - 120*
Toluene-d8 (Surr)	*111*		*80 - 125*

Lab Sample ID: 280-161669-B-17 MSD
Matrix: Water
Analysis Batch: 573782

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		250	236		ug/L		94	74 - 121	2	20
1,1,1-Trichloroethane	ND		250	228		ug/L		91	62 - 132	3	20
1,1,2,2-Tetrachloroethane	ND		250	235		ug/L		94	72 - 122	3	20
1,1,2-Trichloroethane	ND		250	213		ug/L		85	72 - 128	3	20
1,1-Dichloroethane	ND		250	219		ug/L		87	66 - 130	1	20
1,1-Dichloroethene	ND		250	225		ug/L		90	62 - 130	4	21
1,1-Dichloropropene	ND		250	220		ug/L		88	64 - 133	1	20
1,2,3-Trichlorobenzene	ND	F1	250	190		ug/L		76	70 - 127	11	20
1,2,3-Trichloropropane	ND		250	220		ug/L		88	74 - 123	6	20
1,2,4-Trichlorobenzene	ND		250	235		ug/L		94	73 - 124	10	20
1,2,4-Trimethylbenzene	ND		250	263		ug/L		105	74 - 124	5	20
1,2-Dichlorobenzene	ND		250	268		ug/L		107	77 - 121	6	20
1,2-Dichloroethane	ND		250	224		ug/L		90	61 - 130	1	20
1,2-Dichloropropane	ND		250	216		ug/L		86	68 - 127	1	20
1,3,5-Trimethylbenzene	ND		250	258		ug/L		103	73 - 127	3	20
1,3-Dichlorobenzene	ND		250	262		ug/L		105	76 - 121	4	20
1,3-Dichloropropane	ND		250	255		ug/L		102	80 - 118	0	20
1,4-Dichlorobenzene	ND		250	269		ug/L		107	76 - 119	4	20
2,2-Dichloropropane	ND		250	193		ug/L		77	57 - 140	6	22
2-Butanone (MEK)	ND		1000	781		ug/L		78	53 - 135	10	20
2-Chlorotoluene	ND		250	234		ug/L		94	75 - 123	5	20
2-Hexanone	ND		1000	974		ug/L		97	58 - 134	2	21
4-Chlorotoluene	ND		250	234		ug/L		93	74 - 124	7	20
4-Isopropyltoluene	ND		250	263		ug/L		105	74 - 127	5	20

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

Lab Sample ID: 280-161669-B-17 MSD
Matrix: Water
Analysis Batch: 573782

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		1000	737		ug/L		74	56 - 135	4	20
Acetone	ND		1000	768		ug/L		77	50 - 137	4	21
Benzene	ND		250	233		ug/L		93	69 - 126	1	20
Bromobenzene	ND		250	250		ug/L		100	75 - 122	6	20
Bromochloromethane	ND		250	197		ug/L		79	71 - 130	2	20
Bromodichloromethane	ND		250	208		ug/L		83	67 - 126	2	20
Bromoform	ND		250	186		ug/L		74	57 - 125	0	20
Bromomethane	ND		250	180		ug/L		72	25 - 163	12	40
Carbon disulfide	ND		250	226		ug/L		91	56 - 128	2	20
Carbon tetrachloride	ND		250	211		ug/L		84	60 - 133	5	20
Chlorobenzene	ND		250	275		ug/L		110	78 - 118	1	20
Chloroethane	ND		250	207		ug/L		83	52 - 144	6	30
Chloroform	ND		250	226		ug/L		90	68 - 128	1	20
Chloromethane	ND		250	219		ug/L		88	43 - 142	1	20
cis-1,2-Dichloroethene	630	F1	250	849		ug/L		89	69 - 126	7	20
cis-1,3-Dichloropropene	ND		250	212		ug/L		85	75 - 120	2	20
Dibromochloromethane	ND		250	220		ug/L		88	71 - 122	2	20
Dibromomethane	ND		250	204		ug/L		82	68 - 129	3	20
Dichlorodifluoromethane	ND		250	244		ug/L		98	26 - 152	4	21
Ethylbenzene	ND		250	250		ug/L		100	76 - 121	0	20
Hexachlorobutadiene	ND		250	212		ug/L		85	69 - 133	10	20
Isopropylbenzene	ND		250	267		ug/L		107	70 - 127	5	20
Methylene Chloride	ND		250	223		ug/L		89	64 - 128	0	20
Naphthalene	ND		250	210		ug/L		84	63 - 129	14	21
n-Butylbenzene	ND		250	249		ug/L		100	69 - 130	5	20
N-Propylbenzene	ND		250	240		ug/L		96	73 - 127	7	20
sec-Butylbenzene	ND		250	243		ug/L		97	72 - 127	11	20
Styrene	ND		250	265		ug/L		106	79 - 120	2	20
tert-Butylbenzene	ND		250	253		ug/L		101	72 - 126	5	20
Tetrachloroethene	ND		250	252		ug/L		101	72 - 127	3	20
Toluene	ND		250	238		ug/L		95	68 - 127	2	20
trans-1,2-Dichloroethene	ND		250	220		ug/L		88	66 - 129	0	20
trans-1,3-Dichloropropene	ND		250	200		ug/L		80	66 - 127	3	20
Trichloroethene	5.6		250	269		ug/L		105	70 - 125	2	20
Trichlorofluoromethane	ND		250	228		ug/L		91	57 - 144	2	28
Vinyl chloride	410		250	579		ug/L		70	53 - 141	3	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 127*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*
Dibromofluoromethane (Surr)	*89*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-573754/1-A
Matrix: Water
Analysis Batch: 573883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573754

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		05/03/22 16:34	05/04/22 19:16	1
1,2-Dibromoethane	ND		0.050		ug/L		05/03/22 16:34	05/04/22 19:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*05/03/22 16:34*	*05/04/22 19:16*	*1*

Lab Sample ID: LCS 280-573754/2-A
Matrix: Water
Analysis Batch: 573883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.244		ug/L		98	60 - 140		
1,2-Dibromoethane			0.250	0.242		ug/L		97	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Lab Sample ID: LCSD 280-573754/3-A
Matrix: Water
Analysis Batch: 573883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573754

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.240		ug/L		96	60 - 140	2	10
1,2-Dibromoethane			0.250	0.242		ug/L		97	60 - 140	0	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*115*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573695/1-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 20:35	1
Magnesium	ND		200		ug/L		05/03/22 19:17	05/04/22 20:35	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 20:35	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Sodium	ND		1000		ug/L		05/03/22 19:17	05/04/22 20:35	1

Lab Sample ID: LCS 280-573695/2-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	48700		ug/L		97	90 - 111		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-573695/2-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	9450		ug/L		94	89 - 115
Magnesium	50000	49000		ug/L		98	90 - 113
Manganese	1000	976		ug/L		98	90 - 110
Potassium	50000	49500		ug/L		99	89 - 114
Sodium	50000	49100		ug/L		98	90 - 115

Lab Sample ID: 280-161727-J-1-B MS
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	29000		50000	75700		ug/L		94	48 - 153
Iron	43		10000	9670		ug/L		96	52 - 155
Magnesium	50000		50000	98600		ug/L		97	62 - 146
Manganese	41		1000	1000		ug/L		96	79 - 121
Potassium	6900		50000	57800		ug/L		102	76 - 132
Sodium	300000		50000	347000	4	ug/L		102	70 - 203

Lab Sample ID: 280-161727-J-1-C MSD
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	29000		50000	76200		ug/L		95	48 - 153	1	20
Iron	43		10000	9760		ug/L		97	52 - 155	1	20
Magnesium	50000		50000	99200		ug/L		99	62 - 146	1	20
Manganese	41		1000	1020		ug/L		98	79 - 121	1	20
Potassium	6900		50000	57600		ug/L		101	76 - 132	0	20
Sodium	300000		50000	351000	4	ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-625182/28
Matrix: Water
Analysis Batch: 625182

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			05/09/22 22:42	1
Sulfate	ND		1.0		mg/L			05/09/22 22:42	1

Lab Sample ID: LCS 480-625182/29
Matrix: Water
Analysis Batch: 625182

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.9		mg/L		102	90 - 110
Sulfate	50.0	52.1		mg/L		104	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-161448-D-4 MS
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.3		mg/L		93	81 - 120
Sulfate	5.1		50.0	53.9		mg/L		97	80 - 120

Lab Sample ID: 280-161448-D-4 MSD
Matrix: Water
Analysis Batch: 625182

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	22		50.1	68.6		mg/L		93	81 - 120	0	15
Sulfate	5.1		50.0	54.0		mg/L		98	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574030/106
Matrix: Water
Analysis Batch: 574030

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			05/05/22 13:33	1

Lab Sample ID: LCS 280-574030/104
Matrix: Water
Analysis Batch: 574030

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	2.65		mg/L		106	90 - 110

Lab Sample ID: LCSD 280-574030/105
Matrix: Water
Analysis Batch: 574030

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	2.63		mg/L		105	90 - 110	1	10

Lab Sample ID: 280-161418-3 MS
Matrix: Water
Analysis Batch: 574030

Client Sample ID: DUP3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	ND	F1	1.00	1.13	F1	mg/L		113	90 - 110

Lab Sample ID: 280-161418-3 MSD
Matrix: Water
Analysis Batch: 574030

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
Ammonia as N	ND	F1	1.00	1.17	F1	mg/L		117	90 - 110	4	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573635/22
Matrix: Water
Analysis Batch: 573635

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			05/02/22 16:56	1

Lab Sample ID: LCS 280-573635/21
Matrix: Water
Analysis Batch: 573635

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	5.17		mg/L		103	90 - 110

Lab Sample ID: 280-161417-B-2 MS
Matrix: Water
Analysis Batch: 573635

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	0.065		4.00	4.26		mg/L		105	90 - 110

Lab Sample ID: 280-161417-B-2 MSD
Matrix: Water
Analysis Batch: 573635

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	0.065		4.00	4.29		mg/L		106	90 - 110	1	10

Lab Sample ID: MB 280-573773/22
Matrix: Water
Analysis Batch: 573773

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			05/03/22 16:34	1

Lab Sample ID: LCS 280-573773/21
Matrix: Water
Analysis Batch: 573773

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	5.09		mg/L		102	90 - 110

Lab Sample ID: 280-161382-D-2 MS
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.62		mg/L		101	90 - 110

Lab Sample ID: 280-161382-D-2 MSD
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.67		mg/L		102	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573357/4
Matrix: Water
Analysis Batch: 573357

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			04/28/22 14:27	1

Lab Sample ID: LCS 280-573357/3
Matrix: Water
Analysis Batch: 573357

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: 280-161414-A-6 MS
Matrix: Water
Analysis Batch: 573357

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	1.7		25.0	26.9		mg/L		101	88 - 112

Lab Sample ID: 280-161414-A-6 MSD
Matrix: Water
Analysis Batch: 573357

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	1.7		25.0	26.7		mg/L		100	88 - 112	1	15

Lab Sample ID: MB 280-573362/4
Matrix: Water
Analysis Batch: 573362

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			04/28/22 17:29	1

Lab Sample ID: LCS 280-573362/3
Matrix: Water
Analysis Batch: 573362

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: 280-161418-4 MS
Matrix: Water
Analysis Batch: 573362

Client Sample ID: FB3
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	25.6		mg/L		102	88 - 112

Lab Sample ID: 280-161418-4 MSD
Matrix: Water
Analysis Batch: 573362

Client Sample ID: FB3
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	25.7		mg/L		103	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				mg/L			05/10/22 12:14	1
Potassium	0.000				mg/L			05/10/22 12:14	1
Sodium	0.000				mg/L			05/10/22 12:14	1
Ammonia as N	0.000				mg/L			05/10/22 12:14	1
Chloride	0.000				mg/L			05/10/22 12:14	1
Sulfate	0.000				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				mg/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				mg/L			05/10/22 12:14	1
Iron	0.000				mg/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573792/58
Matrix: Water
Analysis Batch: 573792

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			05/03/22 18:49	1

Lab Sample ID: 280-161418-2 DU
Matrix: Water
Analysis Batch: 573792

Client Sample ID: MW-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	130			125		mg/L				0.9	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573280/1
Matrix: Water
Analysis Batch: 573280

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			04/28/22 11:53	1

Lab Sample ID: LCS 280-573280/2
Matrix: Water
Analysis Batch: 573280

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			505	493		mg/L		98	88 - 114		

Lab Sample ID: 280-161384-A-3 DU
Matrix: Water
Analysis Batch: 573280

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	1100			1070		mg/L				0.7	10

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

GC/MS VOA

Analysis Batch: 573474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-1	TRIP BLANK	Total/NA	Water	8260B	
MB 280-573474/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573474/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573474/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-161623-D-1 MS	Matrix Spike	Total/NA	Water	8260B	
280-161623-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 573782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	8260B	
280-161418-3	DUP3	Total/NA	Water	8260B	
280-161418-4	FB3	Total/NA	Water	8260B	
MB 280-573782/10	Method Blank	Total/NA	Water	8260B	
LCS 280-573782/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573782/6	Lab Control Sample Dup	Total/NA	Water	8260B	
280-161669-A-17 MS	Matrix Spike	Total/NA	Water	8260B	
280-161669-B-17 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 573754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-1	TRIP BLANK	Total/NA	Water	8011	
280-161418-2	MW-22A	Total/NA	Water	8011	
280-161418-3	DUP3	Total/NA	Water	8011	
280-161418-4	FB3	Total/NA	Water	8011	
MB 280-573754/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-573754/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-573754/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 573883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-1	TRIP BLANK	Total/NA	Water	8011	573754
280-161418-2	MW-22A	Total/NA	Water	8011	573754
280-161418-3	DUP3	Total/NA	Water	8011	573754
280-161418-4	FB3	Total/NA	Water	8011	573754
MB 280-573754/1-A	Method Blank	Total/NA	Water	8011	573754
LCS 280-573754/2-A	Lab Control Sample	Total/NA	Water	8011	573754
LCSD 280-573754/3-A	Lab Control Sample Dup	Total/NA	Water	8011	573754

Metals

Prep Batch: 573695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Dissolved	Water	3005A	
280-161418-3	DUP3	Dissolved	Water	3005A	
280-161418-4	FB3	Dissolved	Water	3005A	
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Metals

Analysis Batch: 574000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Dissolved	Water	6010B	573695
280-161418-3	DUP3	Dissolved	Water	6010B	573695
280-161418-4	FB3	Dissolved	Water	6010B	573695
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	6010B	573695
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573695
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	6010B	573695
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573695

General Chemistry

Analysis Batch: 573280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	SM 2540C	
280-161418-3	DUP3	Total/NA	Water	SM 2540C	
280-161418-4	FB3	Total/NA	Water	SM 2540C	
MB 280-573280/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573280/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161384-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	9060	
280-161418-3	DUP3	Total/NA	Water	9060	
MB 280-573357/4	Method Blank	Total/NA	Water	9060	
LCS 280-573357/3	Lab Control Sample	Total/NA	Water	9060	
280-161414-A-6 MS	Matrix Spike	Total/NA	Water	9060	
280-161414-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-4	FB3	Total/NA	Water	9060	
MB 280-573362/4	Method Blank	Total/NA	Water	9060	
LCS 280-573362/3	Lab Control Sample	Total/NA	Water	9060	
280-161418-4 MS	FB3	Total/NA	Water	9060	
280-161418-4 MSD	FB3	Total/NA	Water	9060	

Analysis Batch: 573635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-3	DUP3	Total/NA	Water	353.2	
280-161418-4	FB3	Total/NA	Water	353.2	
MB 280-573635/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573635/21	Lab Control Sample	Total/NA	Water	353.2	
280-161417-B-2 MS	Matrix Spike	Total/NA	Water	353.2	
280-161417-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	353.2	
MB 280-573773/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/21	Lab Control Sample	Total/NA	Water	353.2	
280-161382-D-2 MS	Matrix Spike	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 573773 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	SM 2320B	
280-161418-3	DUP3	Total/NA	Water	SM 2320B	
280-161418-4	FB3	Total/NA	Water	SM 2320B	
MB 280-573792/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573792/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161418-2 DU	MW-22A	Total/NA	Water	SM 2320B	

Analysis Batch: 574030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	350.1	
280-161418-3	DUP3	Total/NA	Water	350.1	
280-161418-4	FB3	Total/NA	Water	350.1	
MB 280-574030/106	Method Blank	Total/NA	Water	350.1	
LCS 280-574030/104	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-574030/105	Lab Control Sample Dup	Total/NA	Water	350.1	
280-161418-3 MS	DUP3	Total/NA	Water	350.1	
280-161418-3 MSD	DUP3	Total/NA	Water	350.1	

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	SM 1030E	
280-161418-2	MW-22A	Total/NA	Water	SM 1030E (meq)	
280-161418-3	DUP3	Total/NA	Water	SM 1030E	
280-161418-3	DUP3	Total/NA	Water	SM 1030E (meq)	
280-161418-4	FB3	Total/NA	Water	SM 1030E	
280-161418-4	FB3	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	300.0	
280-161418-3	DUP3	Total/NA	Water	300.0	
280-161418-4	FB3	Total/NA	Water	300.0	
MB 480-625182/28	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/29	Lab Control Sample	Total/NA	Water	300.0	
280-161448-D-4 MS	Matrix Spike	Total/NA	Water	300.0	
280-161448-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 573210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161418-2	MW-22A	Total/NA	Water	Field Sampling	
280-161418-3	DUP3	Total/NA	Water	Field Sampling	

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-161418-1
Date Collected: 04/19/22 07:00
Matrix: Water
Date Received: 04/22/22 11:00

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	573474	04/30/22 15:54	CKL	EET DEN
Total/NA	Prep	8011			34.9 mL	35 mL	573754	05/03/22 16:34	KSA	EET DEN
Total/NA	Analysis	8011		1			573883	05/04/22 22:03	KSA	EET DEN

Client Sample ID: MW-22A
Lab Sample ID: 280-161418-2
Date Collected: 04/21/22 09:15
Matrix: Water
Date Received: 04/22/22 11:00

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	573782	05/04/22 10:08	TAW	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	573754	05/03/22 16:34	KSA	EET DEN
Total/NA	Analysis	8011		1			573883	05/04/22 22:27	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 22:02	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 23:22	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:09	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:52	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 21:55	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 18:54	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573280	04/28/22 11:53	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/21/22 10:15	TJ	EET DEN

Client Sample ID: DUP3
Lab Sample ID: 280-161418-3
Date Collected: 04/21/22 09:20
Matrix: Water
Date Received: 04/22/22 11:00

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	573782	05/04/22 10:30	TAW	EET DEN
Total/NA	Prep	8011			35.4 mL	35 mL	573754	05/03/22 16:34	KSA	EET DEN
Total/NA	Analysis	8011		1			573883	05/04/22 22:51	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 22:22	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 23:41	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:34	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:46	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 22:12	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 19:06	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573280	04/28/22 11:53	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/21/22 10:20	TJ	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161418-1

Client Sample ID: FB3

Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161418-4

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	573782	05/04/22 09:47	TAW	EET DEN
Total/NA	Prep	8011			35.4 mL	35 mL	573754	05/03/22 16:34	KSA	EET DEN
Total/NA	Analysis	8011		1			573883	05/04/22 23:15	KSA	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 22:26	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/10/22 00:01	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:07	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:48	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573362	04/28/22 18:05	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 19:11	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573280	04/28/22 11:53	ABW	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET 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: 5037166320	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/NOX/TOC	8260B - VOA	8011 - EDB/DBCP	Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	A	R	N	X	
TB1	4/19/22	0700	G	W						X	X		9	
MW-22A	4/21/22	0915	G	W	X		X	X	X	X	X	X	11	
DUP3	4/21/22	0920	G	W	X		X	X	X	X	X	X	11	
FB3	4/21/22	1030	G	W	X		X	X	X	X	X	X	11	

280-161418 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		4/21/22 @ 1630	SCS		04/22/22 1100	EA 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: 2.0, 0.3 CF +0.1 IR #12

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) 46. °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)
4/21/22	08:22	22.12	.	16.03	.	6.1	X 1	0.99
/ /	:	.	.	.	.		X 3	2.98

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	4/21/22	09:15	F	3	(40 ml)	(HCl)	(YES)	(NO)		✓
VOA Glass	4/21/22	09:15	F	3	(40 ml)	($Na_2S_2O_3$)	(YES)	(NO)		✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	09:15	F	2	250, (500) (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Glass	4/21/22	09:15	F	2	250, (500), 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	09:15	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) (NH4) (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) (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: 08:25 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(0826)	0.00	6.06	175.9	300.6	10.1	16.08	2.70	clear / colorless
1	F(0833)	1.00	6.07	171.9	292.7	9.9	16.23	2.76	clear / colorless
2	F(0850)	2.00	6.05	168.3	289.3	10.0	17.00	3.70	clear / colorless
3	F(0906)	3.00	6.02	174.1	288.4	9.7	17.38	3.59	clear / colorless
4	F(0908)	3.10	6.02	180.1	288.7	9.9	17.40	3.58	clear / colorless
5	F(0910)	3.20	6.03	181.5	289.1	9.9	17.42	3.53	clear / colorless
6	F(0912)	3.30	6.04	181.3	288.9	9.9		3.54	clear / colorless

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

Standard Purge (12/8/20 psi) → 12/8/15 psi ~ 200 mL/min

SAMPLER: E TAYLOR (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:** Dup 3
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 .	°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	4/21/22	09:20	F	3	40 ml	HCl	YES	NO		
VOA Glass	4/21/22	09:20	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	4/21/22	09:20	F	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/21/22	09:20	F	2	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/21/22	09:20	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-22A

SAMPLER: EDAN TAYLOR (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:** FB 3
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)
/ /	:	.	.	.	.	.	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	4/21/22	10 : 39	G	3	~~40 ml~~	~~HCl~~	~~YES~~	~~NO~~	✓
VOA Glass	4/21/22	10 : 30	G	3	~~40 ml~~	~~$Na_2S_2O_3$~~	~~YES~~	~~NO~~	✓
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO	
White Poly	4/21/22	10 : 30	G	2	~~250~~ 500, ~~1L~~	~~None~~	~~YES~~	~~NO~~	NA ✓
Yellow Glass	4/21/22	10 : 39	G	2	250, ~~500~~, 1L	~~H_2SO_4~~	~~YES~~	~~NO~~	✓
Red Total Poly	~~4/21/22~~	~~10 : 30~~	~~G~~	~~ET~~	125, 250, 500	HNO_3	YES	NO	
Red Diss. Poly	4/21/22	10 : 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~~) (~~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 (1030)	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: EDAN TAYLOR (PRINTED NAME) (SIGNATURE)

FedEx

Do not lift using this tag.

ORIGIN ID:PDXA

SHIP DATE: 21APR22
ACTWGT: 54.85 LB
CAD: XSSFE2300
DIMS: 24x14x14 IN

TO SAMPLE RECEVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST

ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:
DEPT:

(US)

FedEx Express

J221022010502uv

TRK# 0667 8165 7649 6728

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

XA LAAA

AHS
80002
CO–US DEN

280-161418 Waybill

FedEx

Do not lift using this tag.

ORIGIN ID:PDXA

RT 640 4 C
10:30
FZ
04.22

SAMPLE RECEVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST

ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:

eurofins | Environment Testing TestAmerica

1984158

FedEx Express

J221022010502uv

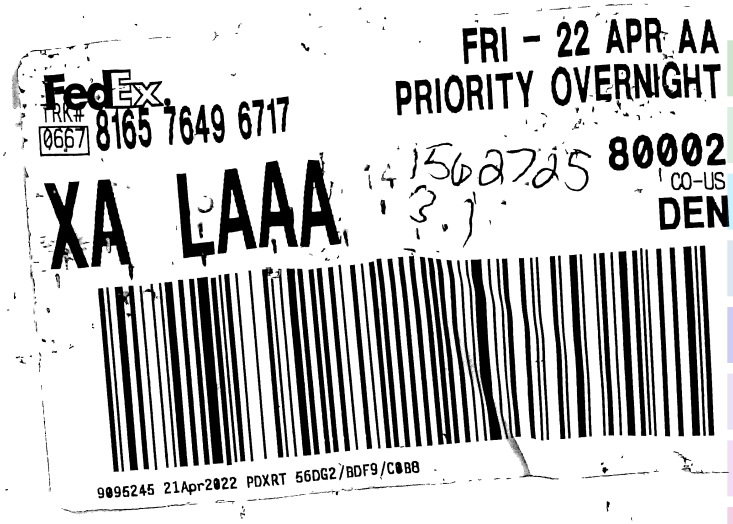
TRK# 0667 8165 7649 6739

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

XA LAAA

AHS
80002
CO–US DEN

Part # 156297-888 REV 03/23


FedEx
TRK# 0667 8165 7649 6717
FRI - 22 APR AA
PRIORITY OVERNIGHT
80002
CO-US
XA LAAA
DEN
9095245 21Apr2022 PDXRT 56DG2/BDF9/C8B8

280-161418 Waybill

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-612042.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161418-1
Address: 10 Hazelwood Drive,	Due Date Requested: 5/12/2022			
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-22A (280-161418-2)	4/21/22	09:15 Pacific		Water			X	1	
DUP3 (280-161418-3)	4/21/22	09:20 Pacific		Water			X	1	
FB3 (280-161418-4)	4/21/22	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	Wade Does	4/22/22 1530	ETA ENV		4/28/22 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: 4.7#1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161418-1

Login Number: 161418

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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.	False	Refer to job narrative for details
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.	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: 280-161418-1

Login Number: 161418
List Number: 2
Creator: Kazenga, Oliver M

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: 280-161418-1

Login Number: 161418
List Number: 3
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:48 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	4.7 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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Annual P-05A/P-06A/P-07A - April

JOB NUMBER

280-161417-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

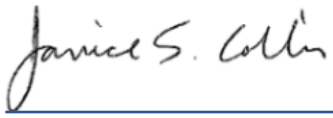
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-161417-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

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.
B	Compound was found in the blank and sample.

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: 280-161417-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161417-1

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 04/22/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.4°C, 2.1°C, 3.2°C and 4.4°C

Holding Times

All holding times were met.

Method Blanks

Dissolved Iron and Dissolved Manganese Method 6010B were detected in the Method Blank above the project established reporting limit, however, the requested reporting limit for Dissolved Iron and Dissolved Manganese 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)

The Matrix Spike and Matrix Spike Duplicate performed on a sample from another client exhibited recoveries outside control limits for Ammonia Method 350.1. 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

Job ID: 280-161417-1 (Continued)

Laboratory: Eurofins 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 SCS Engineers

Job ID: 280-161417-1

Client Sample ID: P-05A — Lab Sample ID: 280-161417-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	110000		500		ug/L	1		6010B	Dissolved
Iron	100		30		ug/L	1		6010B	Dissolved
Magnesium	43000		200		ug/L	1		6010B	Dissolved
Manganese	42		3.0		ug/L	1		6010B	Dissolved
Potassium	820		500		ug/L	1		6010B	Dissolved
Sodium	22000		1000		ug/L	1		6010B	Dissolved
Chloride	150		0.56		mg/L	2		300.0	Total/NA
Sulfate	13		1.0		mg/L	2		300.0	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Bicarbonate Alkalinity	270		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	530		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.81				SU	1		Field Sampling	Total/NA
Field Conductivity	946.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.8				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.51				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	60.70				millivolts	1		Field Sampling	Total/NA

Client Sample ID: P-06A — Lab Sample ID: 280-161417-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	87000		500		ug/L	1		6010B	Dissolved
Magnesium	32000		200		ug/L	1		6010B	Dissolved
Manganese	260	B	3.0		ug/L	1		6010B	Dissolved
Potassium	550		500		ug/L	1		6010B	Dissolved
Sodium	44000		1000		ug/L	1		6010B	Dissolved
Chloride	88		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.9		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	1.1		0.040		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.065		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Bicarbonate Alkalinity	340		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	490		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.56				SU	1		Field Sampling	Total/NA
Field Conductivity	931.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.3				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.70				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	80.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: P-07A — Lab Sample ID: 280-161417-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		500		ug/L	1		6010B	Dissolved
Magnesium	5700		200		ug/L	1		6010B	Dissolved
Potassium	940		500		ug/L	1		6010B	Dissolved
Sodium	8900		1000		ug/L	1		6010B	Dissolved
Chloride	6.8		0.50		mg/L	1		300.0	Total/NA
Sulfate	3.6		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	3.1		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	5.93				SU	1		Field Sampling	Total/NA
Field Conductivity	181.7				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161417-1

Client Sample ID: P-07A (Continued) — Lab Sample ID: 280-161417-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	3.77				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	112.8				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB1 — Lab Sample ID: 280-161417-4

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161417-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161417-1	P-05A	Water	04/19/22 09:50	04/22/22 11:00
280-161417-2	P-06A	Water	04/20/22 10:30	04/22/22 11:00
280-161417-3	P-07A	Water	04/19/22 12:30	04/22/22 11:00
280-161417-4	FB1	Water	04/19/22 12:20	04/22/22 11:00

Method Summary

Client: Waste Management
Job ID: 280-161417-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
FILTRATION	Sample Filtration	None	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: P-05A

Date Collected: 04/19/22 09:50
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-1

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		500		ug/L		05/03/22 19:17	05/04/22 21:50	1
Iron	100		30		ug/L		05/03/22 19:17	05/04/22 21:50	1
Magnesium	43000		200		ug/L		05/03/22 19:17	05/04/22 21:50	1
Manganese	42		3.0		ug/L		05/03/22 19:17	05/04/22 21:50	1
Potassium	820		500		ug/L		05/03/22 19:17	05/04/22 21:50	1
Sodium	22000		1000		ug/L		05/03/22 19:17	05/04/22 21:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	150		0.56		mg/L			05/09/22 20:25	2
Sulfate (EPA 300.0)	13		1.0		mg/L			05/09/22 20:25	2
Ammonia as N (EPA 350.1)	ND		0.040		mg/L			05/05/22 14:40	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/02/22 17:32	1
Total Organic Carbon - Average (SW846 9060)	1.1		1.0		mg/L			04/28/22 20:26	1
Bicarbonate Alkalinity (SM 2320B)	270		10		mg/L			05/03/22 18:01	1
Total Dissolved Solids (SM 2540C)	530		10		mg/L			04/26/22 08:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.81				SU			04/19/22 10:50	1
Field Conductivity	946.0				umhos/cm			04/19/22 10:50	1
Field Temperature	9.8				Degrees C			04/19/22 10:50	1
Field Dissolved Oxygen	0.51				mg/L			04/19/22 10:50	1
Field EH/ORP	60.70				millivolts			04/19/22 10:50	1

Client Sample ID: P-06A

Date Collected: 04/20/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-2

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	87000		500		ug/L		04/28/22 10:31	04/28/22 22:22	1
Iron	ND		30		ug/L		04/28/22 10:31	04/28/22 22:22	1
Magnesium	32000		200		ug/L		04/28/22 10:31	04/28/22 22:22	1
Manganese	260	B	3.0		ug/L		04/28/22 10:31	04/28/22 22:22	1
Potassium	550		500		ug/L		04/28/22 10:31	04/28/22 22:22	1
Sodium	44000		1000		ug/L		04/28/22 10:31	04/28/22 22:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	88		0.50		mg/L			05/09/22 20:45	1
Sulfate (EPA 300.0)	3.9		1.0		mg/L			05/09/22 20:45	1
Ammonia as N (EPA 350.1)	1.1		0.040		mg/L			05/05/22 14:42	1
Nitrate/Nitrite (EPA 353.2)	0.065		0.050		mg/L			05/02/22 17:34	1
Total Organic Carbon - Average (SW846 9060)	1.6		1.0		mg/L			04/28/22 21:09	1
Bicarbonate Alkalinity (SM 2320B)	340		10		mg/L			04/28/22 21:00	1
Total Dissolved Solids (SM 2540C)	490		10		mg/L			04/26/22 11:39	1

Client Sample ID: P-06A

Date Collected: 04/20/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-2
Matrix: Water

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.56				SU			04/20/22 11:30	1
Field Conductivity	931.0				umhos/cm			04/20/22 11:30	1
Field Temperature	11.3				Degrees C			04/20/22 11:30	1
Field Dissolved Oxygen	2.70				mg/L			04/20/22 11:30	1
Field EH/ORP	80.3				millivolts			04/20/22 11:30	1

Client Sample ID: P-07A

Date Collected: 04/19/22 12:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-3
Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19000		500		ug/L		05/03/22 19:17	05/04/22 21:54	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 21:54	1
Magnesium	5700		200		ug/L		05/03/22 19:17	05/04/22 21:54	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 21:54	1
Potassium	940		500		ug/L		05/03/22 19:17	05/04/22 21:54	1
Sodium	8900		1000		ug/L		05/03/22 19:17	05/04/22 21:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.8		0.50		mg/L			05/09/22 21:04	1
Sulfate (EPA 300.0)	3.6		1.0		mg/L			05/09/22 21:04	1
Ammonia as N (EPA 350.1)	ND		0.040		mg/L			05/05/22 14:44	1
Nitrate/Nitrite (EPA 353.2)	3.1		0.050		mg/L			05/02/22 17:40	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			04/28/22 21:25	1
Bicarbonate Alkalinity (SM 2320B)	73		10		mg/L			04/28/22 21:05	1
Total Dissolved Solids (SM 2540C)	140		10		mg/L			04/26/22 08:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.93				SU			04/19/22 13:30	1
Field Conductivity	181.7				umhos/cm			04/19/22 13:30	1
Field Temperature	11.6				Degrees C			04/19/22 13:30	1
Field Dissolved Oxygen	3.77				mg/L			04/19/22 13:30	1
Field EH/ORP	112.8				millivolts			04/19/22 13:30	1

Client Sample ID: FB1

Date Collected: 04/19/22 12:20
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-4
Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:58	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 21:58	1
Magnesium	ND		200		ug/L		05/03/22 19:17	05/04/22 21:58	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 21:58	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 21:58	1
Sodium	ND		1000		ug/L		05/03/22 19:17	05/04/22 21:58	1

Client Sample Results

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161417-1

Client Sample ID: FB1

Date Collected: 04/19/22 12:20
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161417-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			05/09/22 21:24	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			05/09/22 21:24	1
Ammonia as N (EPA 350.1)	ND		0.040		mg/L			05/05/22 14:46	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/02/22 17:42	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			04/28/22 21:41	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/28/22 21:10	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			04/26/22 08:45	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573695/1-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Iron	ND		30		ug/L		05/03/22 19:17	05/04/22 20:35	1
Magnesium	ND		200		ug/L		05/03/22 19:17	05/04/22 20:35	1
Manganese	ND		3.0		ug/L		05/03/22 19:17	05/04/22 20:35	1
Potassium	ND		500		ug/L		05/03/22 19:17	05/04/22 20:35	1
Sodium	ND		1000		ug/L		05/03/22 19:17	05/04/22 20:35	1

Lab Sample ID: LCS 280-573695/2-A
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	48700		ug/L		97	90 - 111
Iron	10000	9450		ug/L		94	89 - 115
Magnesium	50000	49000		ug/L		98	90 - 113
Manganese	1000	976		ug/L		98	90 - 110
Potassium	50000	49500		ug/L		99	89 - 114
Sodium	50000	49100		ug/L		98	90 - 115

Lab Sample ID: MB 280-573083/1-C
Matrix: Water
Analysis Batch: 573344

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 573146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		04/28/22 10:31	04/28/22 20:51	1
Iron	37.8		30		ug/L		04/28/22 10:31	04/28/22 20:51	1
Magnesium	ND		200		ug/L		04/28/22 10:31	04/28/22 20:51	1
Manganese	3.82		3.0		ug/L		04/28/22 10:31	04/28/22 20:51	1
Potassium	ND		500		ug/L		04/28/22 10:31	04/28/22 20:51	1
Sodium	ND		1000		ug/L		04/28/22 10:31	04/28/22 20:51	1

Lab Sample ID: LCS 280-573083/2-C
Matrix: Water
Analysis Batch: 573344

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 573146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	48700		ug/L		97	90 - 111
Iron	10000	9730		ug/L		97	89 - 115
Magnesium	50000	47700		ug/L		95	90 - 113
Manganese	1000	970		ug/L		97	90 - 110
Potassium	50000	48200		ug/L		96	89 - 114
Sodium	50000	49500		ug/L		99	90 - 115

Lab Sample ID: 280-161273-F-1-C MS
Matrix: Water
Analysis Batch: 573344

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	130000		50000	173000		ug/L		93	48 - 153

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-161273-F-1-C MS
Matrix: Water
Analysis Batch: 573344

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	63	B	10000	9710		ug/L		96	52 - 155
Magnesium	30000		50000	77300		ug/L		95	62 - 146
Manganese	180	B	1000	1130		ug/L		95	79 - 121
Potassium	8000		50000	56600		ug/L		97	76 - 132
Sodium	250000		50000	305000	4	ug/L		103	70 - 203

Lab Sample ID: 280-161273-F-1-D MSD
Matrix: Water
Analysis Batch: 573344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	130000		50000	173000		ug/L		93	48 - 153	0	20
Iron	63	B	10000	9690		ug/L		96	52 - 155	0	20
Magnesium	30000		50000	77300		ug/L		95	62 - 146	0	20
Manganese	180	B	1000	1130		ug/L		95	79 - 121	0	20
Potassium	8000		50000	56400		ug/L		97	76 - 132	0	20
Sodium	250000		50000	305000	4	ug/L		103	70 - 203	0	20

Lab Sample ID: 280-161727-J-1-B MS
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	29000		50000	75700		ug/L		94	48 - 153
Iron	43		10000	9670		ug/L		96	52 - 155
Magnesium	50000		50000	98600		ug/L		97	62 - 146
Manganese	41		1000	1000		ug/L		96	79 - 121
Potassium	6900		50000	57800		ug/L		102	76 - 132
Sodium	300000		50000	347000	4	ug/L		102	70 - 203

Lab Sample ID: 280-161727-J-1-C MSD
Matrix: Water
Analysis Batch: 574000

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573695

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	29000		50000	76200		ug/L		95	48 - 153	1	20
Iron	43		10000	9760		ug/L		97	52 - 155	1	20
Magnesium	50000		50000	99200		ug/L		99	62 - 146	1	20
Manganese	41		1000	1020		ug/L		98	79 - 121	1	20
Potassium	6900		50000	57600		ug/L		101	76 - 132	0	20
Sodium	300000		50000	351000	4	ug/L		109	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-625182/4
Matrix: Water
Analysis Batch: 625182

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			05/09/22 14:52	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 480-625182/4
Matrix: Water
Analysis Batch: 625182

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			05/09/22 14:52	1

Lab Sample ID: LCS 480-625182/5
Matrix: Water
Analysis Batch: 625182

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.4		mg/L		101	90 - 110
Sulfate	50.0	51.5		mg/L		103	90 - 110

Lab Sample ID: 280-161417-4 MS
Matrix: Water
Analysis Batch: 625182

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		50.1	47.4		mg/L		95	81 - 120
Sulfate	ND		50.0	48.5		mg/L		97	80 - 120

Lab Sample ID: 620-4251-Q-6 MS
Matrix: Water
Analysis Batch: 625182

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		50.1	61.1		mg/L		93	81 - 120
Sulfate	83		50.0	128		mg/L		90	80 - 120

Lab Sample ID: 620-4251-Q-6 MSD
Matrix: Water
Analysis Batch: 625182

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		50.1	61.1		mg/L		93	81 - 120	0	15
Sulfate	83		50.0	128		mg/L		89	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574030/106
Matrix: Water
Analysis Batch: 574030

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			05/05/22 13:33	1

Lab Sample ID: LCS 280-574030/104
Matrix: Water
Analysis Batch: 574030

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	2.65		mg/L		106	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-574030/105
Matrix: Water
Analysis Batch: 574030

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	2.63		mg/L		105	90 - 110	1	10

Lab Sample ID: 280-161418-D-3 MS
Matrix: Water
Analysis Batch: 574030

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	F1	1.00	1.13	F1	mg/L		113	90 - 110

Lab Sample ID: 280-161418-D-3 MSD
Matrix: Water
Analysis Batch: 574030

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	F1	1.00	1.17	F1	mg/L		117	90 - 110	4	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573635/22
Matrix: Water
Analysis Batch: 573635

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			05/02/22 16:56	1

Lab Sample ID: LCS 280-573635/21
Matrix: Water
Analysis Batch: 573635

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	5.17		mg/L		103	90 - 110

Lab Sample ID: 280-161417-2 MS
Matrix: Water
Analysis Batch: 573635

Client Sample ID: P-06A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate/Nitrite	0.065		4.00	4.26		mg/L		105	90 - 110

Lab Sample ID: 280-161417-2 MSD
Matrix: Water
Analysis Batch: 573635

Client Sample ID: P-06A
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	0.065		4.00	4.29		mg/L		106	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573357/4
Matrix: Water
Analysis Batch: 573357

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			04/28/22 14:27	1

Lab Sample ID: LCS 280-573357/3
Matrix: Water
Analysis Batch: 573357

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: 280-161414-A-6 MS
Matrix: Water
Analysis Batch: 573357

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	1.7		25.0	26.9		mg/L		101	88 - 112

Lab Sample ID: 280-161414-A-6 MSD
Matrix: Water
Analysis Batch: 573357

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	1.7		25.0	26.7		mg/L		100	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573361/58
Matrix: Water
Analysis Batch: 573361

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			04/28/22 20:24	1

Lab Sample ID: 280-161414-A-8 DU
Matrix: Water
Analysis Batch: 573361

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bicarbonate Alkalinity	350		353		mg/L		2	20

Lab Sample ID: MB 280-573792/32
Matrix: Water
Analysis Batch: 573792

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			05/03/22 15:33	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-161311-A-2 DU
Matrix: Water
Analysis Batch: 573792

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	290			290		mg/L				0.4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-572980/1
Matrix: Water
Analysis Batch: 572980

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			04/26/22 07:45	1

Lab Sample ID: LCS 280-572980/2
Matrix: Water
Analysis Batch: 572980

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			505	506		mg/L		100	88 - 114		

Lab Sample ID: LCSD 280-572980/3
Matrix: Water
Analysis Batch: 572980

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			505	494		mg/L		98	88 - 114	2	20

Lab Sample ID: 280-161409-A-5 DU
Matrix: Water
Analysis Batch: 572980

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	190			204		mg/L				6	10

Lab Sample ID: MB 280-573020/1
Matrix: Water
Analysis Batch: 573020

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			04/26/22 10:38	1

Lab Sample ID: LCS 280-573020/2
Matrix: Water
Analysis Batch: 573020

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			502	490		mg/L		98	88 - 114		

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 280-161314-A-4 DU
Matrix: Water
Analysis Batch: 573020

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	1100			1050		mg/L				1	10

Metals

Filtration Batch: 573083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-573083/1-C	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-573083/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
280-161273-F-1-C MS	Matrix Spike	Dissolved	Water	FILTRATION	
280-161273-F-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	FILTRATION	

Filtration Batch: 573135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-2	P-06A	Dissolved	Water	FILTRATION	

Prep Batch: 573146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-2	P-06A	Dissolved	Water	3005A	573135
MB 280-573083/1-C	Method Blank	Dissolved	Water	3005A	573083
LCS 280-573083/2-C	Lab Control Sample	Dissolved	Water	3005A	573083
280-161273-F-1-C MS	Matrix Spike	Dissolved	Water	3005A	573083
280-161273-F-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	573083

Analysis Batch: 573344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-2	P-06A	Dissolved	Water	6010B	573146
MB 280-573083/1-C	Method Blank	Dissolved	Water	6010B	573146
LCS 280-573083/2-C	Lab Control Sample	Dissolved	Water	6010B	573146
280-161273-F-1-C MS	Matrix Spike	Dissolved	Water	6010B	573146
280-161273-F-1-D MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573146

Prep Batch: 573695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Dissolved	Water	3005A	
280-161417-3	P-07A	Dissolved	Water	3005A	
280-161417-4	FB1	Dissolved	Water	3005A	
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 574000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Dissolved	Water	6010B	573695
280-161417-3	P-07A	Dissolved	Water	6010B	573695
280-161417-4	FB1	Dissolved	Water	6010B	573695
MB 280-573695/1-A	Method Blank	Total Recoverable	Water	6010B	573695
LCS 280-573695/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573695
280-161727-J-1-B MS	Matrix Spike	Dissolved	Water	6010B	573695
280-161727-J-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573695

General Chemistry

Analysis Batch: 572980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	SM 2540C	
280-161417-3	P-07A	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 572980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-4	FB1	Total/NA	Water	SM 2540C	
MB 280-572980/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-572980/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-572980/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-161409-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-2	P-06A	Total/NA	Water	SM 2540C	
MB 280-573020/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573020/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161314-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	9060	
280-161417-2	P-06A	Total/NA	Water	9060	
280-161417-3	P-07A	Total/NA	Water	9060	
280-161417-4	FB1	Total/NA	Water	9060	
MB 280-573357/4	Method Blank	Total/NA	Water	9060	
LCS 280-573357/3	Lab Control Sample	Total/NA	Water	9060	
280-161414-A-6 MS	Matrix Spike	Total/NA	Water	9060	
280-161414-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-2	P-06A	Total/NA	Water	SM 2320B	
280-161417-3	P-07A	Total/NA	Water	SM 2320B	
280-161417-4	FB1	Total/NA	Water	SM 2320B	
MB 280-573361/58	Method Blank	Total/NA	Water	SM 2320B	
280-161414-A-8 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	353.2	
280-161417-2	P-06A	Total/NA	Water	353.2	
280-161417-3	P-07A	Total/NA	Water	353.2	
280-161417-4	FB1	Total/NA	Water	353.2	
MB 280-573635/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573635/21	Lab Control Sample	Total/NA	Water	353.2	
280-161417-2 MS	P-06A	Total/NA	Water	353.2	
280-161417-2 MSD	P-06A	Total/NA	Water	353.2	

Analysis Batch: 573792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	SM 2320B	
MB 280-573792/32	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573792/31	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161311-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161417-1

General Chemistry

Analysis Batch: 574030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	350.1	
280-161417-2	P-06A	Total/NA	Water	350.1	
280-161417-3	P-07A	Total/NA	Water	350.1	
280-161417-4	FB1	Total/NA	Water	350.1	
MB 280-574030/106	Method Blank	Total/NA	Water	350.1	
LCS 280-574030/104	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-574030/105	Lab Control Sample Dup	Total/NA	Water	350.1	
280-161418-D-3 MS	Matrix Spike	Total/NA	Water	350.1	
280-161418-D-3 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 625182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	300.0	
280-161417-2	P-06A	Total/NA	Water	300.0	
280-161417-3	P-07A	Total/NA	Water	300.0	
280-161417-4	FB1	Total/NA	Water	300.0	
MB 480-625182/4	Method Blank	Total/NA	Water	300.0	
LCS 480-625182/5	Lab Control Sample	Total/NA	Water	300.0	
280-161417-4 MS	FB1	Total/NA	Water	300.0	
620-4251-Q-6 MS	Matrix Spike	Total/NA	Water	300.0	
620-4251-Q-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 573210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161417-1	P-05A	Total/NA	Water	Field Sampling	
280-161417-2	P-06A	Total/NA	Water	Field Sampling	
280-161417-3	P-07A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-161417-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: P-05A
Lab Sample ID: 280-161417-1
Date Collected: 04/19/22 09:50
Matrix: Water
Date Received: 04/22/22 11:00

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	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:50	LMT	EET DEN
Total/NA	Analysis	300.0		2			625182	05/09/22 20:25	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:40	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:32	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 20:26	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 18:01	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 10:50	TJ	EET DEN

Client Sample ID: P-06A
Lab Sample ID: 280-161417-2
Date Collected: 04/20/22 10:30
Matrix: Water
Date Received: 04/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			200 mL	200 mL	573135	04/27/22 10:40	MAB	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573146	04/28/22 10:31	MB	EET DEN
Dissolved	Analysis	6010B		1			573344	04/28/22 22:22	MAB	EET DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 20:45	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:42	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:34	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 21:09	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 21:00	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573020	04/26/22 11:39	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/20/22 11:30	TJ	EET DEN

Client Sample ID: P-07A
Lab Sample ID: 280-161417-3
Date Collected: 04/19/22 12:30
Matrix: Water
Date Received: 04/22/22 11:00

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	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:54	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 21:04	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:44	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:40	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 21:25	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 21:05	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			573210	04/19/22 13:30	TJ	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161417-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: FB1
Lab Sample ID: 280-161417-4

Date Collected: 04/19/22 12:20
Matrix: Water

Date Received: 04/22/22 11:00

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	573695	05/03/22 19:17	KMS	EET DEN
Dissolved	Analysis	6010B		1			574000	05/04/22 21:58	LMT	EET DEN
Total/NA	Analysis	300.0		1			625182	05/09/22 21:24	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574030	05/05/22 14:46	JJM	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573635	05/02/22 17:42	SVC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 21:41	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 21:10	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	572980	04/26/22 08:45	ABW	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET 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: Ian Hultquist	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-23501-10345 1
Client Contact:	Phone: 503 716 6320	E-Mail: Collins.Janice@ET.EurofinsUS.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	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	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	4/19/22	0950	G	W	X		X	X	X	X	X	X	4	
P-06A	4/20/22	1030	G	W			X	X	X	X	X	X	3	limited volume
P-07A	4/19/22	1230	G	W	X		X	X	X	X	X	X	4	
FB1	4/19/22	1220	G	W	X		X	X	X	X	X	X	4	
														Use unpreserved for dissolved metals (not field filtered)

280-161417 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	[signature]	4/21/22 1630	SCS	[signature]	04/22/2022 1100	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: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.0, 0.3 CF +0.1 IR #12

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: Ian Hultquist	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-23501-10345.1
Client Contact:	Phone: 503 716 6320	E-Mail: Collins.Janice@ET.EurofinsUS.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	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	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	4/19/22	0950	G	W	X		X	X	X	X	X	X	4	
P-06A	4/20/22	1030	G	W			X	X	X	X	X	X	3	limited volume
P-07A	4/19/22	1230	G	W	X		X	X	X	X	X	X	4	
FB1	4/19/22	1220	G	W	X		X	X	X	X	X	X	4	
														Use unpreserved for dissolved metals (not field filtered)

280-161417 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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		4/21/22 @1630	SCS		4/25/22 0852	Test America
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.4 + 0.3 IR12 CF +0.1

4/25/22 0852

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: Ian Hultquist	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-23501-10345.1
Client Contact:	Phone: 503 716 6320	E-Mail: Collins.Janice@ET.EurofinsUS.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	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	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	4/19/22	0950	G	W	X		X	X	X	X	X	X	4	
P-06A	4/20/22	1030	G	W			X	X	X	X	X	X	3	limited volume
P-07A	4/19/22	1230	G	W	X		X	X	X	X	X	X	4	
FB1	4/19/22	1220	G	W	X		X	X	X	X	X	X	4	
														Use unpreserved for dissolved metals (not field filtered)

280-161417 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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
	4/21/22 @1630	SCS		4/25/22 0855	
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: 4.3 + 0.5 IR12 CF +0.1 3.4/25/22 PJ

3/10/2023

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 . ° 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)
4/19/22	09:00	21.44	.	2.53	.	18.91	X 1	0.77
/ /	:	.	.	.	.		X 3	2.31

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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
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	4/19/22	9:50	B	2	(250), 500, (1L) (None)	(YES)	(NO)	NA	√
Yellow Glass	4/19/22	9:50	B	1	250, (500), 1L (H_2SO_4)	(YES)	(NO)		√
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/19/22	9:50	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 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	9:00	0.00	6.30	189.6	961.0	10.1	4.71	3.0	C/C
1	9:15	0.8	6.77	122	950.0	9.60	11.11	0.99	C/C
2	9:25	1.50	6.81	85.2	946.0	9.70	12.11	0.72	C/C
3	9:39	2.30	6.81	63.1	947.0	9.70	12.65	0.51	C/C
4	9:41	2.45	6.80	61.40	947.0	9.7	12.64	0.49	C/C
5	9:43	2.60	6.81	60.70	946.0	9.8	12.94	0.51	C/C
6			.			.	.	.	C/C

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

Standard Purge ~ (250mL/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:** P-06A
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.	°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)
4/19/22	10:20	21.82	.	4.56	.	17.36	X 1	0.70
4/20/22	10:28	21.82	.	18.86	.		X 3	2.10

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	/ /	:		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	4/20/22	10:30	B	2 250, 500, 1L	None	YES	NO	NA	√
Yellow Glass	4/20/22	10:30	B	1 250, 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 — 3 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	B(1030)	0.00	6.90	57.3	91.1	10.2	6.54	0.54	clear/colorless
1	B(1042)	0.73	6.85	21.07	97.1	10.2	17.56	0.73	clear/colorless
2	B(1057)	1.45	7.03	-45.3	900.0	10.8	19.50	0.81	clear/colorless
3	B(1102)	1.60	7.04	-56.0	915.0	10.8	21.66	1.86	Tan, cloudy
4	B(1025)	1.70	6.56	80.3	931.0	11.3	18.86	2.70	tan, cloudy
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Standard purge (~200ml/min) Well dewatered on 4/19/22 @ 1102, will return on 4/20/22 to sample.

Returned on 4/20/22, WL 18.86. Began to sample, insufficient water to fill all bottles.

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

Filled partial of 1L unpreserved, Returned at 1300 and filling 1L. Returned at 1520 and filled

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:**	° 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)
4/29/22	1 :30	28.48	.	10.91	.	17.97	X 1	2.92
/ /	:	.	.	.	.		X 3	8.78

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	/ /	:			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	4/19/22	12 :30	B	2	250, 500, 1L None	YES	NO	NA	√
Yellow Glass	4/19/22	12 :30	B	1	250, 500, 1L H_2SO_4	YES	NO		√
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/19/22	12 :30	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 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	1138 B	0.00	6.20	-12.3	182.1	11.20	10.93	5.44	clear/colorless
1	1146 B	1.60	5.93	48.8	180.0	11.50	14.01	5.19	c/c
2	1154 B	2.0	5.93	64.9	180.3	11.5	14.76	4.43	c/c
3	1208 B	5.0	5.91	89.8	181.0	11.6	15.09	4.35	c/c
4	1223 B	8.80	5.92	109.8	181.0	11.6	15.01	3.84	c/c
5	1225 B	9.00	5.93	111.4	182.1	11.6	15.05	3.78	c/c
6	1227 B	9.30	5.93	112.8	181.7	11.6	15.04	3.77	c/c

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

Standard Purge ~ (1L/min)

SAMPLER: T. Hartquist (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:**	~~45~~ 50	°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	/ /	:		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	4/19/22	12:20	G	2	~~250, 500, 1L~~ None	~~YES~~	~~NO~~	NA	
Yellow Glass	4/19/22	12:20	G	1	250, ~~500~~, 1L H_2SO_4	~~YES~~	~~NO~~		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/19/22	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 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)

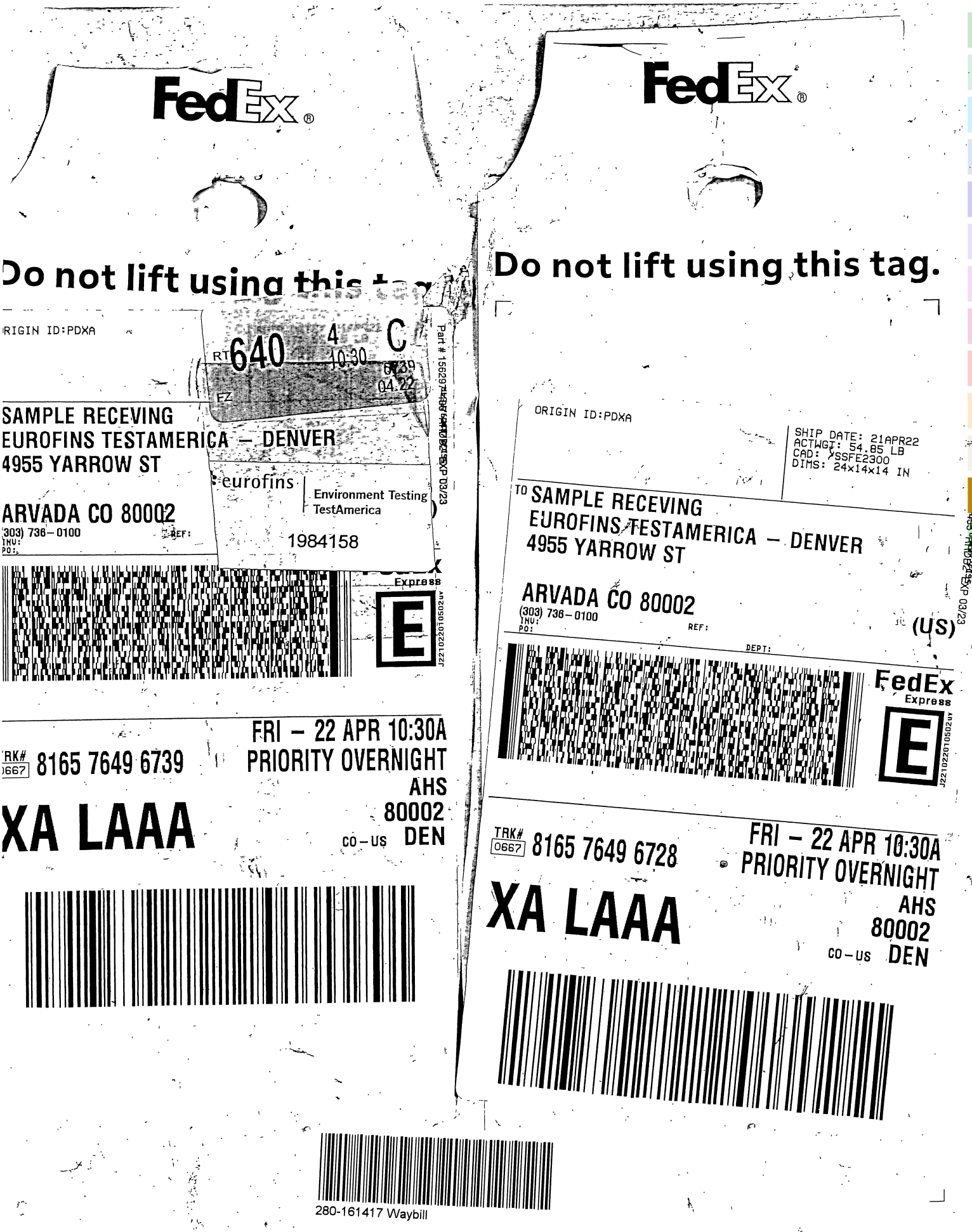
WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

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 new P-07A using lab supplied DI water

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



FedEx

Do not lift using this tag.

ORIGIN ID:PDXA

SHIP DATE: 21APR22
ACTWGT: 54.85 LB
CAD: 7SSFE2300
DIMS: 24x14x14 IN

TO SAMPLE RECEVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST

ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:
DEPT:

(US)

FedEx Express

J221022010502uv

TRK# 0667 8165 7649 6728

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

XA LAAA

AHS
80002
CO–US DEN

RT 640 4 C
10:30
FZ
04.22

Part # 156297-[illegible] REV [illegible] EXP 03/23

ORIGIN ID:PDXA

SAMPLE RECEVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST

ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:

eurofins | Environment Testing TestAmerica

1984158

FedEx Express

J221022010502uv

TRK# 0667 8165 7649 6739

FRI – 22 APR 10:30A
PRIORITY OVERNIGHT

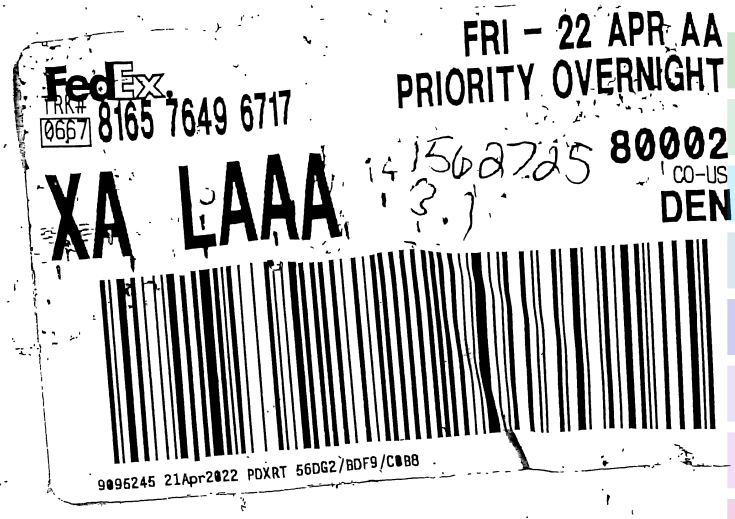
XA LAAA

AHS
80002
CO–US DEN

280-161417 Waybill

SAMPLE RECEIVING
EUROFINS TESTAMERICA — DENVER
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
Environment Test
TestAmerica
1773606
(US)
FedEx
Express
TRK#
8165 7649 6691
FRI - 22 APR 10:30A
PRIORITY OVERNIGHT
A LAAA
43
AHS
80002
CO - US
DEN

280-16417 Waybill


FedEx
TRK# 0667 8165 7649 6717
FRI - 22 APR AA
PRIORITY OVERNIGHT
80002
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XA LAAA
DEN
9096245 21Apr2022 PDXRT 56DG2/BDF9/C8B8

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-612041.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161417-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/12/2022			
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, 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:

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 (280-161417-1)	4/19/22	09:50 Pacific		Water			X	1	
P-06A (280-161417-2)	4/20/22	10:30 Pacific		Water			X	1	
P-07A (280-161417-3)	4/19/22	12:30 Pacific		Water			X	1	
FB1 (280-161417-4)	4/19/22	12:20 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: Madi Davis	Date/Time: 4/26/22	Company: ETA DEN	Received by: Date/Time: 4/28/22 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: 4.7 #1 ICE

Ver: 06/08/2021

3/10/2023

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161417-1

Login Number: 161417
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.	False	Refer to job narrative for details
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.	False	No: Limited volume received
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161417-1

Login Number: 161417
List Number: 2
Creator: Kazenga, Oliver M

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.	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: 280-161417-1

Login Number: 161417
List Number: 3
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:47 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	4.7 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 2022

Surface Water

Laboratory Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Annual SW - Apr

JOB NUMBER

280-161382-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

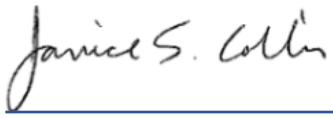
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Waste Management
Job ID: 280-161382-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
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: 280-161382-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161382-1

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 04/22/2022 and 4/25/2022; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.9°C, 1.2°C and 4.4°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)

The Method 8260B LCS recovery for Trichlorofluoromethane was above control limits. Because the data are considered to be biased high and all associated samples were non-detect above the reporting limit for Trichlorofluoromethane, corrective action was deemed unnecessary.

The Method 8260B LCS/LCSD exhibited RPD data outside the QC control limits for Acetone. Both the LCS and LCSD were recovered within QC control limits, demonstrating that the laboratory performed the method within acceptable guidelines; therefore, corrective action is deemed unnecessary.

All other Laboratory Control 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.

Sample SYR MW-12A 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

Job ID: 280-161382-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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 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.

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-161382-1

No Detections.

Client Sample ID: SYR SW-1 — Lab Sample ID: 280-161382-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	7000		500		ug/L	1		6010B	Total Recoverable
Iron	2100		30		ug/L	1		6010B	Total Recoverable
Magnesium	2700		200		ug/L	1		6010B	Total Recoverable
Manganese	34		3.0		ug/L	1		6010B	Total Recoverable
Potassium	590		500		ug/L	1		6010B	Total Recoverable
Silicon	9300		100		ug/L	1		6010B	Total Recoverable
Sodium	5200		1000		ug/L	1		6010B	Total Recoverable
Chloride	3.8		1.0		mg/L	1		300.0	Total/NA
Sulfate	4.7		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.59		0.050		mg/L	1		353.2	Total/NA
Halogens, Total Organic	16		15		ug/L	1		9020B	Total/NA
pH adj. to 25 deg C	8.0	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	79		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	0.99				meq/L	1		SM 1030E	Total/NA
Total Cations	0.93				meq/L	1		SM 1030E	Total/NA
Percent Difference	-3.2				%	1		SM 1030E	Total/NA
Calcium	7.0				mg/L	1		SM 1030E	Total/NA
Magnesium	2.7				mg/L	1		SM 1030E	Total/NA
Potassium	0.59				mg/L	1		SM 1030E	Total/NA
Sodium	5.2				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	3.8				mg/L	1		SM 1030E	Total/NA
Sulfate	4.7				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	37				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	37				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.59				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-3.2				%	1		SM 1030E	Total/NA
Calculated TDS	44				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	2.1				mg/L	1		SM 1030E	Total/NA
Calcium	0.35				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.22				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.015				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.23				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.098				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.74				meq/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SYR SW-1 (Continued) — Lab Sample ID: 280-161382-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	0.74				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.042				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	36		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	61		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	29		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.43				SU	1		Field Sampling	Total/NA
Field Conductivity	87.9				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.70				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	15.66				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	172.3				millivolts	1		Field Sampling	Total/NA

Client Sample ID: SYR SW-2 — Lab Sample ID: 280-161382-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	7000		500		ug/L	1		6010B	Total Recoverable
Iron	2600		30		ug/L	1		6010B	Total Recoverable
Magnesium	2800		200		ug/L	1		6010B	Total Recoverable
Manganese	42		3.0		ug/L	1		6010B	Total Recoverable
Potassium	600		500		ug/L	1		6010B	Total Recoverable
Silicon	9800		100		ug/L	1		6010B	Total Recoverable
Sodium	5100		1000		ug/L	1		6010B	Total Recoverable
Chloride	3.8		1.0		mg/L	1		300.0	Total/NA
Sulfate	4.9		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.61		0.050		mg/L	1		353.2	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	81		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		9060	Total/NA
Total Anions	0.93				meq/L	1		SM 1030E	Total/NA
Total Cations	0.96				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.3				%	1		SM 1030E	Total/NA
Calcium	7.0				mg/L	1		SM 1030E	Total/NA
Magnesium	2.8				mg/L	1		SM 1030E	Total/NA
Potassium	0.60				mg/L	1		SM 1030E	Total/NA
Sodium	5.1				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	3.8				mg/L	1		SM 1030E	Total/NA
Sulfate	4.9				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	34				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	34				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.61				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.3				%	1		SM 1030E	Total/NA
Calculated TDS	43				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SYR SW-2 (Continued)

Lab Sample ID: 280-161382-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
TDS Ratio	1.4				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	58				mg/L	1		SM 1030E	Total/NA
Iron	2.6				mg/L	1		SM 1030E	Total/NA
Calcium	0.35				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	0.22				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.11				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	0.68				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	0.68				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.044				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.14				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	34		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	34		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	28		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	58		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	30		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.36				SU	1		Field Sampling	Total/NA
Field Conductivity	83.3				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.9				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	10.03				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	176.4				millivolts	1		Field Sampling	Total/NA

Client Sample ID: SYR MW-12A

Lab Sample ID: 280-161382-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	13000		500		ug/L	1		6010B	Total Recoverable
Iron	3400		30		ug/L	1		6010B	Total Recoverable
Magnesium	4400		200		ug/L	1		6010B	Total Recoverable
Manganese	52		3.0		ug/L	1		6010B	Total Recoverable
Potassium	850		500		ug/L	1		6010B	Total Recoverable
Silicon	12000		100		ug/L	1		6010B	Total Recoverable
Sodium	5700		1000		ug/L	1		6010B	Total Recoverable
Chloride	4.9		1.0		mg/L	1		300.0	Total/NA
Sulfate	12		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.054		0.050		mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	2.2		0.050		mg/L	1		353.2	Total/NA
Total Phosphorus	0.074		0.050		mg/L	1		365.1	Total/NA
pH adj. to 25 deg C	7.5	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	130		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	2.3		1.0		mg/L	1		9060	Total/NA
Total Anions	1.3				meq/L	1		SM 1030E	Total/NA
Total Cations	1.5				meq/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SYR MW-12A (Continued)

Lab Sample ID: 280-161382-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Percent Difference	6.6				%	1		SM 1030E	Total/NA
Calcium	13				mg/L	1		SM 1030E	Total/NA
Magnesium	4.4				mg/L	1		SM 1030E	Total/NA
Potassium	0.85				mg/L	1		SM 1030E	Total/NA
Sodium	5.7				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.054				mg/L	1		SM 1030E	Total/NA
Chloride	4.9				mg/L	1		SM 1030E	Total/NA
Sulfate	12				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	37				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	37				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.2				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	6.6				%	1		SM 1030E	Total/NA
Calculated TDS	57				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.7				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	95				mg/L	1		SM 1030E	Total/NA
Iron	3.4				mg/L	1		SM 1030E	Total/NA
Calcium	0.65				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.36				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.022				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0039				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.14				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.74				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	0.74				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.16				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.18				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	51		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	95		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	28		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.75				SU	1		Field Sampling	Total/NA
Field Conductivity	133.0				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	7.54				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	156.3				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161382-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161382-1	TRIP BLANK	Water	04/21/22 07:00	04/22/22 11:00
280-161382-2	SYR SW-1	Water	04/21/22 10:30	04/22/22 11:00
280-161382-3	SYR SW-2	Water	04/21/22 08:35	04/22/22 11:00
280-161382-4	SYR MW-12A	Water	04/21/22 09:35	04/22/22 11:00

Method Summary

Client: Waste Management
Job ID: 280-161382-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
365.1	Phosphorus, Ortho	EPA	EET DEN
365.1	Phosphorus, Total	EPA	EET DEN
410.4	COD	EPA	EET DEN
9020B	Organic Halides, Total (TOX)	SW846	EET DEN
9040B	pH	SW846	EET DEN
9050A	Specific Conductance	SW846	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
SM5210B	BOD, 5 Day	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
Subcontract	E-coli MPN (Alexin)	None	AAL
Subcontract	Fecal Coliform (Alexin)	None	AAL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
365.1	Sample Digestion for Total Phosphorus	MCAWW	EET DEN
5030B	Purge and Trap	SW846	EET 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
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: TRIP BLANK
Date Collected: 04/21/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-1
Matrix: Water

Method: SW846 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			05/04/22 17:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 17:35	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 17:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 17:35	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 17:35	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 17:35	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 17:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 17:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 17:35	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 17:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 17:35	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 17:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 17:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 17:35	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 17:35	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 17:35	1
2-Hexanone	ND		5.0		ug/L			05/04/22 17:35	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 17:35	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 17:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 17:35	1
Acetone	ND	*1	10		ug/L			05/04/22 17:35	1
Benzene	ND		1.0		ug/L			05/04/22 17:35	1
Bromobenzene	ND		1.0		ug/L			05/04/22 17:35	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 17:35	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 17:35	1
Bromoform	ND		1.0		ug/L			05/04/22 17:35	1
Bromomethane	ND		2.0		ug/L			05/04/22 17:35	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 17:35	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 17:35	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 17:35	1
Chloroethane	ND		2.0		ug/L			05/04/22 17:35	1
Chloroform	ND		1.0		ug/L			05/04/22 17:35	1
Chloromethane	ND		2.0		ug/L			05/04/22 17:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 17:35	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 17:35	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 17:35	1
Dibromomethane	ND		1.0		ug/L			05/04/22 17:35	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 17:35	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 17:35	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 17:35	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-161382-1
Matrix: Water
Date Collected: 04/21/22 07:00
Date Received: 04/22/22 11:00

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			05/04/22 17:35	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
Styrene	ND		1.0		ug/L			05/04/22 17:35	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 17:35	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 17:35	1
Toluene	ND		1.0		ug/L			05/04/22 17:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 17:35	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 17:35	1
Trichloroethene	ND		1.0		ug/L			05/04/22 17:35	1
Trichlorofluoromethane	ND	*+	2.0		ug/L			05/04/22 17:35	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 17:35	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 17:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*10*	*T J*	*ug/L*		*1.25*	*N/A*		*05/04/22 17:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*05/04/22 17:35*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*05/04/22 17:35*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/04/22 17:35*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*05/04/22 17:35*	*1*

Client Sample ID: SYR SW-1

Lab Sample ID: 280-161382-2
Matrix: Water
Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Method: SW846 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			05/04/22 17:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 17:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 17:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 17:55	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 17:55	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 17:55	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 17:55	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 17:55	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 17:55	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 17:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 17:55	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 17:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 17:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: SYR SW-1
Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-2
Matrix: Water

Method: SW846 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			05/04/22 17:55	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 17:55	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 17:55	1
2-Hexanone	ND		5.0		ug/L			05/04/22 17:55	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 17:55	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 17:55	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 17:55	1
Acetone	ND	*1	10		ug/L			05/04/22 17:55	1
Benzene	ND		1.0		ug/L			05/04/22 17:55	1
Bromobenzene	ND		1.0		ug/L			05/04/22 17:55	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 17:55	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 17:55	1
Bromoform	ND		1.0		ug/L			05/04/22 17:55	1
Bromomethane	ND		2.0		ug/L			05/04/22 17:55	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 17:55	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 17:55	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 17:55	1
Chloroethane	ND		2.0		ug/L			05/04/22 17:55	1
Chloroform	ND		1.0		ug/L			05/04/22 17:55	1
Chloromethane	ND		2.0		ug/L			05/04/22 17:55	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 17:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 17:55	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 17:55	1
Dibromomethane	ND		1.0		ug/L			05/04/22 17:55	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 17:55	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 17:55	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 17:55	1
Naphthalene	ND		1.0		ug/L			05/04/22 17:55	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
Styrene	ND		1.0		ug/L			05/04/22 17:55	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 17:55	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 17:55	1
Toluene	ND		1.0		ug/L			05/04/22 17:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 17:55	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 17:55	1
Trichloroethene	ND		1.0		ug/L			05/04/22 17:55	1
Trichlorofluoromethane	ND	*+	2.0		ug/L			05/04/22 17:55	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 17:55	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 17:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*14*	*T J*	*ug/L*		*1.25*	*N/A*		*05/04/22 17:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*05/04/22 17:55*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*05/04/22 17:55*	*1*

Client Sample ID: SYR SW-1

Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/04/22 17:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/04/22 17:55*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7000		500		ug/L		05/02/22 13:28	05/04/22 10:21	1
Iron	2100		30		ug/L		05/02/22 13:28	05/04/22 10:21	1
Magnesium	2700		200		ug/L		05/02/22 13:28	05/04/22 10:21	1
Manganese	34		3.0		ug/L		05/02/22 13:28	05/04/22 10:21	1
Potassium	590		500		ug/L		05/02/22 13:28	05/04/22 10:21	1
Silicon	9300		100		ug/L		05/02/22 13:28	05/04/22 10:21	1
Sodium	5200		1000		ug/L		05/02/22 13:28	05/04/22 10:21	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	0.99				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	0.93				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	-3.2				%			05/10/22 12:14	1
Calcium (SM 1030E)	7.0				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	2.7				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	0.59				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	5.2				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	3.8				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	4.7				mg/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	37				mg/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E)	37				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	0.59				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	-3.2				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	44				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	1.4				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	61				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	2.1				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	0.35				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	0.22				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	0.015				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	0.23				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	0.00				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	0.11				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	0.098				meq/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	0.74				meq/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E (meq))	0.74				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	0.042				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	0.11				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.8		1.0		mg/L			05/07/22 06:17	1

Client Sample ID: SYR SW-1

Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (EPA 300.0)	**4.7**		1.0		mg/L			05/07/22 06:17	1
Ammonia as N (EPA 350.1)	ND		0.050		mg/L			05/09/22 12:53	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		1.0		mg/L		04/28/22 16:09	05/02/22 17:19	1
Nitrate Nitrite as N (EPA 353.2)	**0.59**		0.050		mg/L			05/03/22 16:36	1
Orthophosphate (EPA 365.1)	ND	H	0.020		mg/L			05/06/22 11:57	1
Total Phosphorus (EPA 365.1)	ND		0.050		mg/L		05/09/22 13:50	05/10/22 14:46	1
Chemical Oxygen Demand (COD) (EPA 410.4)	ND		20		mg/L			05/10/22 11:26	1
Halogens, Total Organic (SW846 9020B)	**16**		15		ug/L			05/10/22 12:10	1
Total Organic Carbon - Average (SW846 9060)	**1.6**		1.0		mg/L			05/02/22 20:10	1
Total Alkalinity (SM 2320B)	**37**		10		mg/L			04/28/22 18:16	1
Bicarbonate Alkalinity (SM 2320B)	**37**		10		mg/L			04/28/22 18:16	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/28/22 18:16	1
Hardness, as CaCO3 (SM 2340C)	**36**		3.0		mg/L			04/29/22 15:10	1
Total Dissolved Solids (SM 2540C)	**61**		10		mg/L			04/28/22 11:41	1
Total Suspended Solids (SM 2540D)	**29**		4.0		mg/L			04/26/22 11:29	1
Biochemical Oxygen Demand (SM5210B)	ND		2.0		mg/L			04/22/22 13:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**8.0**	**HF**	0.1		SU			05/06/22 21:10	1
Specific Conductance (SW846 9050A)	**79**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.43**				SU			04/21/22 11:30	1
Field Conductivity	**87.9**				umhos/cm			04/21/22 11:30	1
Field Temperature	**9.70**				Degrees C			04/21/22 11:30	1
Field Dissolved Oxygen	**15.66**				mg/L			04/21/22 11:30	1
Field EH/ORP	**172.3**				millivolts			04/21/22 11:30	1

Client Sample ID: SYR SW-2

Date Collected: 04/21/22 08:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-3

Matrix: Water

Method: SW846 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			05/04/22 18:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 18:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 18:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 18:15	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 18:15	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 18:15	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 18:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 18:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 18:15	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: SYR SW-2
Date Collected: 04/21/22 08:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 18:15	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 18:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 18:15	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 18:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 18:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 18:15	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 18:15	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 18:15	1
2-Hexanone	ND		5.0		ug/L			05/04/22 18:15	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 18:15	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 18:15	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 18:15	1
Acetone	ND	*1	10		ug/L			05/04/22 18:15	1
Benzene	ND		1.0		ug/L			05/04/22 18:15	1
Bromobenzene	ND		1.0		ug/L			05/04/22 18:15	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 18:15	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 18:15	1
Bromoform	ND		1.0		ug/L			05/04/22 18:15	1
Bromomethane	ND		2.0		ug/L			05/04/22 18:15	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 18:15	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 18:15	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 18:15	1
Chloroethane	ND		2.0		ug/L			05/04/22 18:15	1
Chloroform	ND		1.0		ug/L			05/04/22 18:15	1
Chloromethane	ND		2.0		ug/L			05/04/22 18:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 18:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 18:15	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 18:15	1
Dibromomethane	ND		1.0		ug/L			05/04/22 18:15	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 18:15	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 18:15	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 18:15	1
Naphthalene	ND		1.0		ug/L			05/04/22 18:15	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
Styrene	ND		1.0		ug/L			05/04/22 18:15	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 18:15	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 18:15	1
Toluene	ND		1.0		ug/L			05/04/22 18:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 18:15	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 18:15	1
Trichloroethene	ND		1.0		ug/L			05/04/22 18:15	1

Client Sample ID: SYR SW-2

Date Collected: 04/21/22 08:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND	*+	2.0		ug/L			05/04/22 18:15	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 18:15	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 18:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*14*	*T J*	*ug/L*		*1.25*	*N/A*		*05/04/22 18:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*05/04/22 18:15*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*05/04/22 18:15*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/04/22 18:15*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/04/22 18:15*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**7000**		500		ug/L		05/02/22 13:28	05/04/22 10:25	1
Iron	**2600**		30		ug/L		05/02/22 13:28	05/04/22 10:25	1
Magnesium	**2800**		200		ug/L		05/02/22 13:28	05/04/22 10:25	1
Manganese	**42**		3.0		ug/L		05/02/22 13:28	05/04/22 10:25	1
Potassium	**600**		500		ug/L		05/02/22 13:28	05/04/22 10:25	1
Silicon	**9800**		100		ug/L		05/02/22 13:28	05/04/22 10:25	1
Sodium	**5100**		1000		ug/L		05/02/22 13:28	05/04/22 10:25	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.93**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**0.96**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**1.3**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**7.0**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**2.8**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.60**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**5.1**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**3.8**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**4.9**				mg/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**34**				mg/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E)	**34**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**0.61**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**1.3**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**43**				mg/L			05/10/22 12:14	1
TDS Ratio (SM 1030E)	**1.4**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**58**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**2.6**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**0.35**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**0.23**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.015**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**0.22**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.11**				meq/L			05/10/22 12:14	1

Client Sample ID: SYR SW-2

Lab Sample ID: 280-161382-3

Date Collected: 04/21/22 08:35

Matrix: Water

Date Received: 04/22/22 11:00

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate (SM 1030E (meq))	**0.10**				meq/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.68**				meq/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E (meq))	**0.68**				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.044**				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	**0.14**				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**3.8**		1.0		mg/L			05/07/22 06:36	1
Sulfate (EPA 300.0)	**4.9**		1.0		mg/L			05/07/22 06:36	1
Ammonia as N (EPA 350.1)	ND		0.050		mg/L			05/09/22 13:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		1.0		mg/L		04/28/22 16:09	05/02/22 17:20	1
Nitrate Nitrite as N (EPA 353.2)	**0.61**		0.050		mg/L			05/03/22 16:42	1
Orthophosphate (EPA 365.1)	ND		0.020		mg/L			04/22/22 15:03	1
Total Phosphorus (EPA 365.1)	ND		0.050		mg/L		05/09/22 13:50	05/10/22 14:47	1
Chemical Oxygen Demand (COD) (EPA 410.4)	ND		20		mg/L			05/10/22 11:26	1
Halogens, Total Organic (SW846 9020B)	ND		15		ug/L			05/10/22 12:10	1
Total Organic Carbon - Average (SW846 9060)	**1.6**		1.0		mg/L			05/02/22 20:24	1
Total Alkalinity (SM 2320B)	**34**		10		mg/L			04/28/22 18:21	1
Bicarbonate Alkalinity (SM 2320B)	**34**		10		mg/L			04/28/22 18:21	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/28/22 18:21	1
Hardness, as CaCO3 (SM 2340C)	**28**		3.0		mg/L			04/29/22 15:13	1
Total Dissolved Solids (SM 2540C)	**58**		10		mg/L			04/28/22 11:41	1
Total Suspended Solids (SM 2540D)	**30**		4.0		mg/L			04/26/22 11:29	1
Biochemical Oxygen Demand (SM5210B)	ND		2.0		mg/L			04/22/22 13:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**7.7**	**HF**	0.1		SU			05/06/22 21:14	1
Specific Conductance (SW846 9050A)	**81**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.36**				SU			04/21/22 09:35	1
Field Conductivity	**83.3**				umhos/cm			04/21/22 09:35	1
Field Temperature	**9.9**				Degrees C			04/21/22 09:35	1
Field Dissolved Oxygen	**10.03**				mg/L			04/21/22 09:35	1
Field EH/ORP	**176.4**				millivolts			04/21/22 09:35	1

Client Sample ID: SYR MW-12A

Lab Sample ID: 280-161382-4

Date Collected: 04/21/22 09:35

Matrix: Water

Date Received: 04/22/22 11:00

Method: SW846 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			05/04/22 18:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 18:36	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: SYR MW-12A
Date Collected: 04/21/22 09:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-4
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 18:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 18:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 18:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 18:36	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 18:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 18:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 18:36	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 18:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 18:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 18:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 18:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 18:36	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 18:36	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 18:36	1
2-Hexanone	ND		5.0		ug/L			05/04/22 18:36	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 18:36	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 18:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 18:36	1
Acetone	ND	*1	10		ug/L			05/04/22 18:36	1
Benzene	ND		1.0		ug/L			05/04/22 18:36	1
Bromobenzene	ND		1.0		ug/L			05/04/22 18:36	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 18:36	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 18:36	1
Bromoform	ND		1.0		ug/L			05/04/22 18:36	1
Bromomethane	ND		2.0		ug/L			05/04/22 18:36	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 18:36	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 18:36	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 18:36	1
Chloroethane	ND		2.0		ug/L			05/04/22 18:36	1
Chloroform	ND		1.0		ug/L			05/04/22 18:36	1
Chloromethane	ND		2.0		ug/L			05/04/22 18:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 18:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 18:36	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 18:36	1
Dibromomethane	ND		1.0		ug/L			05/04/22 18:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 18:36	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 18:36	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 18:36	1
Naphthalene	ND		1.0		ug/L			05/04/22 18:36	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 18:36	1

Client Sample ID: SYR MW-12A

Date Collected: 04/21/22 09:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-4

Matrix: Water

Method: SW846 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			05/04/22 18:36	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
Styrene	ND		1.0		ug/L			05/04/22 18:36	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 18:36	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 18:36	1
Toluene	ND		1.0		ug/L			05/04/22 18:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 18:36	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 18:36	1
Trichloroethene	ND		1.0		ug/L			05/04/22 18:36	1
Trichlorofluoromethane	ND	*+	2.0		ug/L			05/04/22 18:36	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 18:36	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 18:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*16*	*T J*	*ug/L*		*1.25*	*N/A*		*05/04/22 18:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*05/04/22 18:36*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*05/04/22 18:36*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*05/04/22 18:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*05/04/22 18:36*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**13000**		500		ug/L		05/02/22 13:28	05/04/22 10:29	1
Iron	**3400**		30		ug/L		05/02/22 13:28	05/04/22 10:29	1
Magnesium	**4400**		200		ug/L		05/02/22 13:28	05/04/22 10:29	1
Manganese	**52**		3.0		ug/L		05/02/22 13:28	05/04/22 10:29	1
Potassium	**850**		500		ug/L		05/02/22 13:28	05/04/22 10:29	1
Silicon	**12000**		100		ug/L		05/02/22 13:28	05/04/22 10:29	1
Sodium	**5700**		1000		ug/L		05/02/22 13:28	05/04/22 10:29	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**1.3**				meq/L			05/10/22 12:14	1
Total Cations (SM 1030E)	**1.5**				meq/L			05/10/22 12:14	1
Percent Difference (SM 1030E)	**6.6**				%			05/10/22 12:14	1
Calcium (SM 1030E)	**13**				mg/L			05/10/22 12:14	1
Magnesium (SM 1030E)	**4.4**				mg/L			05/10/22 12:14	1
Potassium (SM 1030E)	**0.85**				mg/L			05/10/22 12:14	1
Sodium (SM 1030E)	**5.7**				mg/L			05/10/22 12:14	1
Ammonia as N (SM 1030E)	**0.054**				mg/L			05/10/22 12:14	1
Chloride (SM 1030E)	**4.9**				mg/L			05/10/22 12:14	1
Sulfate (SM 1030E)	**12**				mg/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E)	**37**				mg/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E)	**37**				mg/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E)	**2.2**				mg/L			05/10/22 12:14	1
Anion/Cation Balance (SM 1030E)	**6.6**				%			05/10/22 12:14	1
Calculated TDS (SM 1030E)	**57**				mg/L			05/10/22 12:14	1

Client Sample ID: SYR MW-12A

Date Collected: 04/21/22 09:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-4

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
TDS Ratio (SM 1030E)	**1.7**				NONE			05/10/22 12:14	1
Total Dissolved Solids (SM 1030E)	**95**				mg/L			05/10/22 12:14	1
Iron (SM 1030E)	**3.4**				mg/L			05/10/22 12:14	1
Calcium (SM 1030E (meq))	**0.65**				meq/L			05/10/22 12:14	1
Magnesium (SM 1030E (meq))	**0.36**				meq/L			05/10/22 12:14	1
Potassium (SM 1030E (meq))	**0.022**				meq/L			05/10/22 12:14	1
Sodium (SM 1030E (meq))	**0.25**				meq/L			05/10/22 12:14	1
Ammonia as N (SM 1030E (meq))	**0.0039**				meq/L			05/10/22 12:14	1
Chloride (SM 1030E (meq))	**0.14**				meq/L			05/10/22 12:14	1
Sulfate (SM 1030E (meq))	**0.25**				meq/L			05/10/22 12:14	1
Carbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/10/22 12:14	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.74**				meq/L			05/10/22 12:14	1
Total Alkalinity (SM 1030E (meq))	**0.74**				meq/L			05/10/22 12:14	1
Nitrate/Nitrite (SM 1030E (meq))	**0.16**				meq/L			05/10/22 12:14	1
Iron (SM 1030E (meq))	**0.18**				meq/L			05/10/22 12:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**4.9**		1.0		mg/L			05/07/22 06:54	1
Sulfate (EPA 300.0)	**12**		1.0		mg/L			05/09/22 14:20	1
Ammonia as N (EPA 350.1)	**0.054**		0.050		mg/L			05/09/22 13:03	1
Total Kjeldahl Nitrogen (EPA 351.2)	ND		1.0		mg/L		04/28/22 16:09	05/02/22 17:20	1
Nitrate Nitrite as N (EPA 353.2)	**2.2**		0.050		mg/L			05/04/22 17:28	1
Orthophosphate (EPA 365.1)	ND		0.020		mg/L			04/22/22 15:03	1
Total Phosphorus (EPA 365.1)	**0.074**		0.050		mg/L		05/09/22 13:50	05/10/22 14:47	1
Chemical Oxygen Demand (COD) (EPA 410.4)	ND	F1	20		mg/L			05/10/22 11:26	1
Halogens, Total Organic (SW846 9020B)	ND		15		ug/L			05/10/22 12:10	1
Total Organic Carbon - Average (SW846 9060)	**2.3**		1.0		mg/L			04/28/22 16:56	1
Total Alkalinity (SM 2320B)	**37**		10		mg/L			04/28/22 18:26	1
Bicarbonate Alkalinity (SM 2320B)	**37**		10		mg/L			04/28/22 18:26	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/28/22 18:26	1
Hardness, as CaCO3 (SM 2340C)	**51**		3.0		mg/L			04/29/22 15:13	1
Total Dissolved Solids (SM 2540C)	**95**		10		mg/L			04/28/22 11:41	1
Total Suspended Solids (SM 2540D)	**28**		4.0		mg/L			04/26/22 11:29	1
Biochemical Oxygen Demand (SM5210B)	ND		2.0		mg/L			04/22/22 13:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**7.5**	**HF**	0.1		SU			05/06/22 21:18	1
Specific Conductance (SW846 9050A)	**130**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.75**				SU			04/21/22 10:35	1
Field Conductivity	**133.0**				umhos/cm			04/21/22 10:35	1
Field Temperature	**10.7**				Degrees C			04/21/22 10:35	1
Field Dissolved Oxygen	**7.54**				mg/L			04/21/22 10:35	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: SYR MW-12A
Date Collected: 04/21/22 09:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-4
Matrix: Water

Method: EPA Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field EH/ORP	156.3				millivolts			04/21/22 10:35	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

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)
280-161382-1	TRIP BLANK	97	100	99	102
280-161382-2	SYR SW-1	97	98	99	99
280-161382-3	SYR SW-2	98	100	100	100
280-161382-4	SYR MW-12A	99	102	99	99
LCS 280-573793/4	Lab Control Sample	103	97	100	100
LCSD 280-573793/5	Lab Control Sample Dup	101	98	99	98
MB 280-573793/8	Method Blank	97	102	100	98

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 280-573793/8
Matrix: Water
Analysis Batch: 573793

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			05/04/22 11:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 11:43	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 11:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 11:43	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 11:43	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 11:43	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 11:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 11:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 11:43	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 11:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,2-Dichloroethane	ND		1.0		ug/L			05/04/22 11:43	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 11:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 11:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 11:43	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 11:43	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:43	1
2-Hexanone	ND		5.0		ug/L			05/04/22 11:43	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 11:43	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 11:43	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 11:43	1
Acetone	ND		10		ug/L			05/04/22 11:43	1
Benzene	ND		1.0		ug/L			05/04/22 11:43	1
Bromobenzene	ND		1.0		ug/L			05/04/22 11:43	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 11:43	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 11:43	1
Bromoform	ND		1.0		ug/L			05/04/22 11:43	1
Bromomethane	ND		2.0		ug/L			05/04/22 11:43	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 11:43	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 11:43	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 11:43	1
Chloroethane	ND		2.0		ug/L			05/04/22 11:43	1
Chloroform	ND		1.0		ug/L			05/04/22 11:43	1
Chloromethane	ND		2.0		ug/L			05/04/22 11:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 11:43	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 11:43	1
Dibromomethane	ND		1.0		ug/L			05/04/22 11:43	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 11:43	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 11:43	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 11:43	1

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

Lab Sample ID: MB 280-573793/8
Matrix: Water
Analysis Batch: 573793

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			05/04/22 11:43	1
Naphthalene	ND		1.0		ug/L			05/04/22 11:43	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
Styrene	ND		1.0		ug/L			05/04/22 11:43	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 11:43	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 11:43	1
Toluene	ND		1.0		ug/L			05/04/22 11:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 11:43	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 11:43	1
Trichloroethene	ND		1.0		ug/L			05/04/22 11:43	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 11:43	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 11:43	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 11:43	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/04/22 11:43*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*05/04/22 11:43*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*05/04/22 11:43*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*05/04/22 11:43*	*1*
Toluene-d8 (Surr)	*98*		*80 - 125*		*05/04/22 11:43*	*1*

Lab Sample ID: LCS 280-573793/4
Matrix: Water
Analysis Batch: 573793

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	54.8		ug/L		110	74 - 121
1,1,1-Trichloroethane	50.0	51.4		ug/L		103	62 - 132
1,1,2,2-Tetrachloroethane	50.0	50.2		ug/L		100	72 - 122
1,1,2-Trichloroethane	50.0	53.3		ug/L		107	72 - 128
1,1-Dichloroethane	50.0	53.9		ug/L		108	66 - 130
1,1-Dichloroethene	50.0	54.2		ug/L		108	62 - 130
1,1-Dichloropropene	50.0	55.3		ug/L		111	64 - 133
1,2,3-Trichlorobenzene	50.0	57.5		ug/L		115	70 - 127
1,2,3-Trichloropropane	50.0	52.3		ug/L		105	74 - 123
1,2,4-Trichlorobenzene	50.0	56.3		ug/L		113	73 - 124
1,2,4-Trimethylbenzene	50.0	55.6		ug/L		111	74 - 124
1,2-Dibromo-3-Chloropropane	50.0	48.8		ug/L		98	58 - 122
1,2-Dibromoethane	50.0	55.7		ug/L		111	81 - 118
1,2-Dichlorobenzene	50.0	54.2		ug/L		108	77 - 121
1,2-Dichloroethane	50.0	48.1		ug/L		96	61 - 130
1,2-Dichloropropane	50.0	51.4		ug/L		103	68 - 127
1,3,5-Trimethylbenzene	50.0	54.9		ug/L		110	73 - 127
1,3-Dichlorobenzene	50.0	54.7		ug/L		109	76 - 121

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

Lab Sample ID: LCS 280-573793/4
Matrix: Water
Analysis Batch: 573793

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	80 - 118
1,4-Dichlorobenzene	50.0	53.2		ug/L		106	76 - 119
2,2-Dichloropropane	50.0	52.0		ug/L		104	57 - 140
2-Butanone (MEK)	200	180		ug/L		90	53 - 135
2-Chlorotoluene	50.0	56.5		ug/L		113	75 - 123
2-Hexanone	200	195		ug/L		98	58 - 134
4-Chlorotoluene	50.0	52.9		ug/L		106	74 - 124
4-Isopropyltoluene	50.0	56.3		ug/L		113	74 - 127
4-Methyl-2-pentanone	200	215		ug/L		107	56 - 135
Acetone	200	173		ug/L		87	50 - 137
Benzene	50.0	52.7		ug/L		105	69 - 126
Bromobenzene	50.0	51.6		ug/L		103	75 - 122
Bromochloromethane	50.0	55.6		ug/L		111	71 - 130
Bromodichloromethane	50.0	53.6		ug/L		107	67 - 126
Bromoform	50.0	51.4		ug/L		103	57 - 125
Bromomethane	50.0	56.3		ug/L		113	25 - 163
Carbon disulfide	50.0	55.2		ug/L		110	56 - 128
Carbon tetrachloride	50.0	56.9		ug/L		114	60 - 133
Chlorobenzene	50.0	52.7		ug/L		105	78 - 118
Chloroethane	50.0	51.1		ug/L		102	52 - 144
Chloroform	50.0	51.7		ug/L		103	68 - 128
Chloromethane	50.0	40.1		ug/L		80	43 - 142
cis-1,2-Dichloroethene	50.0	56.5		ug/L		113	69 - 126
cis-1,3-Dichloropropene	50.0	57.9		ug/L		116	75 - 120
Dibromochloromethane	50.0	58.1		ug/L		116	71 - 122
Dibromomethane	50.0	52.9		ug/L		106	68 - 129
Dichlorodifluoromethane	50.0	27.6		ug/L		55	26 - 152
Ethylbenzene	50.0	54.4		ug/L		109	76 - 121
Hexachlorobutadiene	50.0	53.3		ug/L		107	69 - 133
Isopropylbenzene	50.0	55.0		ug/L		110	70 - 127
Methylene Chloride	50.0	47.7		ug/L		95	64 - 128
Naphthalene	50.0	56.8		ug/L		114	63 - 129
n-Butylbenzene	50.0	57.6		ug/L		115	69 - 130
N-Propylbenzene	50.0	53.4		ug/L		107	73 - 127
sec-Butylbenzene	50.0	56.8		ug/L		114	72 - 127
Styrene	50.0	53.5		ug/L		107	79 - 120
tert-Butylbenzene	50.0	54.4		ug/L		109	72 - 126
Tetrachloroethene	50.0	53.9		ug/L		108	72 - 127
Toluene	50.0	52.3		ug/L		105	68 - 127
trans-1,2-Dichloroethene	50.0	54.9		ug/L		110	66 - 129
trans-1,3-Dichloropropene	50.0	53.2		ug/L		106	66 - 127
Trichloroethene	50.0	51.6		ug/L		103	70 - 125
Trichlorofluoromethane	50.0	83.5	*+	ug/L		167	57 - 144
Vinyl chloride	50.0	50.6		ug/L		101	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*

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

Lab Sample ID: LCS 280-573793/4
Matrix: Water
Analysis Batch: 573793

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	100		77 - 120
Toluene-d8 (Surr)	100		80 - 125

Lab Sample ID: LCSD 280-573793/5
Matrix: Water
Analysis Batch: 573793

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	50.8		ug/L		102	74 - 121	8	20
1,1,1-Trichloroethane			50.0	48.1		ug/L		96	62 - 132	7	20
1,1,2,2-Tetrachloroethane			50.0	49.0		ug/L		98	72 - 122	2	20
1,1,2-Trichloroethane			50.0	49.8		ug/L		100	72 - 128	7	20
1,1-Dichloroethane			50.0	49.9		ug/L		100	66 - 130	8	20
1,1-Dichloroethene			50.0	50.6		ug/L		101	62 - 130	7	21
1,1-Dichloropropene			50.0	51.1		ug/L		102	64 - 133	8	20
1,2,3-Trichlorobenzene			50.0	54.5		ug/L		109	70 - 127	5	20
1,2,3-Trichloropropane			50.0	51.7		ug/L		103	74 - 123	1	20
1,2,4-Trichlorobenzene			50.0	53.3		ug/L		107	73 - 124	5	20
1,2,4-Trimethylbenzene			50.0	52.7		ug/L		105	74 - 124	5	20
1,2-Dibromo-3-Chloropropane			50.0	48.0		ug/L		96	58 - 122	2	21
1,2-Dibromoethane			50.0	52.8		ug/L		106	81 - 118	5	20
1,2-Dichlorobenzene			50.0	51.6		ug/L		103	77 - 121	5	20
1,2-Dichloroethane			50.0	45.3		ug/L		91	61 - 130	6	20
1,2-Dichloropropane			50.0	48.1		ug/L		96	68 - 127	7	20
1,3,5-Trimethylbenzene			50.0	51.8		ug/L		104	73 - 127	6	20
1,3-Dichlorobenzene			50.0	51.9		ug/L		104	76 - 121	5	20
1,3-Dichloropropane			50.0	51.0		ug/L		102	80 - 118	8	20
1,4-Dichlorobenzene			50.0	50.1		ug/L		100	76 - 119	6	20
2,2-Dichloropropane			50.0	48.6		ug/L		97	57 - 140	7	22
2-Butanone (MEK)			200	181		ug/L		90	53 - 135	0	20
2-Chlorotoluene			50.0	53.8		ug/L		108	75 - 123	5	20
2-Hexanone			200	196		ug/L		98	58 - 134	0	21
4-Chlorotoluene			50.0	48.8		ug/L		98	74 - 124	8	20
4-Isopropyltoluene			50.0	53.4		ug/L		107	74 - 127	5	20
4-Methyl-2-pentanone			200	213		ug/L		107	56 - 135	1	20
Acetone			200	216	*1	ug/L		108	50 - 137	22	21
Benzene			50.0	49.9		ug/L		100	69 - 126	5	20
Bromobenzene			50.0	49.3		ug/L		99	75 - 122	4	20
Bromochloromethane			50.0	51.5		ug/L		103	71 - 130	8	20
Bromodichloromethane			50.0	49.9		ug/L		100	67 - 126	7	20
Bromoform			50.0	49.3		ug/L		99	57 - 125	4	20
Bromomethane			50.0	56.5		ug/L		113	25 - 163	0	40
Carbon disulfide			50.0	48.0		ug/L		96	56 - 128	14	20
Carbon tetrachloride			50.0	53.2		ug/L		106	60 - 133	7	20
Chlorobenzene			50.0	49.7		ug/L		99	78 - 118	6	20
Chloroethane			50.0	49.0		ug/L		98	52 - 144	4	30
Chloroform			50.0	48.6		ug/L		97	68 - 128	6	20
Chloromethane			50.0	37.7		ug/L		75	43 - 142	6	20

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

Lab Sample ID: LCSD 280-573793/5
Matrix: Water
Analysis Batch: 573793

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	52.3		ug/L		105	69 - 126	8	20
cis-1,3-Dichloropropene			50.0	53.0		ug/L		106	75 - 120	9	20
Dibromochloromethane			50.0	53.3		ug/L		107	71 - 122	9	20
Dibromomethane			50.0	50.1		ug/L		100	68 - 129	5	20
Dichlorodifluoromethane			50.0	28.2		ug/L		56	26 - 152	2	21
Ethylbenzene			50.0	51.3		ug/L		103	76 - 121	6	20
Hexachlorobutadiene			50.0	52.2		ug/L		104	69 - 133	2	20
Isopropylbenzene			50.0	52.2		ug/L		104	70 - 127	5	20
Methylene Chloride			50.0	45.1		ug/L		90	64 - 128	6	20
Naphthalene			50.0	55.0		ug/L		110	63 - 129	3	21
n-Butylbenzene			50.0	55.2		ug/L		110	69 - 130	4	20
N-Propylbenzene			50.0	50.7		ug/L		101	73 - 127	5	20
sec-Butylbenzene			50.0	53.9		ug/L		108	72 - 127	5	20
Styrene			50.0	49.8		ug/L		100	79 - 120	7	20
tert-Butylbenzene			50.0	51.9		ug/L		104	72 - 126	5	20
Tetrachloroethene			50.0	51.2		ug/L		102	72 - 127	5	20
Toluene			50.0	49.6		ug/L		99	68 - 127	5	20
trans-1,2-Dichloroethene			50.0	51.8		ug/L		104	66 - 129	6	20
trans-1,3-Dichloropropene			50.0	48.7		ug/L		97	66 - 127	9	20
Trichloroethene			50.0	47.7		ug/L		95	70 - 125	8	20
Trichlorofluoromethane			50.0	73.4	*+	ug/L		147	57 - 144	13	28
Vinyl chloride			50.0	44.5		ug/L		89	53 - 141	13	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573588/1-A
Matrix: Water
Analysis Batch: 573869

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/02/22 13:28	05/04/22 08:59	1
Iron	ND		30		ug/L		05/02/22 13:28	05/04/22 08:59	1
Magnesium	ND		200		ug/L		05/02/22 13:28	05/04/22 08:59	1
Manganese	ND		3.0		ug/L		05/02/22 13:28	05/04/22 08:59	1
Potassium	ND		500		ug/L		05/02/22 13:28	05/04/22 08:59	1
Silicon	ND		100		ug/L		05/02/22 13:28	05/04/22 08:59	1
Sodium	ND		1000		ug/L		05/02/22 13:28	05/04/22 08:59	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-573588/2-A
Matrix: Water
Analysis Batch: 573869

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	50400		ug/L		101	90 - 111
Iron	10000	10100		ug/L		101	89 - 115
Magnesium	50000	49600		ug/L		99	90 - 113
Manganese	1000	1010		ug/L		101	90 - 110
Potassium	50000	51200		ug/L		102	89 - 114
Silicon	2000	1980		ug/L		99	90 - 110
Sodium	50000	50900		ug/L		102	90 - 115

Lab Sample ID: 280-161333-B-11-D MS
Matrix: Water
Analysis Batch: 573869

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	120000		50000	167000		ug/L		95	48 - 153
Iron	ND		10000	10100		ug/L		101	52 - 155
Magnesium	47000		50000	95900		ug/L		99	62 - 146
Manganese	3.7		1000	1010		ug/L		100	79 - 121
Potassium	1200		50000	53100		ug/L		104	76 - 132
Silicon	7200		2000	9140		ug/L		96	79 - 140
Sodium	160000		50000	213000		ug/L		103	70 - 203

Lab Sample ID: 280-161333-B-11-E MSD
Matrix: Water
Analysis Batch: 573869

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	120000		50000	169000		ug/L		99	48 - 153	1	20
Iron	ND		10000	10200		ug/L		101	52 - 155	0	20
Magnesium	47000		50000	96800		ug/L		100	62 - 146	1	20
Manganese	3.7		1000	1020		ug/L		101	79 - 121	1	20
Potassium	1200		50000	53500		ug/L		104	76 - 132	1	20
Silicon	7200		2000	9200		ug/L		99	79 - 140	1	20
Sodium	160000		50000	216000		ug/L		108	70 - 203	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-624944/28
Matrix: Water
Analysis Batch: 624944

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			05/07/22 01:57	1
Sulfate	ND		1.0		mg/L			05/07/22 01:57	1

Lab Sample ID: LCS 480-624944/29
Matrix: Water
Analysis Batch: 624944

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.6		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-624944/29
Matrix: Water
Analysis Batch: 624944

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	49.9		mg/L		100	90 - 110		

Lab Sample ID: 280-161414-E-5 MS
Matrix: Water
Analysis Batch: 624944

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	23		50.1	69.9		mg/L		93	81 - 120		
Sulfate	2.4		50.0	50.9		mg/L		97	80 - 120		

Lab Sample ID: 480-197460-G-1 MS
Matrix: Water
Analysis Batch: 624944

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	170		251	402		mg/L		93	81 - 120		
Sulfate	54		250	295		mg/L		96	80 - 120		

Lab Sample ID: 480-197460-G-1 MSD
Matrix: Water
Analysis Batch: 624944

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	170		251	402		mg/L		93	81 - 120	0	15
Sulfate	54		250	295		mg/L		97	80 - 120	0	15

Lab Sample ID: MB 480-625171/4
Matrix: Water
Analysis Batch: 625171

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			05/09/22 12:41	1
Sulfate	ND		1.0		mg/L			05/09/22 12:41	1

Lab Sample ID: LCS 480-625171/5
Matrix: Water
Analysis Batch: 625171

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.1	49.4		mg/L		99	90 - 110		
Sulfate			50.0	50.2		mg/L		100	90 - 110		

Lab Sample ID: 280-161382-4 MS
Matrix: Water
Analysis Batch: 625171

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		
Chloride	5.2		50.1	54.4		mg/L		98	81 - 120		
Sulfate	12		50.0	61.2		mg/L		98	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-161382-4 MSD
Matrix: Water
Analysis Batch: 625171

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
Chloride	5.2		50.1	56.2		mg/L		102	81 - 120	3	15
Sulfate	12		50.0	61.8		mg/L		99	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574325/18
Matrix: Water
Analysis Batch: 574325

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			05/09/22 12:50	1

Lab Sample ID: LCS 280-574325/17
Matrix: Water
Analysis Batch: 574325

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			5.00	4.85		mg/L		97	90 - 110		

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 574325

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		
Ammonia as N	ND		1.00	1.05		mg/L		105	90 - 110		

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 574325

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
Ammonia as N	ND		1.00	1.06		mg/L		106	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-573320/12-A
Matrix: Water
Analysis Batch: 573619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/28/22 16:09	05/02/22 17:15	1

Lab Sample ID: LCS 280-573320/11-A
Matrix: Water
Analysis Batch: 573619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573320

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen			6.00	6.11		mg/L		102	90 - 110		

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 280-161384-B-2-B MS
Matrix: Water
Analysis Batch: 573619

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 573320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	ND		3.00	2.75		mg/L		92	90 - 110

Lab Sample ID: 280-161384-B-2-C MSD
Matrix: Water
Analysis Batch: 573619

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 573320

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	2.77		mg/L		92	90 - 110	1	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573773/22
Matrix: Water
Analysis Batch: 573773

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			05/03/22 16:34	1

Lab Sample ID: LCS 280-573773/21
Matrix: Water
Analysis Batch: 573773

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	5.09		mg/L		102	90 - 110

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.62		mg/L		101	90 - 110

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 573773

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	0.59		4.00	4.67		mg/L		102	90 - 110	1	10

Lab Sample ID: MB 280-573912/23
Matrix: Water
Analysis Batch: 573912

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			05/04/22 17:18	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-573912/21
Matrix: Water
Analysis Batch: 573912

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	5.06		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-573912/22
Matrix: Water
Analysis Batch: 573912

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 as N			5.00	5.02		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-161408-A-13 MS
Matrix: Water
Analysis Batch: 573912

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	5.0	F1	4.00	8.53	F1	mg/L		89	90 - 110		

Lab Sample ID: 280-161408-A-13 MSD
Matrix: Water
Analysis Batch: 573912

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	5.0	F1	4.00	8.64		mg/L		92	90 - 110	1	10

Method: 365.1 - Phosphorus, Ortho

Lab Sample ID: MB 280-572775/11
Matrix: Water
Analysis Batch: 572775

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			04/22/22 15:03	1

Lab Sample ID: LCS 280-572775/9
Matrix: Water
Analysis Batch: 572775

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	0.497		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-572775/10
Matrix: Water
Analysis Batch: 572775

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	0.482		mg/L		96	90 - 110	3	10

Method: 365.1 - Phosphorus, Ortho (Continued)

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 572775

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
Orthophosphate	0.040		0.500	0.532		mg/L		98	90 - 110

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 572775

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
Orthophosphate	0.040		0.500	0.539		mg/L		100	90 - 110	1	10

Lab Sample ID: MB 280-574134/10
Matrix: Water
Analysis Batch: 574134

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			05/06/22 11:57	1

Lab Sample ID: LCS 280-574134/9
Matrix: Water
Analysis Batch: 574134

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	0.484		mg/L		97	90 - 110

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 574134

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
Orthophosphate	ND	H	0.500	0.532		mg/L		106	90 - 110

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 574134

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
Orthophosphate	ND	H	0.500	0.533		mg/L		107	90 - 110	0	10

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 280-574301/5-A
Matrix: Water
Analysis Batch: 574473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	ND		0.050		mg/L		05/09/22 13:50	05/10/22 14:46	1

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCS 280-574301/3-A
Matrix: Water
Analysis Batch: 574473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus	0.500	0.522		mg/L		104	90 - 110

Lab Sample ID: LCSD 280-574301/4-A
Matrix: Water
Analysis Batch: 574473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 574301

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Phosphorus	0.500	0.522		mg/L		104	90 - 110	0	10

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 574473

Client Sample ID: SYR SW-1
Prep Type: Total/NA
Prep Batch: 574301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus	ND		0.500	0.598		mg/L		110	90 - 110

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 574473

Client Sample ID: SYR SW-1
Prep Type: Total/NA
Prep Batch: 574301

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Phosphorus	ND		0.500	0.578		mg/L		106	90 - 110	3	10

Method: 410.4 - COD

Lab Sample ID: MB 280-574418/5
Matrix: Water
Analysis Batch: 574418

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			05/10/22 11:26	1

Lab Sample ID: LCS 280-574418/3
Matrix: Water
Analysis Batch: 574418

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	94.7		mg/L		95	90 - 110

Lab Sample ID: LCSD 280-574418/4
Matrix: Water
Analysis Batch: 574418

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	95.4		mg/L		95	90 - 110	1	11

Method: 410.4 - COD (Continued)

Lab Sample ID: 280-161382-4 MS
Matrix: Water
Analysis Batch: 574418

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		
Chemical Oxygen Demand (COD)	ND	F1	50.0	58.0	F1	mg/L		82	90 - 110		

Lab Sample ID: 280-161382-4 MSD
Matrix: Water
Analysis Batch: 574418

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
Chemical Oxygen Demand (COD)	ND	F1	50.0	55.7	F1	mg/L		77	90 - 110	4	11

Method: 9020B - Organic Halides, Total (TOX)

Lab Sample ID: MB 280-574429/2
Matrix: Water
Analysis Batch: 574429

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			05/10/22 12:10	1

Lab Sample ID: LCS 280-574429/4
Matrix: Water
Analysis Batch: 574429

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	96.2		ug/L		96	78 - 114		

Lab Sample ID: 280-161382-2 MS
Matrix: Water
Analysis Batch: 574429

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		
Halogens, Total Organic	16		100	111		ug/L		95	78 - 114		

Lab Sample ID: 280-161382-2 MSD
Matrix: Water
Analysis Batch: 574429

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
Halogens, Total Organic	16		100	107		ug/L		91	78 - 114	4	23

Method: 9040B - pH

Lab Sample ID: LCS 280-574240/73
Matrix: Water
Analysis Batch: 574240

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	7.0		SU		100	99 - 101		

Method: 9040B - pH (Continued)

Lab Sample ID: 280-161640-A-1 DU
Matrix: Water
Analysis Batch: 574240

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	8.1			8.2		SU				1	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-572874/5
Matrix: Water
Analysis Batch: 572874

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			04/25/22 10:28	1

Lab Sample ID: LCS 280-572874/4
Matrix: Water
Analysis Batch: 572874

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	1470		umhos/cm		104	90 - 110		

Lab Sample ID: 280-161382-2 DU
Matrix: Water
Analysis Batch: 572874

Client Sample ID: SYR SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	79			78.3		umhos/cm				0.9	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573357/4
Matrix: Water
Analysis Batch: 573357

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			04/28/22 14:27	1

Lab Sample ID: LCS 280-573357/3
Matrix: Water
Analysis Batch: 573357

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: 280-161361-B-3 MS
Matrix: Water
Analysis Batch: 573357

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	26.1		mg/L		102	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-161361-B-3 MSD
Matrix: Water
Analysis Batch: 573357

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	26.0		mg/L		101	88 - 112	1	15

Lab Sample ID: MB 280-573694/4
Matrix: Water
Analysis Batch: 573694

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			05/02/22 15:25	1

Lab Sample ID: LCS 280-573694/3
Matrix: Water
Analysis Batch: 573694

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	24.6		mg/L		98	88 - 112

Lab Sample ID: 280-161491-A-1 MS
Matrix: Water
Analysis Batch: 573694

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	27.2		mg/L		102	88 - 112

Lab Sample ID: 280-161491-A-1 MSD
Matrix: Water
Analysis Batch: 573694

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	27.5		mg/L		103	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574431/1
Matrix: Water
Analysis Batch: 574431

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			05/10/22 12:14	1
Magnesium	0.000				meq/L			05/10/22 12:14	1
Potassium	0.000				meq/L			05/10/22 12:14	1
Sodium	0.000				meq/L			05/10/22 12:14	1
Ammonia as N	0.000				meq/L			05/10/22 12:14	1
Chloride	0.000				meq/L			05/10/22 12:14	1
Sulfate	0.000				meq/L			05/10/22 12:14	1
Carbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Bicarbonate Alkalinity	0.000				meq/L			05/10/22 12:14	1
Total Alkalinity	0.000				meq/L			05/10/22 12:14	1
Nitrate/Nitrite	0.000				meq/L			05/10/22 12:14	1
Iron	0.000				meq/L			05/10/22 12:14	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573361/32
Matrix: Water
Analysis Batch: 573361

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			04/28/22 16:58	1
Bicarbonate Alkalinity	ND		10		mg/L			04/28/22 16:58	1
Carbonate Alkalinity	ND		10		mg/L			04/28/22 16:58	1

Lab Sample ID: MB 280-573361/6
Matrix: Water
Analysis Batch: 573361

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			04/28/22 13:40	1
Bicarbonate Alkalinity	ND		10		mg/L			04/28/22 13:40	1
Carbonate Alkalinity	ND		10		mg/L			04/28/22 13:40	1

Lab Sample ID: LCS 280-573361/31
Matrix: Water
Analysis Batch: 573361

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	202		mg/L		101	89 - 109		

Lab Sample ID: LCSD 280-573361/5
Matrix: Water
Analysis Batch: 573361

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: 280-161377-B-2 DU
Matrix: Water
Analysis Batch: 573361

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	1400			1360		mg/L				0.4	10
Bicarbonate Alkalinity	1300			1270		mg/L				1	20
Carbonate Alkalinity	85			91.8		mg/L				8	20

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-573437/2
Matrix: Water
Analysis Batch: 573437

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			04/29/22 15:10	1

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: LCS 280-573437/1
Matrix: Water
Analysis Batch: 573437

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	396		mg/L		99	90 - 110		

Lab Sample ID: 280-161320-B-1 MSD
Matrix: Water
Analysis Batch: 573437

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	97		398	499		mg/L		101	90 - 110	2	10

Lab Sample ID: MB 280-573438/3
Matrix: Water
Analysis Batch: 573438

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			04/29/22 15:13	1

Lab Sample ID: LCS 280-573438/1
Matrix: Water
Analysis Batch: 573438

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	396		mg/L		99	90 - 110		

Lab Sample ID: LCSD 280-573438/2
Matrix: Water
Analysis Batch: 573438

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
Hardness, as CaCO3			398	402		mg/L		101	90 - 110	2	10

Lab Sample ID: 280-161493-A-3 MS
Matrix: Water
Analysis Batch: 573438

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	645		mg/L		104	90 - 110		

Lab Sample ID: 280-161493-A-3 MSD
Matrix: Water
Analysis Batch: 573438

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	632		mg/L		101	90 - 110	2	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573276/1
Matrix: Water
Analysis Batch: 573276

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			04/28/22 11:41	1

Lab Sample ID: LCS 280-573276/2
Matrix: Water
Analysis Batch: 573276

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			502	501		mg/L		100	88 - 114		

Lab Sample ID: 280-161313-A-1 DU
Matrix: Water
Analysis Batch: 573276

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	520			523		mg/L				1	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-573016/2
Matrix: Water
Analysis Batch: 573016

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			04/26/22 11:28	1

Lab Sample ID: LCS 280-573016/1
Matrix: Water
Analysis Batch: 573016

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	88.0		mg/L		88	79 - 114		

Lab Sample ID: 280-161377-A-1 DU
Matrix: Water
Analysis Batch: 573016

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

Method: SM5210B - BOD, 5 Day

Lab Sample ID: MB 280-572698/4
Matrix: Water
Analysis Batch: 572698

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			04/22/22 10:06	1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: SCB 280-572698/1
Matrix: Water
Analysis Batch: 572698

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		2.0		mg/L			04/22/22 10:06	1

Lab Sample ID: USB 280-572698/2
Matrix: Water
Analysis Batch: 572698

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			04/22/22 10:06	1

Lab Sample ID: LCS 280-572698/3
Matrix: Water
Analysis Batch: 572698

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	183		mg/L		92	85 - 115		

Lab Sample ID: 280-161307-A-9 DU
Matrix: Water
Analysis Batch: 572698

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	1200			1260		mg/L				4	20

GC/MS VOA

Analysis Batch: 573793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-1	TRIP BLANK	Total/NA	Water	8260B	
280-161382-2	SYR SW-1	Total/NA	Water	8260B	
280-161382-3	SYR SW-2	Total/NA	Water	8260B	
280-161382-4	SYR MW-12A	Total/NA	Water	8260B	
MB 280-573793/8	Method Blank	Total/NA	Water	8260B	
LCS 280-573793/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573793/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 573588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total Recoverable	Water	3005A	
280-161382-3	SYR SW-2	Total Recoverable	Water	3005A	
280-161382-4	SYR MW-12A	Total Recoverable	Water	3005A	
MB 280-573588/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573588/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161333-B-11-D MS	Matrix Spike	Dissolved	Water	3005A	
280-161333-B-11-E MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 573869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total Recoverable	Water	6010B	573588
280-161382-3	SYR SW-2	Total Recoverable	Water	6010B	573588
280-161382-4	SYR MW-12A	Total Recoverable	Water	6010B	573588
MB 280-573588/1-A	Method Blank	Total Recoverable	Water	6010B	573588
LCS 280-573588/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573588
280-161333-B-11-D MS	Matrix Spike	Dissolved	Water	6010B	573588
280-161333-B-11-E MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	573588

General Chemistry

Analysis Batch: 572698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM5210B	
280-161382-3	SYR SW-2	Total/NA	Water	SM5210B	
280-161382-4	SYR MW-12A	Total/NA	Water	SM5210B	
MB 280-572698/4	Method Blank	Total/NA	Water	SM5210B	
SCB 280-572698/1	Method Blank	Total/NA	Water	SM5210B	
USB 280-572698/2	Method Blank	Total/NA	Water	SM5210B	
LCS 280-572698/3	Lab Control Sample	Total/NA	Water	SM5210B	
280-161307-A-9 DU	Duplicate	Total/NA	Water	SM5210B	

Analysis Batch: 572775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-3	SYR SW-2	Total/NA	Water	365.1	
280-161382-4	SYR MW-12A	Total/NA	Water	365.1	
MB 280-572775/11	Method Blank	Total/NA	Water	365.1	
LCS 280-572775/9	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-572775/10	Lab Control Sample Dup	Total/NA	Water	365.1	
280-161382-2 MS	SYR SW-1	Total/NA	Water	365.1	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	365.1	

General Chemistry

Analysis Batch: 572874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	9050A	
280-161382-3	SYR SW-2	Total/NA	Water	9050A	
280-161382-4	SYR MW-12A	Total/NA	Water	9050A	
MB 280-572874/5	Method Blank	Total/NA	Water	9050A	
LCS 280-572874/4	Lab Control Sample	Total/NA	Water	9050A	
280-161382-2 DU	SYR SW-1	Total/NA	Water	9050A	

Analysis Batch: 573016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM 2540D	
280-161382-3	SYR SW-2	Total/NA	Water	SM 2540D	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 2540D	
MB 280-573016/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-573016/1	Lab Control Sample	Total/NA	Water	SM 2540D	
280-161377-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 573276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM 2540C	
280-161382-3	SYR SW-2	Total/NA	Water	SM 2540C	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 2540C	
MB 280-573276/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573276/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161313-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Prep Batch: 573320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	351.2	
280-161382-3	SYR SW-2	Total/NA	Water	351.2	
280-161382-4	SYR MW-12A	Total/NA	Water	351.2	
MB 280-573320/12-A	Method Blank	Total/NA	Water	351.2	
LCS 280-573320/11-A	Lab Control Sample	Total/NA	Water	351.2	
280-161384-B-2-B MS	Matrix Spike	Total/NA	Water	351.2	
280-161384-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 573357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-4	SYR MW-12A	Total/NA	Water	9060	
MB 280-573357/4	Method Blank	Total/NA	Water	9060	
LCS 280-573357/3	Lab Control Sample	Total/NA	Water	9060	
280-161361-B-3 MS	Matrix Spike	Total/NA	Water	9060	
280-161361-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM 2320B	
280-161382-3	SYR SW-2	Total/NA	Water	SM 2320B	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 2320B	
MB 280-573361/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-573361/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573361/31	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 573361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-573361/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-161377-B-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM 2340C	
MB 280-573437/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-573437/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-161320-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 573438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-3	SYR SW-2	Total/NA	Water	SM 2340C	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 2340C	
MB 280-573438/3	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-573438/1	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 280-573438/2	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
280-161493-A-3 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-161493-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 573619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	351.2	573320
280-161382-3	SYR SW-2	Total/NA	Water	351.2	573320
280-161382-4	SYR MW-12A	Total/NA	Water	351.2	573320
MB 280-573320/12-A	Method Blank	Total/NA	Water	351.2	573320
LCS 280-573320/11-A	Lab Control Sample	Total/NA	Water	351.2	573320
280-161384-B-2-B MS	Matrix Spike	Total/NA	Water	351.2	573320
280-161384-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	573320

Analysis Batch: 573694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	9060	
280-161382-3	SYR SW-2	Total/NA	Water	9060	
MB 280-573694/4	Method Blank	Total/NA	Water	9060	
LCS 280-573694/3	Lab Control Sample	Total/NA	Water	9060	
280-161491-A-1 MS	Matrix Spike	Total/NA	Water	9060	
280-161491-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	353.2	
280-161382-3	SYR SW-2	Total/NA	Water	353.2	
MB 280-573773/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/21	Lab Control Sample	Total/NA	Water	353.2	
280-161382-2 MS	SYR SW-1	Total/NA	Water	353.2	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	353.2	

Analysis Batch: 573912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-4	SYR MW-12A	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 573912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-573912/23	Method Blank	Total/NA	Water	353.2	
LCS 280-573912/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-573912/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-161408-A-13 MS	Matrix Spike	Total/NA	Water	353.2	
280-161408-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 574134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	365.1	
MB 280-574134/10	Method Blank	Total/NA	Water	365.1	
LCS 280-574134/9	Lab Control Sample	Total/NA	Water	365.1	
280-161382-2 MS	SYR SW-1	Total/NA	Water	365.1	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	365.1	

Analysis Batch: 574240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	9040B	
280-161382-3	SYR SW-2	Total/NA	Water	9040B	
280-161382-4	SYR MW-12A	Total/NA	Water	9040B	
LCS 280-574240/73	Lab Control Sample	Total/NA	Water	9040B	
280-161640-A-1 DU	Duplicate	Total/NA	Water	9040B	

Prep Batch: 574301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	365.1	
280-161382-3	SYR SW-2	Total/NA	Water	365.1	
280-161382-4	SYR MW-12A	Total/NA	Water	365.1	
MB 280-574301/5-A	Method Blank	Total/NA	Water	365.1	
LCS 280-574301/3-A	Lab Control Sample	Total/NA	Water	365.1	
LCSD 280-574301/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	
280-161382-2 MS	SYR SW-1	Total/NA	Water	365.1	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	365.1	

Analysis Batch: 574325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	350.1	
280-161382-3	SYR SW-2	Total/NA	Water	350.1	
280-161382-4	SYR MW-12A	Total/NA	Water	350.1	
MB 280-574325/18	Method Blank	Total/NA	Water	350.1	
LCS 280-574325/17	Lab Control Sample	Total/NA	Water	350.1	
280-161382-2 MS	SYR SW-1	Total/NA	Water	350.1	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	350.1	

Analysis Batch: 574418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	410.4	
280-161382-3	SYR SW-2	Total/NA	Water	410.4	
280-161382-4	SYR MW-12A	Total/NA	Water	410.4	
MB 280-574418/5	Method Blank	Total/NA	Water	410.4	
LCS 280-574418/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-574418/4	Lab Control Sample Dup	Total/NA	Water	410.4	

General Chemistry (Continued)

Analysis Batch: 574418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-4 MS	SYR MW-12A	Total/NA	Water	410.4	
280-161382-4 MSD	SYR MW-12A	Total/NA	Water	410.4	

Analysis Batch: 574429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	9020B	
280-161382-3	SYR SW-2	Total/NA	Water	9020B	
280-161382-4	SYR MW-12A	Total/NA	Water	9020B	
MB 280-574429/2	Method Blank	Total/NA	Water	9020B	
LCS 280-574429/4	Lab Control Sample	Total/NA	Water	9020B	
280-161382-2 MS	SYR SW-1	Total/NA	Water	9020B	
280-161382-2 MSD	SYR SW-1	Total/NA	Water	9020B	

Analysis Batch: 574431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	SM 1030E	
280-161382-2	SYR SW-1	Total/NA	Water	SM 1030E (meq)	
280-161382-3	SYR SW-2	Total/NA	Water	SM 1030E	
280-161382-3	SYR SW-2	Total/NA	Water	SM 1030E (meq)	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 1030E	
280-161382-4	SYR MW-12A	Total/NA	Water	SM 1030E (meq)	
MB 280-574431/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 574473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	365.1	574301
280-161382-3	SYR SW-2	Total/NA	Water	365.1	574301
280-161382-4	SYR MW-12A	Total/NA	Water	365.1	574301
MB 280-574301/5-A	Method Blank	Total/NA	Water	365.1	574301
LCS 280-574301/3-A	Lab Control Sample	Total/NA	Water	365.1	574301
LCSD 280-574301/4-A	Lab Control Sample Dup	Total/NA	Water	365.1	574301
280-161382-2 MS	SYR SW-1	Total/NA	Water	365.1	574301
280-161382-2 MSD	SYR SW-1	Total/NA	Water	365.1	574301

Analysis Batch: 624944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	300.0	
280-161382-3	SYR SW-2	Total/NA	Water	300.0	
280-161382-4	SYR MW-12A	Total/NA	Water	300.0	
MB 480-624944/28	Method Blank	Total/NA	Water	300.0	
LCS 480-624944/29	Lab Control Sample	Total/NA	Water	300.0	
280-161414-E-5 MS	Matrix Spike	Total/NA	Water	300.0	
480-197460-G-1 MS	Matrix Spike	Total/NA	Water	300.0	
480-197460-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 625171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-4	SYR MW-12A	Total/NA	Water	300.0	
MB 480-625171/4	Method Blank	Total/NA	Water	300.0	
LCS 480-625171/5	Lab Control Sample	Total/NA	Water	300.0	
280-161382-4 MS	SYR MW-12A	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 625171 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-4 MSD	SYR MW-12A	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161382-2	SYR SW-1	Total/NA	Water	Field Sampling	
280-161382-3	SYR SW-2	Total/NA	Water	Field Sampling	
280-161382-4	SYR MW-12A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: TRIP BLANK

Date Collected: 04/21/22 07:00
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-1

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	573793	05/04/22 17:35	JLS	EET DEN

Client Sample ID: SYR SW-1

Date Collected: 04/21/22 10:30
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-2

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	573793	05/04/22 17:55	JLS	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573588	05/02/22 13:28	MB	EET DEN
Total Recoverable	Analysis	6010B		1			573869	05/04/22 10:21	LMT	EET DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 06:17	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 12:53	MMP	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	573320	04/28/22 16:09	SVC	EET DEN
Total/NA	Analysis	351.2		1			573619	05/02/22 17:19	SVC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:36	SVC	EET DEN
Total/NA	Prep	365.1			50 mL	50 mL	574301	05/09/22 13:50	MMP	EET DEN
Total/NA	Analysis	365.1		1	50 mL	50 mL	574473	05/10/22 14:46	MMP	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	574134	05/06/22 11:57	MMP	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	574429	05/10/22 12:10	LRB	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 21:10	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	50 mL	50 mL	573694	05/02/22 20:10	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 18:16	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	573437	04/29/22 15:10	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573276	04/28/22 11:41	ABW	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573016	04/26/22 11:29	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	572698	04/22/22 13:00	SJD	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/21/22 11:30	TJ	EET DEN

Client Sample ID: SYR SW-2

Date Collected: 04/21/22 08:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-3

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	573793	05/04/22 18:15	JLS	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573588	05/02/22 13:28	MB	EET DEN
Total Recoverable	Analysis	6010B		1			573869	05/04/22 10:25	LMT	EET DEN
Total/NA	Analysis	300.0		1			624944	05/07/22 06:36	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:01	MMP	EET DEN

Client Sample ID: SYR SW-2

Lab Sample ID: 280-161382-3

Date Collected: 04/21/22 08:35

Matrix: Water

Date Received: 04/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	573320	04/28/22 16:09	SVC	EET DEN
Total/NA	Analysis	351.2		1			573619	05/02/22 17:20	SVC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 16:42	SVC	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	572775	04/22/22 15:03	SJD	EET DEN
Total/NA	Prep	365.1			50 mL	50 mL	574301	05/09/22 13:50	MMP	EET DEN
Total/NA	Analysis	365.1		1	50 mL	50 mL	574473	05/10/22 14:47	MMP	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	574429	05/10/22 12:10	LRB	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 21:14	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573694	05/02/22 20:24	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 18:21	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	573438	04/29/22 15:13	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573276	04/28/22 11:41	ABW	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573016	04/26/22 11:29	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	572698	04/22/22 13:00	SJD	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/21/22 09:35	TJ	EET DEN

Client Sample ID: SYR MW-12A

Lab Sample ID: 280-161382-4

Date Collected: 04/21/22 09:35

Matrix: Water

Date Received: 04/22/22 11:00

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	573793	05/04/22 18:36	JLS	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573588	05/02/22 13:28	MB	EET DEN
Total Recoverable	Analysis	6010B		1			573869	05/04/22 10:29	LMT	EET DEN
Total/NA	Analysis	300.0		1			625171	05/09/22 14:20	IMZ	EET BUF
Total/NA	Analysis	300.0		1			624944	05/07/22 06:54	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:03	MMP	EET DEN
Total/NA	Prep	351.2			25 mL	25 mL	573320	04/28/22 16:09	SVC	EET DEN
Total/NA	Analysis	351.2		1			573619	05/02/22 17:20	SVC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:28	SVC	EET DEN
Total/NA	Analysis	365.1		1	2 mL	2 mL	572775	04/22/22 15:03	SJD	EET DEN
Total/NA	Prep	365.1			50 mL	50 mL	574301	05/09/22 13:50	MMP	EET DEN
Total/NA	Analysis	365.1		1	50 mL	50 mL	574473	05/10/22 14:47	MMP	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9020B		1	50 mL	100 mL	574429	05/10/22 12:10	LRB	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 21:18	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573357	04/28/22 16:56	ABW	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161382-1

Client Sample ID: SYR MW-12A

Date Collected: 04/21/22 09:35
Date Received: 04/22/22 11:00

Lab Sample ID: 280-161382-4

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	SM 1030E		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574431	05/10/22 12:14	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			573361	04/28/22 18:26	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	573438	04/29/22 15:13	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573276	04/28/22 11:41	ABW	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573016	04/26/22 11:29	ABW	EET DEN
Total/NA	Analysis	SM5210B		1	120 mL	300 mL	572698	04/22/22 13:00	SJD	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/21/22 10:35	TJ	EET DEN

Laboratory References:

AAL = AAL, 13035 SW PACIFIC HWY., Tigard, OR 97223, TEL (503)639-9311

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET 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: 280-23502-10346.1
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#:			

280-161382 Chain of Custody

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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)			Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D	S	S	A	N	N		N	N				
Trip Blank	4/21/22	0700	G	W								X								2	Short Holds: pH, BOD, Orthophosphate(365.1)
SYR SW-1	4/21/22	1030	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	
SYR SW-2	4/21/22	0835	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	
SYR MW-12A	4/21/22	0935	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	

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: 04/22/22

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/21/22 1630	SCS		04/22/2022 1100	CTDEM
	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: 1.1, 0.8 CF +0.1 IR#12

3/10/2023

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: 280-23502-10346.1
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#:			

280-161382 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/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)			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D	S	S	A	N	N		N	N				
Trip Blank	4/21/22	0700	G	W								X								2	Short Holds: pH, BOD, Orthophosphate(365.1)
SYR SW-1	4/21/22	1030	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	
SYR SW-2	4/21/22	0835	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	
SYR MW-12A	4/21/22	0935	G	W	X		X	X	X	X	X	X	X	X	X	X	X			13	

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: UL 4/22/22
Relinquished by:	Date/Time: 4/21/22 1630	Company: SCS	Received by: AHK	Date/Time: 04/22/2022 1100	Company: 280 DEM
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: 1.1, 0.8 CF +0.1 IR#12

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:** 48. °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 = Stainless steel 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	4/21/22	10 : 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	4/21/22	10 : 30	G	4	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/21/22	10 : 30	G	3	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/21/22	10 : 30	G	2	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/21/22	10 : 30	G	1	250, 500, 1L	None	YES	YES		
Clear Poly	4/21/22	10 : 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 (1030)	0.00	6.43	179.3	87.9	9.70	—	15.66	Cloudy tan
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Grab with Stainless steel Bailer

SAMPLER: J. 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:** 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 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 = Stainless Steel 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	4/21/22	08:35	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	4/21/22	08:35	G	4	(250, 500, 1L)	(None)	YES	NO	NA ✓
Yellow Glass	4/21/22	08:35	G	3	250, (500), 1L	(H_2SO_4)	YES	NO	
Red Total Poly	4/21/22	08:35	G	2	125, 250, (500)	(HNO_3)	(YES)	(NO)	✓
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES	
White Poly	4/21/22	08:35	G	1	(250), 500, 1L	(None)	(YES)	(YES)	✓
Clear Poly	4/21/22	08:35	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	(OH) (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 0835)	0.00	6.36	176.4	83.3	9.9	—	10.03	clear, light tan
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Grab with Stainless Steel 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:** SGR ~~MW-12A~~ 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 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 = Stainless Steel 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	4/21/22	09:35	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	4/21/22	09:35	G	4	(250, 500) 1L	(None)	~~YES~~	~~NO~~	NA	✓
Yellow Glass	4/21/22	09:35	G	3	250, (500) 1L	(H_2SO_4)	(YES)	(NO)		✓
Red Total Poly	4/21/22	09:35	G	IH 32	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
White Poly	4/21/22	09:35	C	1	250, 500, 1L	None	YES	YES		
Clear Poly	4/21/22	09:35	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	(0935)	0.00	6.75	156.3	133.0	10.7	—	7.54	Tan, clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Grab with ~~Stainless~~ IH Steel bailer
Stainless

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

ORIGIN ID:PDXA
SHIP DATE: 21APR22
ACTWGT: 58.25 LB
CAD: /SSFE2300
DIMS: 24x14x14 IN
TO SAMPLE RECEIVING
EUROFINS TESTAM
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
DEPT:
eurofins
Environment Testing
TestAmerica
1773607
FedEx
Express
TRK# 0667 8165 7649 6750
FRI - 22 APR 10:30A
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN
XA LAAA

280-161382 Waybill

ORIGIN ID:PDXA
SHIP DATE: 21APR22
ACTWGT: 44.75 LB
CAD: /SSFE2300
DIMS: 24x14x14 IN
TO SAMPLE RECEVING
EUROFINS TESTAMERICA - DENVER
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
eurofins
Environment Testing
TestAmerica
1562722
FedEx
Express
TRK# 0667 8165 7649 6740
FRI - 22 APR 10:30A
PRIORITY OVERNIGHT
AHS
80002
CO-US DEN
XA LAAA
eurofins
Environment Testing

SAMPLE RECEIVING
EUROFINS TESTAMERICA – DENVER
4955 YARROW ST
ARVADA CO 80002
(303) 736–0100
INV:
PO:
REF:
Environment Test
TestAmerica
1773606
(US)
edEx
Express
J22102201050
RK#
667
8165 7649 6691
FRI – 22 APR 10:30A
PRIORITY OVERNIGHT
A LAAA
4.3
AHS
80002
CO – US
DEN

280-161382 Waybill

Eurofins 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: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-611870.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-161382-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 5/12/2022			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 28002786			
Project Name: 1003|Riverbend Landfill SCS Engineers	SSOW#:			
Site: 1003|Riverbend Landfill				

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:						
SYR SW-1 (280-161382-2)	4/21/22	10:30 Pacific		Water			X	1	
SYR SW-2 (280-161382-3)	4/21/22	08:35 Pacific		Water			X	1	
SYR MW-12A (280-161382-4)	4/21/22	09:35 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: 4/26/22 1530	Company: ETDEN	Received by:	Date/Time: 4/28/22 1000	Company: ΔΔ	
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: 4/7# ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161382-1

Login Number: 161382

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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.	False	Refer to job narrative for details
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: 280-161382-1

Login Number: 161382
List Number: 2
Creator: Kazenga, Oliver M

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.	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: 280-161382-1

Login Number: 161382
List Number: 3
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 04/29/22 04:48 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	4.7 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 2022

Leachate Management System Liquids

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Leachate Lagoon - Apr Nov

JOB NUMBER

280-161447-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

Job Notes

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

The Lab Certification ID# is 4025.

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

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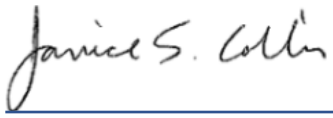
Authorization



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Authorized for release by
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Definitions/Glossary

Client: Waste Management
Job ID: 280-161447-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

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.
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
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: 280-161447-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161447-1

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 04/23/2022; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.7°C and 2.7°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.

The analysis for Total Mercury Method 7470A for all samples was performed outside of the prescribed hold time due to client request for analysis after hold time expiration.

All other holding times were met.

Method Blanks

All Method Blanks met method criteria.

Laboratory Control Samples (LCS)

1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane Method 8260B recovered outside control limits for the LCS. This is not indicative of a systematic control problem because these were random marginal exceedances.

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 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 Matrix Spike and Matrix Spike Duplicate performed on samples from other clients exhibited recoveries outside control limits Chemical

Job ID: 280-161447-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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.

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161447-1

Client Sample ID: TB2 — Lab Sample ID: 280-161447-1

No Detections.

Client Sample ID: LEACH POND — Lab Sample ID: 280-161447-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	20000		100		ug/L	5		6010B	Total Recoverable
Zinc	39		26		ug/L	5		6010B	Total Recoverable
Boron	8400		100		ug/L	5		6010B	Total Recoverable
Calcium	66000		500		ug/L	1		6010B	Dissolved
Iron	2400		30		ug/L	1		6010B	Dissolved
Magnesium	82000		200		ug/L	1		6010B	Dissolved
Manganese	640		3.0		ug/L	1		6010B	Dissolved
Potassium	370000		500		ug/L	1		6010B	Dissolved
Sodium	1400000		1000		ug/L	1		6010B	Dissolved
Antimony	19		0.60		ug/L	1		6020	Total Recoverable
Arsenic	130		1.0		ug/L	1		6020	Total Recoverable
Barium	250		1.0		ug/L	1		6020	Total Recoverable
Chromium	120		2.0		ug/L	1		6020	Total Recoverable
Cobalt	26		0.20		ug/L	1		6020	Total Recoverable
Copper	2.4		1.0		ug/L	1		6020	Total Recoverable
Lead	1.3		0.50		ug/L	1		6020	Total Recoverable
Nickel	72		1.0		ug/L	1		6020	Total Recoverable
Vanadium	78		3.0		ug/L	1		6020	Total Recoverable
Chloride	1400		20		mg/L	20		300.0	Total/NA
Sulfate	82		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	340		4.4		mg/L	200		350.1	Total/NA
Total Kjeldahl Nitrogen	450		34		mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	46		2.2		mg/L	50		353.2	Total/NA
Chemical Oxygen Demand (COD)	1000		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	9100		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	290		3.5		mg/L	10		9060	Total/NA
Total Anions	88				meq/L	1		SM 1030E	Total/NA
Total Cations	100				meq/L	1		SM 1030E	Total/NA
Percent Difference	8.5				%	1		SM 1030E	Total/NA
Calcium	66				mg/L	1		SM 1030E	Total/NA
Magnesium	82				mg/L	1		SM 1030E	Total/NA
Potassium	370				mg/L	1		SM 1030E	Total/NA
Sodium	1400				mg/L	1		SM 1030E	Total/NA
Ammonia as N	340				mg/L	1		SM 1030E	Total/NA
Chloride	1400				mg/L	1		SM 1030E	Total/NA
Sulfate	82				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	2200				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: 280-161447-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2200				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	46				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	8.5				%	1		SM 1030E	Total/NA
Calculated TDS	5000				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.88				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	4400				mg/L	1		SM 1030E	Total/NA
Iron	2.4				mg/L	1		SM 1030E	Total/NA
Calcium	3.3				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	6.7				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	9.5				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	61				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.13				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	24				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	39				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	3.3				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	44				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	44				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	2200		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	2200		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	470		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	4400		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	39		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.23				SU	1		Field Sampling	Total/NA
Field Conductivity	8237				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.95				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	273				millivolts	1		Field Sampling	Total/NA

Client Sample ID: LPOND LDS — Lab Sample ID: 280-161447-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	17000		100		ug/L	1		6010B	Total Recoverable
Zinc	26		26		ug/L	1		6010B	Total Recoverable
Boron	6000		100		ug/L	1		6010B	Total Recoverable
Calcium	36000		500		ug/L	1		6010B	Dissolved
Iron	7900		30		ug/L	1		6010B	Dissolved
Magnesium	48000		200		ug/L	1		6010B	Dissolved
Manganese	1200		3.0		ug/L	1		6010B	Dissolved
Potassium	160000		500		ug/L	1		6010B	Dissolved
Sodium	800000		1000		ug/L	1		6010B	Dissolved
Antimony	11		0.60		ug/L	1		6020	Total Recoverable
Arsenic	22		1.0		ug/L	1		6020	Total Recoverable
Barium	180		1.0		ug/L	1		6020	Total Recoverable
Chromium	67		2.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: LPOND LDS (Continued)

Lab Sample ID: 280-161447-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	27		0.20		ug/L	1		6020	Total Recoverable
Copper	34		1.0		ug/L	1		6020	Total Recoverable
Lead	1.9		0.50		ug/L	1		6020	Total Recoverable
Nickel	67		1.0		ug/L	1		6020	Total Recoverable
Vanadium	40		3.0		ug/L	1		6020	Total Recoverable
Chloride	950		20		mg/L	20		300.0	Total/NA
Sulfate	190		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	120		2.2		mg/L	100		350.1	Total/NA
Total Kjeldahl Nitrogen	170		34		mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.8		0.10		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	460		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	5300		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	150		1.7		mg/L	5		9060	Total/NA
Total Anions	51				meq/L	1		SM 1030E	Total/NA
Total Cations	54				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.6				%	1		SM 1030E	Total/NA
Calcium	36				mg/L	1		SM 1030E	Total/NA
Magnesium	48				mg/L	1		SM 1030E	Total/NA
Potassium	160				mg/L	1		SM 1030E	Total/NA
Sodium	800				mg/L	1		SM 1030E	Total/NA
Ammonia as N	120				mg/L	1		SM 1030E	Total/NA
Chloride	950				mg/L	1		SM 1030E	Total/NA
Sulfate	190				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	1000				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1000				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.8				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	2.6				%	1		SM 1030E	Total/NA
Calculated TDS	2700				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2800				mg/L	1		SM 1030E	Total/NA
Iron	7.9				mg/L	1		SM 1030E	Total/NA
Calcium	1.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	4.1				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	35				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	8.6				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	27				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	4.0				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.20				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	20				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	20				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1000		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1000		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: 280-161447-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness, as CaCO3	300		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	2800		19		mg/L	1		SM 2540C	Total/NA
Field pH	7.60				SU	1		Field Sampling	Total/NA
Field Conductivity	2600				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.7				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.96				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	338.3				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161447-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161447-1	TB2	Water	04/20/22 07:00	04/23/22 11:25
280-161447-2	LEACH POND	Water	04/20/22 09:45	04/23/22 11:25
280-161447-3	LPOND LDS	Water	04/20/22 10:30	04/23/22 11:25

Method Summary

Client: Waste Management
Job ID: 280-161447-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
6020	Metals (ICP/MS)	SW846	EET DEN
7470A	Mercury (CVAA)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
9040B	pH	SW846	EET DEN
9050A	Specific Conductance	SW846	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
351.2	Nitrogen, Total Kjeldahl	EPA	EET DEN
5030B	Purge and Trap	SW846	EET DEN
7470A	Preparation, Mercury	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161447-1

Client Sample ID: TB2
Date Collected: 04/20/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-1
Matrix: Water

Method: SW846 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			05/03/22 10:24	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 10:24	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 10:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 10:24	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 10:24	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 10:24	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 10:24	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 10:24	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 10:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 10:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
1,2-Dibromo-3-Chloropropane	ND	*-	5.0		ug/L			05/03/22 10:24	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 10:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:24	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 10:24	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 10:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:24	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 10:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:24	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 10:24	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 10:24	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 10:24	1
2-Hexanone	ND		5.0		ug/L			05/03/22 10:24	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 10:24	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 10:24	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 10:24	1
Acetone	ND		10		ug/L			05/03/22 10:24	1
Benzene	ND		1.0		ug/L			05/03/22 10:24	1
Bromobenzene	ND		1.0		ug/L			05/03/22 10:24	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 10:24	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 10:24	1
Bromoform	ND		1.0		ug/L			05/03/22 10:24	1
Bromomethane	ND		2.0		ug/L			05/03/22 10:24	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 10:24	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 10:24	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 10:24	1
Chloroethane	ND		2.0		ug/L			05/03/22 10:24	1
Chloroform	ND		1.0		ug/L			05/03/22 10:24	1
Chloromethane	ND		2.0		ug/L			05/03/22 10:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 10:24	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 10:24	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 10:24	1
Dibromomethane	ND		1.0		ug/L			05/03/22 10:24	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 10:24	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 10:24	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 10:24	1

Client Sample ID: TB2

Date Collected: 04/20/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-1

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			05/03/22 10:24	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
Styrene	ND		1.0		ug/L			05/03/22 10:24	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 10:24	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 10:24	1
Toluene	ND		1.0		ug/L			05/03/22 10:24	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 10:24	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 10:24	1
Trichloroethene	ND		1.0		ug/L			05/03/22 10:24	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 10:24	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 10:24	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 10:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 10:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 10:24*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 10:24*	*1*
Dibromofluoromethane (Surr)	*89*		*77 - 120*		*05/03/22 10:24*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 10:24*	*1*

Client Sample ID: LEACH POND

Date Collected: 04/20/22 09:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-2

Matrix: Water

Method: SW846 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			05/03/22 16:50	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 16:50	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/03/22 16:50	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/03/22 16:50	5
1,1-Dichloroethane	ND		1.1		ug/L			05/03/22 16:50	5
1,1-Dichloroethene	ND		1.2		ug/L			05/03/22 16:50	5
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 16:50	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:50	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/03/22 16:50	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:50	5
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 16:50	5
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 16:50	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:50	5
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 16:50	5
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 16:50	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:50	5
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 16:50	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:50	5

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161447-1

Client Sample ID: LEACH POND

Date Collected: 04/20/22 09:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-2

Matrix: Water

Method: SW846 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			05/03/22 16:50	5
2-Butanone (MEK)	ND		10		ug/L			05/03/22 16:50	5
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 16:50	5
2-Hexanone	ND		8.5		ug/L			05/03/22 16:50	5
4-Chlorotoluene	ND		1.1		ug/L			05/03/22 16:50	5
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 16:50	5
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 16:50	5
Acetone	ND		10		ug/L			05/03/22 16:50	5
Benzene	ND		1.0		ug/L			05/03/22 16:50	5
Bromobenzene	ND		1.0		ug/L			05/03/22 16:50	5
Bromochloromethane	ND		1.0		ug/L			05/03/22 16:50	5
Bromodichloromethane	ND		1.0		ug/L			05/03/22 16:50	5
Bromoform	ND		2.3		ug/L			05/03/22 16:50	5
Bromomethane	ND		2.0		ug/L			05/03/22 16:50	5
Carbon disulfide	ND		2.0		ug/L			05/03/22 16:50	5
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 16:50	5
Chlorobenzene	ND		1.0		ug/L			05/03/22 16:50	5
Chloroethane	ND		2.1		ug/L			05/03/22 16:50	5
Chloroform	ND		1.0		ug/L			05/03/22 16:50	5
Chloromethane	ND		2.0		ug/L			05/03/22 16:50	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:50	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 16:50	5
Dibromochloromethane	ND		1.0		ug/L			05/03/22 16:50	5
Dibromomethane	ND		1.0		ug/L			05/03/22 16:50	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 16:50	5
Ethylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
Hexachlorobutadiene	ND		1.8		ug/L			05/03/22 16:50	5
Isopropylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
Methylene Chloride	ND		5.0		ug/L			05/03/22 16:50	5
Naphthalene	ND		1.1		ug/L			05/03/22 16:50	5
n-Butylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
N-Propylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
Styrene	ND		1.8		ug/L			05/03/22 16:50	5
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 16:50	5
Tetrachloroethene	ND		1.0		ug/L			05/03/22 16:50	5
Toluene	ND		1.0		ug/L			05/03/22 16:50	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:50	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 16:50	5
Trichloroethene	ND		1.0		ug/L			05/03/22 16:50	5
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 16:50	5
Vinyl chloride	ND		1.0		ug/L			05/03/22 16:50	5
Xylenes (total)	ND		2.0		ug/L			05/03/22 16:50	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 16:50*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 127*		*05/03/22 16:50*	*5*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/22 16:50*	*5*

Client Sample ID: LEACH POND

Date Collected: 04/20/22 09:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 16:50*	*5*
Toluene-d8 (Surr)	*112*		*80 - 125*		*05/03/22 16:50*	*5*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**20000**		100		ug/L		05/04/22 10:41	05/05/22 09:26	5
Silver	ND		9.8		ug/L		05/04/22 10:41	05/05/22 09:26	5
Zinc	**39**		26		ug/L		05/04/22 10:41	05/05/22 09:26	5
Molybdenum	ND		20		ug/L		05/04/22 10:41	05/05/22 09:26	5
Boron	**8400**		100		ug/L		05/04/22 10:41	05/05/22 09:26	5

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**66000**		500		ug/L		05/04/22 09:55	05/05/22 11:19	1
Iron	**2400**		30		ug/L		05/04/22 09:55	05/05/22 11:19	1
Magnesium	**82000**		200		ug/L		05/04/22 09:55	05/05/22 11:19	1
Manganese	**640**		3.0		ug/L		05/04/22 09:55	05/05/22 11:19	1
Potassium	**370000**		500		ug/L		05/04/22 09:55	05/05/22 11:19	1
Sodium	**1400000**		1000		ug/L		05/04/22 09:55	05/05/22 11:19	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**19**		0.60		ug/L		05/04/22 08:40	05/04/22 21:38	1
Arsenic	**130**		1.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Barium	**250**		1.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:38	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:38	1
Chromium	**120**		2.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Cobalt	**26**		0.20		ug/L		05/04/22 08:40	05/04/22 21:38	1
Copper	**2.4**		1.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Lead	**1.3**		0.50		ug/L		05/04/22 08:40	05/04/22 21:38	1
Nickel	**72**		1.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:38	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:38	1
Vanadium	**78**		3.0		ug/L		05/04/22 08:40	05/04/22 21:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H	0.20		ug/L		07/11/22 20:10	07/12/22 00:55	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**88**				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	**100**				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	**8.5**				%			05/11/22 10:42	1
Calcium (SM 1030E)	**66**				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	**82**				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	**370**				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	**1400**				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	**340**				mg/L			05/11/22 10:42	1

Client Sample ID: LEACH POND

Date Collected: 04/20/22 09:45
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 1030E)	1400				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	82				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	2200				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	2200				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	46				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	8.5				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	5000				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.88				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	4400				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	2.4				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	3.3				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	6.7				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	9.5				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	61				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.13				meq/L			05/11/22 10:42	1
Ammonia (SM 1030E (meq))	24				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	39				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	1.7				meq/L			05/11/22 10:42	1
Nitrate Nitrite as N (SM 1030E (meq))	3.3				meq/L			05/11/22 10:42	1
Alkalinity (SM 1030E (meq))	44				meq/L			05/11/22 10:42	1
Carbonate Alkalinity as CaCO3 (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity as CaCO3 (SM 1030E (meq))	44				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1400		20		mg/L			05/11/22 06:32	20
Sulfate (EPA 300.0)	82		5.0		mg/L			05/11/22 06:17	1
Ammonia as N (EPA 350.1)	340		4.4		mg/L			05/10/22 14:08	200
Total Kjeldahl Nitrogen (EPA 351.2	450		34		mg/L		04/25/22 15:21	04/27/22 17:39	1
Nitrate Nitrite as N (EPA 353.2)	46		2.2		mg/L			05/03/22 19:00	50
Chemical Oxygen Demand (COD) (EPA 410.4)	1000		170		mg/L			05/10/22 11:26	20
Total Organic Carbon - Average (SW846 9060)	290		3.5		mg/L			05/02/22 22:04	10
Total Alkalinity (SM 2320B)	2200		10		mg/L			05/03/22 22:32	1
Bicarbonate Alkalinity (SM 2320B)	2200		10		mg/L			05/03/22 22:32	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 22:32	1
Hardness, as CaCO3 (SM 2340C)	470		3.0		mg/L			04/29/22 15:13	2
Total Dissolved Solids (SM 2540C)	4400		19		mg/L			04/26/22 11:39	1
Total Suspended Solids (SM 2540D)	39		4.0		mg/L			04/25/22 16:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	8.2	HF	0.1		SU			05/05/22 15:14	1
Specific Conductance (SW846 9050A)	9100		2.0		umhos/cm			04/25/22 10:29	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.23				SU			04/20/22 10:45	1

Client Sample ID: LEACH POND

Lab Sample ID: 280-161447-2

Date Collected: 04/20/22 09:45

Matrix: Water

Date Received: 04/23/22 11:25

Method: EPA Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field Conductivity	8237				umhos/cm			04/20/22 10:45	1
Field Temperature	10.0				Degrees C			04/20/22 10:45	1
Field Dissolved Oxygen	2.95				mg/L			04/20/22 10:45	1
Field EH/ORP	273				millivolts			04/20/22 10:45	1

Client Sample ID: LPOND LDS

Lab Sample ID: 280-161447-3

Date Collected: 04/20/22 10:30

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/03/22 17:11	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 17:11	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/03/22 17:11	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/03/22 17:11	5
1,1-Dichloroethane	ND		1.1		ug/L			05/03/22 17:11	5
1,1-Dichloroethene	ND		1.2		ug/L			05/03/22 17:11	5
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 17:11	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/03/22 17:11	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/03/22 17:11	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/03/22 17:11	5
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 17:11	5
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 17:11	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 17:11	5
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 17:11	5
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 17:11	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 17:11	5
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 17:11	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 17:11	5
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 17:11	5
2-Butanone (MEK)	ND		10		ug/L			05/03/22 17:11	5
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 17:11	5
2-Hexanone	ND		8.5		ug/L			05/03/22 17:11	5
4-Chlorotoluene	ND		1.1		ug/L			05/03/22 17:11	5
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 17:11	5
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 17:11	5
Acetone	ND		10		ug/L			05/03/22 17:11	5
Benzene	ND		1.0		ug/L			05/03/22 17:11	5
Bromobenzene	ND		1.0		ug/L			05/03/22 17:11	5
Bromochloromethane	ND		1.0		ug/L			05/03/22 17:11	5
Bromodichloromethane	ND		1.0		ug/L			05/03/22 17:11	5
Bromoform	ND		2.3		ug/L			05/03/22 17:11	5
Bromomethane	ND		2.0		ug/L			05/03/22 17:11	5
Carbon disulfide	ND		2.0		ug/L			05/03/22 17:11	5
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 17:11	5
Chlorobenzene	ND		1.0		ug/L			05/03/22 17:11	5
Chloroethane	ND		2.1		ug/L			05/03/22 17:11	5
Chloroform	ND		1.0		ug/L			05/03/22 17:11	5

Client Sample ID: LPOND LDS
Date Collected: 04/20/22 10:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		2.0		ug/L			05/03/22 17:11	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 17:11	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 17:11	5
Dibromochloromethane	ND		1.0		ug/L			05/03/22 17:11	5
Dibromomethane	ND		1.0		ug/L			05/03/22 17:11	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 17:11	5
Ethylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
Hexachlorobutadiene	ND		1.8		ug/L			05/03/22 17:11	5
Isopropylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
Methylene Chloride	ND		5.0		ug/L			05/03/22 17:11	5
Naphthalene	ND		1.1		ug/L			05/03/22 17:11	5
n-Butylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
N-Propylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
Styrene	ND		1.8		ug/L			05/03/22 17:11	5
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 17:11	5
Tetrachloroethene	ND		1.0		ug/L			05/03/22 17:11	5
Toluene	ND		1.0		ug/L			05/03/22 17:11	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 17:11	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 17:11	5
Trichloroethene	ND		1.0		ug/L			05/03/22 17:11	5
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 17:11	5
Vinyl chloride	ND		1.0		ug/L			05/03/22 17:11	5
Xylenes (total)	ND		2.0		ug/L			05/03/22 17:11	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 17:11*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*05/03/22 17:11*	*5*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*05/03/22 17:11*	*5*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 17:11*	*5*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 17:11*	*5*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**17000**		100		ug/L		05/04/22 10:10	05/05/22 05:08	1
Silver	ND		3.0		ug/L		05/04/22 10:10	05/05/22 05:08	1
Zinc	**26**		26		ug/L		05/04/22 10:10	05/05/22 05:08	1
Molybdenum	ND		20		ug/L		05/04/22 10:10	05/05/22 05:08	1
Boron	**6000**		100		ug/L		05/04/22 10:10	05/05/22 05:08	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**36000**		500		ug/L		05/04/22 09:55	05/05/22 11:23	1
Iron	**7900**		30		ug/L		05/04/22 09:55	05/05/22 11:23	1
Magnesium	**48000**		200		ug/L		05/04/22 09:55	05/05/22 11:23	1
Manganese	**1200**		3.0		ug/L		05/04/22 09:55	05/05/22 11:23	1
Potassium	**160000**		500		ug/L		05/04/22 09:55	05/05/22 11:23	1
Sodium	**800000**		1000		ug/L		05/04/22 09:55	05/05/22 11:23	1

Client Sample ID: LPOND LDS

Date Collected: 04/20/22 10:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-3

Matrix: Water

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	11		0.60		ug/L		05/04/22 08:40	05/04/22 21:41	1
Arsenic	22		1.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Barium	180		1.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:41	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:41	1
Chromium	67		2.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Cobalt	27		0.20		ug/L		05/04/22 08:40	05/04/22 21:41	1
Copper	34		1.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Lead	1.9		0.50		ug/L		05/04/22 08:40	05/04/22 21:41	1
Nickel	67		1.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:41	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:41	1
Vanadium	40		3.0		ug/L		05/04/22 08:40	05/04/22 21:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	H	0.20		ug/L		07/11/22 20:10	07/12/22 00:57	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	51				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	54				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	2.6				%			05/11/22 10:42	1
Calcium (SM 1030E)	36				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	48				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	160				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	800				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	120				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	950				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	190				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	1000				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	1000				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	2.8				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	2.6				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	2700				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	1.0				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	2800				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	7.9				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	1.8				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	3.9				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	4.1				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	35				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.42				meq/L			05/11/22 10:42	1
Ammonia (SM 1030E (meq))	8.6				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	27				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	4.0				meq/L			05/11/22 10:42	1
Nitrate Nitrite as N (SM 1030E (meq))	0.20				meq/L			05/11/22 10:42	1
Alkalinity (SM 1030E (meq))	20				meq/L			05/11/22 10:42	1

Client Sample ID: LPOND LDS

Date Collected: 04/20/22 10:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161447-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity as CaCO3 (SM 1030E (meq))	20				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	950		20		mg/L			05/11/22 07:02	20
Sulfate (EPA 300.0)	190		5.0		mg/L			05/11/22 06:47	1
Ammonia as N (EPA 350.1)	120		2.2		mg/L			05/10/22 14:10	100
Total Kjeldahl Nitrogen (EPA 351.2	170		34		mg/L		04/25/22 15:21	04/27/22 17:39	1
Nitrate Nitrite as N (EPA 353.2)	2.8		0.10		mg/L			05/03/22 19:02	1
Chemical Oxygen Demand (COD) (EPA 410.4)	460		87		mg/L			05/10/22 11:26	10
Total Organic Carbon - Average (SW846 9060)	150		1.7		mg/L			05/02/22 22:18	5
Total Alkalinity (SM 2320B)	1000		10		mg/L			05/03/22 22:46	1
Bicarbonate Alkalinity (SM 2320B)	1000		10		mg/L			05/03/22 22:46	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 22:46	1
Hardness, as CaCO3 (SM 2340C)	300		3.0		mg/L			04/29/22 15:13	1
Total Dissolved Solids (SM 2540C)	2800		19		mg/L			04/26/22 11:39	1
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			04/25/22 16:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.3	HF	0.1		SU			05/05/22 15:18	1
Specific Conductance (SW846 9050A)	5300		2.0		umhos/cm			04/25/22 10:29	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.60				SU			04/20/22 11:30	1
Field Conductivity	2600				umhos/cm			04/20/22 11:30	1
Field Temperature	11.7				Degrees C			04/20/22 11:30	1
Field Dissolved Oxygen	2.96				mg/L			04/20/22 11:30	1
Field EH/ORP	338.3				millivolts			04/20/22 11:30	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161447-1

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)
280-161447-1	TB2	94	96	89	110
280-161447-2	LEACH POND	96	97	90	112
280-161447-3	LPOND LDS	95	97	90	110
LCS 280-573649/4	Lab Control Sample	91	97	90	110
LCSD 280-573649/5	Lab Control Sample Dup	93	96	90	109
MB 280-573649/9	Method Blank	94	96	90	109

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 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 08:59	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 08:59	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 08:59	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
2-Hexanone	ND		5.0		ug/L			05/03/22 08:59	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 08:59	1
Acetone	ND		10		ug/L			05/03/22 08:59	1
Benzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromoform	ND		1.0		ug/L			05/03/22 08:59	1
Bromomethane	ND		2.0		ug/L			05/03/22 08:59	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 08:59	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 08:59	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Chloroethane	ND		2.0		ug/L			05/03/22 08:59	1
Chloroform	ND		1.0		ug/L			05/03/22 08:59	1
Chloromethane	ND		2.0		ug/L			05/03/22 08:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Dibromomethane	ND		1.0		ug/L			05/03/22 08:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 08:59	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 08:59	1

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

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
Naphthalene	ND		1.0		ug/L			05/03/22 08:59	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Styrene	ND		1.0		ug/L			05/03/22 08:59	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Toluene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 08:59	1
Trichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 08:59	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 08:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 08:59*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 08:59*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 08:59*	*1*

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	23.0		ug/L		92	74 - 121
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	62 - 132
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	72 - 122
1,1,2-Trichloroethane	25.0	20.2		ug/L		81	72 - 128
1,1-Dichloroethane	25.0	21.3		ug/L		85	66 - 130
1,1-Dichloroethene	25.0	20.3		ug/L		81	62 - 130
1,1-Dichloropropene	25.0	22.1		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	25.0	16.4	*-	ug/L		66	70 - 127
1,2,3-Trichloropropane	25.0	20.6		ug/L		82	74 - 123
1,2,4-Trichlorobenzene	25.0	21.9		ug/L		88	73 - 124
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	74 - 124
1,2-Dibromo-3-Chloropropane	25.0	14.3	*-	ug/L		57	58 - 122
1,2-Dibromoethane	25.0	23.4		ug/L		94	81 - 118
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 121
1,2-Dichloroethane	25.0	20.4		ug/L		82	61 - 130
1,2-Dichloropropane	25.0	20.9		ug/L		84	68 - 127
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	73 - 127
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	76 - 121

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	25.0		ug/L		100	80 - 118
1,4-Dichlorobenzene	25.0	26.1		ug/L		105	76 - 119
2,2-Dichloropropane	25.0	21.6		ug/L		87	57 - 140
2-Butanone (MEK)	100	69.3		ug/L		69	53 - 135
2-Chlorotoluene	25.0	23.6		ug/L		95	75 - 123
2-Hexanone	100	85.8		ug/L		86	58 - 134
4-Chlorotoluene	25.0	23.2		ug/L		93	74 - 124
4-Isopropyltoluene	25.0	26.1		ug/L		104	74 - 127
4-Methyl-2-pentanone	100	64.9		ug/L		65	56 - 135
Acetone	100	65.6		ug/L		66	50 - 137
Benzene	25.0	23.1		ug/L		92	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	19.2		ug/L		77	71 - 130
Bromodichloromethane	25.0	20.6		ug/L		83	67 - 126
Bromoform	25.0	18.2		ug/L		73	57 - 125
Bromomethane	25.0	17.4		ug/L		70	25 - 163
Carbon disulfide	25.0	19.8		ug/L		79	56 - 128
Carbon tetrachloride	25.0	20.4		ug/L		82	60 - 133
Chlorobenzene	25.0	27.2		ug/L		109	78 - 118
Chloroethane	25.0	24.0		ug/L		96	52 - 144
Chloroform	25.0	22.5		ug/L		90	68 - 128
Chloromethane	25.0	17.4		ug/L		70	43 - 142
cis-1,2-Dichloroethene	25.0	21.0		ug/L		84	69 - 126
cis-1,3-Dichloropropene	25.0	21.5		ug/L		86	75 - 120
Dibromochloromethane	25.0	21.4		ug/L		86	71 - 122
Dibromomethane	25.0	19.5		ug/L		78	68 - 129
Dichlorodifluoromethane	25.0	15.3		ug/L		61	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	21.2		ug/L		85	69 - 133
Isopropylbenzene	25.0	26.5		ug/L		106	70 - 127
Methylene Chloride	25.0	21.7		ug/L		87	64 - 128
Naphthalene	25.0	17.3		ug/L		69	63 - 129
n-Butylbenzene	25.0	25.6		ug/L		102	69 - 130
N-Propylbenzene	25.0	23.9		ug/L		95	73 - 127
sec-Butylbenzene	25.0	23.4		ug/L		93	72 - 127
Styrene	25.0	26.1		ug/L		105	79 - 120
tert-Butylbenzene	25.0	21.9		ug/L		87	72 - 126
Tetrachloroethene	25.0	24.4		ug/L		98	72 - 127
Toluene	25.0	23.3		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	21.3		ug/L		85	66 - 129
trans-1,3-Dichloropropene	25.0	19.7		ug/L		79	66 - 127
Trichloroethene	25.0	26.1		ug/L		104	70 - 125
Trichlorofluoromethane	25.0	20.2		ug/L		81	57 - 144
Vinyl chloride	25.0	18.8		ug/L		75	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*110*		*80 - 125*

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	22.9		ug/L		92	74 - 121	0	20
1,1,1-Trichloroethane			25.0	20.8		ug/L		83	62 - 132	8	20
1,1,2,2-Tetrachloroethane			25.0	23.1		ug/L		92	72 - 122	4	20
1,1,2-Trichloroethane			25.0	20.5		ug/L		82	72 - 128	2	20
1,1-Dichloroethane			25.0	20.6		ug/L		82	66 - 130	3	20
1,1-Dichloroethene			25.0	19.0		ug/L		76	62 - 130	7	21
1,1-Dichloropropene			25.0	20.7		ug/L		83	64 - 133	6	20
1,2,3-Trichlorobenzene			25.0	18.5		ug/L		74	70 - 127	12	20
1,2,3-Trichloropropane			25.0	21.4		ug/L		86	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	22.7		ug/L		91	73 - 124	4	20
1,2,4-Trimethylbenzene			25.0	25.3		ug/L		101	74 - 124	3	20
1,2-Dibromo-3-Chloropropane			25.0	15.9		ug/L		64	58 - 122	11	21
1,2-Dibromoethane			25.0	23.7		ug/L		95	81 - 118	1	20
1,2-Dichlorobenzene			25.0	25.2		ug/L		101	77 - 121	2	20
1,2-Dichloroethane			25.0	20.3		ug/L		81	61 - 130	1	20
1,2-Dichloropropane			25.0	20.7		ug/L		83	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	24.7		ug/L		99	73 - 127	4	20
1,3-Dichlorobenzene			25.0	25.0		ug/L		100	76 - 121	4	20
1,3-Dichloropropane			25.0	25.5		ug/L		102	80 - 118	2	20
1,4-Dichlorobenzene			25.0	25.3		ug/L		101	76 - 119	3	20
2,2-Dichloropropane			25.0	20.4		ug/L		82	57 - 140	6	22
2-Butanone (MEK)			100	78.2		ug/L		78	53 - 135	12	20
2-Chlorotoluene			25.0	22.5		ug/L		90	75 - 123	5	20
2-Hexanone			100	97.3		ug/L		97	58 - 134	13	21
4-Chlorotoluene			25.0	22.3		ug/L		89	74 - 124	4	20
4-Isopropyltoluene			25.0	24.9		ug/L		100	74 - 127	5	20
4-Methyl-2-pentanone			100	73.0		ug/L		73	56 - 135	12	20
Acetone			100	72.8		ug/L		73	50 - 137	10	21
Benzene			25.0	22.3		ug/L		89	69 - 126	4	20
Bromobenzene			25.0	23.9		ug/L		96	75 - 122	3	20
Bromochloromethane			25.0	19.1		ug/L		76	71 - 130	1	20
Bromodichloromethane			25.0	20.0		ug/L		80	67 - 126	3	20
Bromoform			25.0	19.0		ug/L		76	57 - 125	4	20
Bromomethane			25.0	17.5		ug/L		70	25 - 163	0	40
Carbon disulfide			25.0	18.7		ug/L		75	56 - 128	6	20
Carbon tetrachloride			25.0	19.0		ug/L		76	60 - 133	7	20
Chlorobenzene			25.0	26.7		ug/L		107	78 - 118	2	20
Chloroethane			25.0	19.8		ug/L		79	52 - 144	19	30
Chloroform			25.0	21.5		ug/L		86	68 - 128	5	20
Chloromethane			25.0	18.0		ug/L		72	43 - 142	3	20

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

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	20.6		ug/L		82	69 - 126	2	20
cis-1,3-Dichloropropene	25.0	21.3		ug/L		85	75 - 120	1	20
Dibromochloromethane	25.0	21.5		ug/L		86	71 - 122	0	20
Dibromomethane	25.0	20.2		ug/L		81	68 - 129	4	20
Dichlorodifluoromethane	25.0	15.5		ug/L		62	26 - 152	2	21
Ethylbenzene	25.0	23.9		ug/L		95	76 - 121	4	20
Hexachlorobutadiene	25.0	20.1		ug/L		80	69 - 133	6	20
Isopropylbenzene	25.0	25.2		ug/L		101	70 - 127	5	20
Methylene Chloride	25.0	21.2		ug/L		85	64 - 128	2	20
Naphthalene	25.0	20.3		ug/L		81	63 - 129	16	21
n-Butylbenzene	25.0	24.6		ug/L		98	69 - 130	4	20
N-Propylbenzene	25.0	22.5		ug/L		90	73 - 127	6	20
sec-Butylbenzene	25.0	22.1		ug/L		88	72 - 127	6	20
Styrene	25.0	25.6		ug/L		102	79 - 120	2	20
tert-Butylbenzene	25.0	20.8		ug/L		83	72 - 126	5	20
Tetrachloroethene	25.0	22.4		ug/L		90	72 - 127	8	20
Toluene	25.0	22.3		ug/L		89	68 - 127	4	20
trans-1,2-Dichloroethene	25.0	19.7		ug/L		79	66 - 129	8	20
trans-1,3-Dichloropropene	25.0	19.7		ug/L		79	66 - 127	0	20
Trichloroethene	25.0	24.5		ug/L		98	70 - 125	6	20
Trichlorofluoromethane	25.0	19.9		ug/L		80	57 - 144	2	28
Vinyl chloride	25.0	19.4		ug/L		78	53 - 141	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-573691/1-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		05/04/22 10:41	05/05/22 07:26	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 07:26	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 07:26	1
Molybdenum	ND		20		ug/L		05/04/22 10:41	05/05/22 07:26	1
Boron	ND		100		ug/L		05/04/22 10:41	05/05/22 07:26	1

Lab Sample ID: LCS 280-573691/2-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	2000	2020		ug/L		101	90 - 110
Silver	50.0	50.7		ug/L		101	86 - 115

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-573691/2-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	500	484		ug/L		97	85 - 111
Molybdenum	1000	900		ug/L		90	90 - 110
Boron	1000	1030		ug/L		103	86 - 110

Lab Sample ID: 280-161233-C-1-B MS
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	28000		2000	30600	4	ug/L		135	79 - 140
Silver	ND		50.0	55.2		ug/L		110	75 - 141
Zinc	ND		500	486		ug/L		97	60 - 137
Molybdenum	23		1000	971		ug/L		95	83 - 109
Boron	280		1000	1380		ug/L		109	87 - 113

Lab Sample ID: 280-161233-C-1-C MSD
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silicon	28000		2000	29100	4	ug/L		60	79 - 140	5	20
Silver	ND		50.0	53.2		ug/L		106	75 - 141	4	20
Zinc	ND		500	470		ug/L		94	60 - 137	3	20
Molybdenum	23		1000	949		ug/L		93	83 - 109	2	20
Boron	280		1000	1320		ug/L		104	87 - 113	4	20

Lab Sample ID: MB 280-573718/1-A
Matrix: Water
Analysis Batch: 574034

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 09:47	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 09:47	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 09:47	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 09:47	1

Lab Sample ID: LCS 280-573718/2-A
Matrix: Water
Analysis Batch: 574115

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	49400		ug/L		99	90 - 111
Iron	10000	9800		ug/L		98	89 - 115
Magnesium	50000	48500		ug/L		97	90 - 113
Manganese	1000	960		ug/L		96	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	49600		ug/L		99	90 - 115

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 280-573721/1-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573721

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		05/04/22 10:10	05/05/22 05:00	1
Silver	ND		3.0		ug/L		05/04/22 10:10	05/05/22 05:00	1
Zinc	ND		26		ug/L		05/04/22 10:10	05/05/22 05:00	1
Molybdenum	ND		20		ug/L		05/04/22 10:10	05/05/22 05:00	1
Boron	ND		100		ug/L		05/04/22 10:10	05/05/22 05:00	1

Lab Sample ID: LCS 280-573721/2-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573721

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	2000	1980		ug/L		99	90 - 110
Silver	50.0	51.1		ug/L		102	86 - 115
Zinc	500	460		ug/L		92	85 - 111
Molybdenum	1000	957		ug/L		96	90 - 110
Boron	1000	987		ug/L		99	86 - 110

Lab Sample ID: 280-161450-A-17-C MS
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 573721

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	18000		2000	19900	4	ug/L		86	79 - 140
Silver	ND		50.0	52.9		ug/L		106	75 - 141
Zinc	ND		500	462		ug/L		92	60 - 137
Molybdenum	ND		1000	972		ug/L		97	83 - 109
Boron	110		1000	1140		ug/L		103	87 - 113

Lab Sample ID: 280-161450-A-17-D MSD
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 573721

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silicon	18000		2000	19900	4	ug/L		87	79 - 140	0	20
Silver	ND		50.0	52.0		ug/L		104	75 - 141	2	20
Zinc	ND		500	458		ug/L		92	60 - 137	1	20
Molybdenum	ND		1000	961		ug/L		96	83 - 109	1	20
Boron	110		1000	1120		ug/L		101	87 - 113	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-573706/1-A
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		05/04/22 08:40	05/04/22 19:33	1
Arsenic	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Barium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 19:33	1

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

Lab Sample ID: MB 280-573706/1-A
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 19:33	1
Chromium	ND		2.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Cobalt	ND		0.20		ug/L		05/04/22 08:40	05/04/22 19:33	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 19:33	1
Nickel	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 19:33	1
Vanadium	ND		3.0		ug/L		05/04/22 08:40	05/04/22 19:33	1

Lab Sample ID: LCS 280-573706/2-A
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	42.9		ug/L		107	85 - 115
Arsenic	40.0	42.3		ug/L		106	85 - 117
Barium	40.0	41.1		ug/L		103	85 - 118
Beryllium	40.0	41.7		ug/L		104	80 - 125
Cadmium	40.0	41.3		ug/L		103	85 - 115
Chromium	40.0	42.8		ug/L		107	84 - 121
Cobalt	40.0	41.8		ug/L		104	85 - 120
Copper	40.0	43.1		ug/L		108	85 - 119
Lead	40.0	41.6		ug/L		104	85 - 118
Nickel	40.0	42.4		ug/L		106	85 - 119
Selenium	40.0	41.2		ug/L		103	77 - 122
Thallium	40.0	41.2		ug/L		103	85 - 118
Vanadium	40.0	42.6		ug/L		107	85 - 120

Lab Sample ID: 280-161727-J-1-E MS
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	2.2		40.0	44.8		ug/L		107	85 - 115
Arsenic	2.6		40.0	44.3		ug/L		104	85 - 117
Barium	70		40.0	112		ug/L		106	85 - 118
Beryllium	ND		40.0	42.2		ug/L		105	80 - 125
Cadmium	ND		40.0	40.8		ug/L		102	85 - 115
Chromium	ND		40.0	42.6		ug/L		107	84 - 121
Cobalt	0.39		40.0	40.4		ug/L		100	85 - 120
Copper	ND		40.0	39.6		ug/L		99	85 - 119
Lead	ND		40.0	39.7		ug/L		99	85 - 118
Nickel	ND		40.0	40.6		ug/L		99	85 - 119
Selenium	ND		40.0	40.2		ug/L		99	77 - 122
Thallium	ND		40.0	39.1		ug/L		98	85 - 118
Vanadium	3.5		40.0	46.4		ug/L		107	85 - 120

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

Lab Sample ID: 280-161727-J-1-F MSD
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	2.2		40.0	45.7		ug/L		109	85 - 115	2	20
Arsenic	2.6		40.0	45.0		ug/L		106	85 - 117	1	20
Barium	70		40.0	114		ug/L		110	85 - 118	1	20
Beryllium	ND		40.0	43.4		ug/L		109	80 - 125	3	20
Cadmium	ND		40.0	42.9		ug/L		107	85 - 115	5	20
Chromium	ND		40.0	41.3		ug/L		103	84 - 121	3	20
Cobalt	0.39		40.0	40.7		ug/L		101	85 - 120	1	20
Copper	ND		40.0	40.4		ug/L		101	85 - 119	2	20
Lead	ND		40.0	40.1		ug/L		100	85 - 118	1	20
Nickel	ND		40.0	39.3		ug/L		96	85 - 119	3	20
Selenium	ND		40.0	40.9		ug/L		101	77 - 122	2	20
Thallium	ND		40.0	39.6		ug/L		99	85 - 118	1	20
Vanadium	3.5		40.0	45.4		ug/L		105	85 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 280-580509/1-A
Matrix: Water
Analysis Batch: 580610

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 580509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		07/11/22 20:10	07/12/22 00:22	1

Lab Sample ID: LCS 280-580509/2-A
Matrix: Water
Analysis Batch: 580610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 580509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.99		ug/L		100	84 - 120

Lab Sample ID: 160-46141-A-1-B MS
Matrix: Water
Analysis Batch: 580610

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 580509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.99		5.00	5.92		ug/L		99	75 - 125

Lab Sample ID: 160-46141-A-1-C MSD
Matrix: Water
Analysis Batch: 580610

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 580509

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.99		5.00	5.92		ug/L		99	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-574409/13
Matrix: Water
Analysis Batch: 574409

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			05/10/22 15:07	1
Sulfate	ND		5.0		mg/L			05/10/22 15:07	1

Lab Sample ID: LCS 280-574409/11
Matrix: Water
Analysis Batch: 574409

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			100	98.6		mg/L		99	90 - 110		
Sulfate			100	97.9		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-574409/12
Matrix: Water
Analysis Batch: 574409

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			100	98.4		mg/L		98	90 - 110	0	10
Sulfate			100	97.6		mg/L		98	90 - 110	0	10

Lab Sample ID: MRL 280-574409/10
Matrix: Water
Analysis Batch: 574409

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	4.64		mg/L		93	50 - 150		
Sulfate			5.00	ND		mg/L		99	50 - 150		

Lab Sample ID: 280-162110-A-7 MS
Matrix: Water
Analysis Batch: 574409

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	130		50.0	186		mg/L		113	80 - 120		

Lab Sample ID: 280-162110-A-7 MS
Matrix: Water
Analysis Batch: 574409

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	449		mg/L		107	80 - 120		

Lab Sample ID: 280-162110-A-7 MSD
Matrix: Water
Analysis Batch: 574409

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	130		50.0	187		mg/L		115	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-162110-A-7 MSD
Matrix: Water
Analysis Batch: 574409

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	451		mg/L		108	80 - 120	1	20

Lab Sample ID: 280-162110-A-7 DU
Matrix: Water
Analysis Batch: 574409

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	130			129		mg/L				0.2	15

Lab Sample ID: 280-162110-A-7 DU
Matrix: Water
Analysis Batch: 574409

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride	180			181		mg/L				0.2	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-574631/90
Matrix: Water
Analysis Batch: 574631

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			05/10/22 13:52	1

Lab Sample ID: LCS 280-574631/88
Matrix: Water
Analysis Batch: 574631

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 280-574631/89
Matrix: Water
Analysis Batch: 574631

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	2.54		mg/L		102	90 - 110	0	10

Lab Sample ID: 280-161408-A-11 MS
Matrix: Water
Analysis Batch: 574631

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	1.03		mg/L		103	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-161408-A-11 MSD
Matrix: Water
Analysis Batch: 574631

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	1.03		mg/L		103	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-572938/2-A
Matrix: Water
Analysis Batch: 573208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 572938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		04/25/22 15:21	04/27/22 17:36	1

Lab Sample ID: LCS 280-572938/1-A
Matrix: Water
Analysis Batch: 573208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 572938

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	6.00	6.11		mg/L		102	90 - 110

Lab Sample ID: 280-161392-B-1-B MS
Matrix: Water
Analysis Batch: 573208

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 572938

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	ND		3.00	2.77		mg/L		92	90 - 110

Lab Sample ID: 280-161392-B-1-C MSD
Matrix: Water
Analysis Batch: 573208

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 572938

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	2.81		mg/L		94	90 - 110	1	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573773/60
Matrix: Water
Analysis Batch: 573773

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			05/03/22 17:50	1

Lab Sample ID: LCS 280-573773/59
Matrix: Water
Analysis Batch: 573773

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	4.97		mg/L		99	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-161629-B-3 MS
Matrix: Water
Analysis Batch: 573773

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	3.6		4.00	7.34		mg/L		93	90 - 110		

Lab Sample ID: 280-161629-B-3 MSD
Matrix: Water
Analysis Batch: 573773

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	3.6		4.00	7.46		mg/L		96	90 - 110	2	10

Method: 410.4 - COD

Lab Sample ID: MB 280-574418/5
Matrix: Water
Analysis Batch: 574418

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			05/10/22 11:26	1

Lab Sample ID: LCS 280-574418/3
Matrix: Water
Analysis Batch: 574418

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	94.7		mg/L		95	90 - 110		

Lab Sample ID: LCSD 280-574418/4
Matrix: Water
Analysis Batch: 574418

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	95.4		mg/L		95	90 - 110	1	11

Lab Sample ID: 280-161382-E-4 MS
Matrix: Water
Analysis Batch: 574418

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	58.0	F1	mg/L		82	90 - 110		

Lab Sample ID: 280-161382-E-4 MSD
Matrix: Water
Analysis Batch: 574418

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	55.7	F1	mg/L		77	90 - 110	4	11

Method: 9040B - pH

Lab Sample ID: LCS 280-574080/4
Matrix: Water
Analysis Batch: 574080

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	7.0		SU		100	99 - 101

Lab Sample ID: 280-161699-D-1 DU
Matrix: Water
Analysis Batch: 574080

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	7.2		7.2		SU		0.3	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-572874/5
Matrix: Water
Analysis Batch: 572874

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			04/25/22 10:28	1

Lab Sample ID: LCS 280-572874/4
Matrix: Water
Analysis Batch: 572874

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	1470		umhos/cm		104	90 - 110

Lab Sample ID: 280-161382-I-2 DU
Matrix: Water
Analysis Batch: 572874

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	79		78.3		umhos/cm		0.9	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573694/4
Matrix: Water
Analysis Batch: 573694

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			05/02/22 15:25	1

Lab Sample ID: MB 280-573694/45
Matrix: Water
Analysis Batch: 573694

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			05/03/22 01:45	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-573694/3
Matrix: Water
Analysis Batch: 573694

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	24.6		mg/L		98	88 - 112

Lab Sample ID: LCS 280-573694/44
Matrix: Water
Analysis Batch: 573694

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

Lab Sample ID: 280-161337-A-2 MS
Matrix: Water
Analysis Batch: 573694

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	25		50.1	77.1		mg/L		104	88 - 112

Lab Sample ID: 280-161337-A-2 MSD
Matrix: Water
Analysis Batch: 573694

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	25		50.1	77.3		mg/L		104	88 - 112	0	15

Lab Sample ID: 280-161594-G-3 MS
Matrix: Water
Analysis Batch: 573694

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	130		125	251		mg/L		100	88 - 112

Lab Sample ID: 280-161594-G-3 MSD
Matrix: Water
Analysis Batch: 573694

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	130		125	251		mg/L		101	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574559/11
Matrix: Water
Analysis Batch: 574559

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			05/11/22 10:42	1
Magnesium	0.000				meq/L			05/11/22 10:42	1
Potassium	0.000				meq/L			05/11/22 10:42	1
Sodium	0.000				meq/L			05/11/22 10:42	1
Iron	0.000				meq/L			05/11/22 10:42	1
Ammonia	0.000				meq/L			05/11/22 10:42	1

Method: SM 1030E (meq) - Cation Anion Balance (Continued)

Lab Sample ID: MB 280-574559/11
Matrix: Water
Analysis Batch: 574559

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

Analyte	MB Result	MB Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.000				meq/L			05/11/22 10:42	1
Chloride	0.000				meq/L			05/11/22 10:42	1
Sulfate	0.000				meq/L			05/11/22 10:42	1
Nitrate Nitrite as N	0.000				meq/L			05/11/22 10:42	1
Nitrate/Nitrite	0.000				meq/L			05/11/22 10:42	1
Alkalinity	0.000				meq/L			05/11/22 10:42	1
Total Alkalinity	0.000				meq/L			05/11/22 10:42	1
Carbonate Alkalinity	0.000				meq/L			05/11/22 10:42	1
Carbonate Alkalinity as CaCO3	0.000				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity	0.000				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity as CaCO3	0.000				meq/L			05/11/22 10:42	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573792/58
Matrix: Water
Analysis Batch: 573792

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			05/03/22 18:49	1
Bicarbonate Alkalinity	ND		10		mg/L			05/03/22 18:49	1
Carbonate Alkalinity	ND		10		mg/L			05/03/22 18:49	1

Lab Sample ID: LCS 280-573792/57
Matrix: Water
Analysis Batch: 573792

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	205		mg/L		102	89 - 109		

Lab Sample ID: 280-161418-A-2 DU
Matrix: Water
Analysis Batch: 573792

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	130			125		mg/L				0.9	10
Bicarbonate Alkalinity	130			125		mg/L				0.9	20
Carbonate Alkalinity	ND			ND		mg/L				NC	20

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-573438/3
Matrix: Water
Analysis Batch: 573438

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			04/29/22 15:13	1

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: LCS 280-573438/1
Matrix: Water
Analysis Batch: 573438

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	396		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-573438/2
Matrix: Water
Analysis Batch: 573438

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
Hardness, as CaCO3	398	402		mg/L		101	90 - 110	2	10

Lab Sample ID: 280-161493-A-3 MS
Matrix: Water
Analysis Batch: 573438

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	645		mg/L		104	90 - 110

Lab Sample ID: 280-161493-A-3 MSD
Matrix: Water
Analysis Batch: 573438

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	632		mg/L		101	90 - 110	2	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573020/1
Matrix: Water
Analysis Batch: 573020

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			04/26/22 10:38	1

Lab Sample ID: LCS 280-573020/2
Matrix: Water
Analysis Batch: 573020

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	502	490		mg/L		98	88 - 114

Lab Sample ID: 280-161314-A-4 DU
Matrix: Water
Analysis Batch: 573020

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	1100		1050		mg/L		1	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-572941/3
Matrix: Water
Analysis Batch: 572941

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			04/25/22 16:08	1

Lab Sample ID: LCS 280-572941/1
Matrix: Water
Analysis Batch: 572941

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	107		mg/L		107	79 - 114		

Lab Sample ID: LCSD 280-572941/2
Matrix: Water
Analysis Batch: 572941

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	91.2		mg/L		91	79 - 114	16	20

Lab Sample ID: 280-161376-A-1 DU
Matrix: Water
Analysis Batch: 572941

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	22			20.8		mg/L				6	10

GC/MS VOA

Analysis Batch: 573649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-1	TB2	Total/NA	Water	8260B	
280-161447-2	LEACH POND	Total/NA	Water	8260B	
280-161447-3	LPOND LDS	Total/NA	Water	8260B	
MB 280-573649/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573649/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573649/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 573691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total Recoverable	Water	3005A	
MB 280-573691/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573691/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161233-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-161233-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 573706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total Recoverable	Water	3005A	
280-161447-3	LPOND LDS	Total Recoverable	Water	3005A	
MB 280-573706/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573706/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161727-J-1-E MS	Matrix Spike	Dissolved	Water	3005A	
280-161727-J-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 573718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Dissolved	Water	3005A	
280-161447-3	LPOND LDS	Dissolved	Water	3005A	
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 573721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-3	LPOND LDS	Total Recoverable	Water	3005A	
MB 280-573721/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573721/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161450-A-17-C MS	Matrix Spike	Total Recoverable	Water	3005A	
280-161450-A-17-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 573944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total Recoverable	Water	6020	573706
280-161447-3	LPOND LDS	Total Recoverable	Water	6020	573706
MB 280-573706/1-A	Method Blank	Total Recoverable	Water	6020	573706
LCS 280-573706/2-A	Lab Control Sample	Total Recoverable	Water	6020	573706
280-161727-J-1-E MS	Matrix Spike	Dissolved	Water	6020	573706
280-161727-J-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020	573706

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161447-1

Metals

Analysis Batch: 574011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total Recoverable	Water	6010B	573691
280-161447-3	LPOND LDS	Total Recoverable	Water	6010B	573721
MB 280-573691/1-A	Method Blank	Total Recoverable	Water	6010B	573691
MB 280-573721/1-A	Method Blank	Total Recoverable	Water	6010B	573721
LCS 280-573691/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573691
LCS 280-573721/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573721
280-161233-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	573691
280-161233-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	573691
280-161450-A-17-C MS	Matrix Spike	Total Recoverable	Water	6010B	573721
280-161450-A-17-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	573721

Analysis Batch: 574034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Dissolved	Water	6010B	573718
280-161447-3	LPOND LDS	Dissolved	Water	6010B	573718
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	6010B	573718

Analysis Batch: 574115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573718

Prep Batch: 580509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	7470A	
280-161447-3	LPOND LDS	Total/NA	Water	7470A	
MB 280-580509/1-A	Method Blank	Total/NA	Water	7470A	
LCS 280-580509/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-46141-A-1-B MS	Matrix Spike	Total/NA	Water	7470A	
160-46141-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 580610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	7470A	580509
280-161447-3	LPOND LDS	Total/NA	Water	7470A	580509
MB 280-580509/1-A	Method Blank	Total/NA	Water	7470A	580509
LCS 280-580509/2-A	Lab Control Sample	Total/NA	Water	7470A	580509
160-46141-A-1-B MS	Matrix Spike	Total/NA	Water	7470A	580509
160-46141-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	580509

General Chemistry

Analysis Batch: 572874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	9050A	
280-161447-3	LPOND LDS	Total/NA	Water	9050A	
MB 280-572874/5	Method Blank	Total/NA	Water	9050A	
LCS 280-572874/4	Lab Control Sample	Total/NA	Water	9050A	
280-161382-I-2 DU	Duplicate	Total/NA	Water	9050A	

General Chemistry

Prep Batch: 572938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	351.2	
280-161447-3	LPOND LDS	Total/NA	Water	351.2	
MB 280-572938/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-572938/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-161392-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	
280-161392-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 572941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	SM 2540D	
280-161447-3	LPOND LDS	Total/NA	Water	SM 2540D	
MB 280-572941/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-572941/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-572941/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-161376-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 573020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	SM 2540C	
280-161447-3	LPOND LDS	Total/NA	Water	SM 2540C	
MB 280-573020/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573020/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-161314-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	351.2	572938
280-161447-3	LPOND LDS	Total/NA	Water	351.2	572938
MB 280-572938/2-A	Method Blank	Total/NA	Water	351.2	572938
LCS 280-572938/1-A	Lab Control Sample	Total/NA	Water	351.2	572938
280-161392-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	572938
280-161392-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	572938

Analysis Batch: 573438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	SM 2340C	
280-161447-3	LPOND LDS	Total/NA	Water	SM 2340C	
MB 280-573438/3	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-573438/1	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 280-573438/2	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
280-161493-A-3 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-161493-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 573694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	9060	
280-161447-3	LPOND LDS	Total/NA	Water	9060	
MB 280-573694/4	Method Blank	Total/NA	Water	9060	
MB 280-573694/45	Method Blank	Total/NA	Water	9060	
LCS 280-573694/3	Lab Control Sample	Total/NA	Water	9060	
LCS 280-573694/44	Lab Control Sample	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 573694 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161337-A-2 MS	Matrix Spike	Total/NA	Water	9060	
280-161337-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	
280-161594-G-3 MS	Matrix Spike	Total/NA	Water	9060	
280-161594-G-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	353.2	
280-161447-3	LPOND LDS	Total/NA	Water	353.2	
MB 280-573773/60	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/59	Lab Control Sample	Total/NA	Water	353.2	
280-161629-B-3 MS	Matrix Spike	Total/NA	Water	353.2	
280-161629-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	SM 2320B	
280-161447-3	LPOND LDS	Total/NA	Water	SM 2320B	
MB 280-573792/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573792/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161418-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 574080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	9040B	
280-161447-3	LPOND LDS	Total/NA	Water	9040B	
LCS 280-574080/4	Lab Control Sample	Total/NA	Water	9040B	
280-161699-D-1 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 574409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	300.0	
280-161447-2	LEACH POND	Total/NA	Water	300.0	
280-161447-3	LPOND LDS	Total/NA	Water	300.0	
280-161447-3	LPOND LDS	Total/NA	Water	300.0	
MB 280-574409/13	Method Blank	Total/NA	Water	300.0	
LCS 280-574409/11	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-574409/12	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-574409/10	Lab Control Sample	Total/NA	Water	300.0	
280-162110-A-7 MS	Matrix Spike	Total/NA	Water	300.0	
280-162110-A-7 MS	Matrix Spike	Total/NA	Water	300.0	
280-162110-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-162110-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-162110-A-7 DU	Duplicate	Total/NA	Water	300.0	
280-162110-A-7 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 574418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	410.4	
280-161447-3	LPOND LDS	Total/NA	Water	410.4	
MB 280-574418/5	Method Blank	Total/NA	Water	410.4	

General Chemistry (Continued)

Analysis Batch: 574418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-574418/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-574418/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-161382-E-4 MS	Matrix Spike	Total/NA	Water	410.4	
280-161382-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Analysis Batch: 574559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	SM 1030E	
280-161447-2	LEACH POND	Total/NA	Water	SM 1030E (meq)	
280-161447-3	LPOND LDS	Total/NA	Water	SM 1030E	
280-161447-3	LPOND LDS	Total/NA	Water	SM 1030E (meq)	
MB 280-574559/11	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 574631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	350.1	
280-161447-3	LPOND LDS	Total/NA	Water	350.1	
MB 280-574631/90	Method Blank	Total/NA	Water	350.1	
LCS 280-574631/88	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-574631/89	Lab Control Sample Dup	Total/NA	Water	350.1	
280-161408-A-11 MS	Matrix Spike	Total/NA	Water	350.1	
280-161408-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161447-2	LEACH POND	Total/NA	Water	Field Sampling	
280-161447-3	LPOND LDS	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-161447-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB2
Lab Sample ID: 280-161447-1
Date Collected: 04/20/22 07:00
Matrix: Water
Date Received: 04/23/22 11:25

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	573649	05/03/22 10:24	TAW	EET DEN

Client Sample ID: LEACH POND
Lab Sample ID: 280-161447-2
Date Collected: 04/20/22 09:45
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573649	05/03/22 16:50	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:19	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		5			574011	05/05/22 09:26	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:38	LMT	EET DEN
Total/NA	Prep	7470A			30 mL	50 mL	580509	07/11/22 20:10	CEH	EET DEN
Total/NA	Analysis	7470A		1			580610	07/12/22 00:55	CEH	EET DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	574409	05/11/22 06:17	CJ	EET DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	574409	05/11/22 06:32	CJ	EET DEN
Total/NA	Analysis	350.1		200	10 mL	10 mL	574631	05/10/22 14:08	MMP	EET DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	572938	04/25/22 15:21	SVC	EET DEN
Total/NA	Analysis	351.2		1			573208	04/27/22 17:39	SVC	EET DEN
Total/NA	Analysis	353.2		50	100 mL	100 mL	573773	05/03/22 19:00	SVC	EET DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574080	05/05/22 15:14	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:29	KEG	EET DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	573694	05/02/22 22:04	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 22:32	KEG	EET DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	573438	04/29/22 15:13	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573020	04/26/22 11:39	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	572941	04/25/22 16:08	SVC	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/20/22 10:45	TJ	EET DEN

Client Sample ID: LPOND LDS
Lab Sample ID: 280-161447-3
Date Collected: 04/20/22 10:30
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573649	05/03/22 17:11	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:23	LMT	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161447-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: LPOND LDS
Lab Sample ID: 280-161447-3

Date Collected: 04/20/22 10:30
Matrix: Water

Date Received: 04/23/22 11:25

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	573721	05/04/22 10:10	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 05:08	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:41	LMT	EET DEN
Total/NA	Prep	7470A			30 mL	50 mL	580509	07/11/22 20:10	CEH	EET DEN
Total/NA	Analysis	7470A		1			580610	07/12/22 00:57	CEH	EET DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	574409	05/11/22 06:47	CJ	EET DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	574409	05/11/22 07:02	CJ	EET DEN
Total/NA	Analysis	350.1		100	10 mL	10 mL	574631	05/10/22 14:10	MMP	EET DEN
Total/NA	Prep	351.2			0.5 mL	25 mL	572938	04/25/22 15:21	SVC	EET DEN
Total/NA	Analysis	351.2		1			573208	04/27/22 17:39	SVC	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 19:02	SVC	EET DEN
Total/NA	Analysis	410.4		10	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574080	05/05/22 15:18	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:29	KEG	EET DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	573694	05/02/22 22:18	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 22:46	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	573438	04/29/22 15:13	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573020	04/26/22 11:39	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	572941	04/25/22 16:08	SVC	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/20/22 11:30	TJ	EET DEN

Laboratory References:

EET 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: Jan Hubbquist	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:				N	D	S	A	N	D			
TB2	4/20/22	0700	G	W						X				2	Short Holds: pH
Leach Pond	4/20/22	0945	G	W	X		X	X	X	X	X	X	X	9	
L Pond LDS	4/20/22	1030	G	W	X		X	X	X	X	X	X	X	9	

280-161447 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:

	Date/Time	Company		Date/Time	Company
Relinquished by:	4/22/22 @ 1630	SCS	Received by:	4/23/22 1115	EA/DGR
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.: 1584159 1983843

Cooler Temperature(s) °C and Other Remarks: 2.6, 0.6 IR12 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) 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)
4/20/22	:	.	.	.	.	.	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	4/20/22	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	4/20/22	09:45	G	2	250, 500, (1L)	None	(YES)	(NO)	NA	
Yellow Glass	4/20/22	09:45	G	2	250, (500) 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/20/22	9:45	G	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	4/20/22	9:45	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 — 7 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) 945	0.00	6.23	273	8237	10.0	-	2.95	DARK Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected from base of truck hauler tree.

SAMPLER: EDAN TAYLOR (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:** L 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) 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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume	Preservative	Ice	Filter	pH	√
VOA Glass	4/20/22	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	4/20/22	10 : 30	A	2	250, 500, 1L None	YES	NO	NA	
Yellow Glass	4/20/22	10 : 30	A	2	250, 500, 1L H_2SO_4	YES	NO		
Red Total Poly	4/20/22	10 : 30	A	1	125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/20/22	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 — 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) (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:

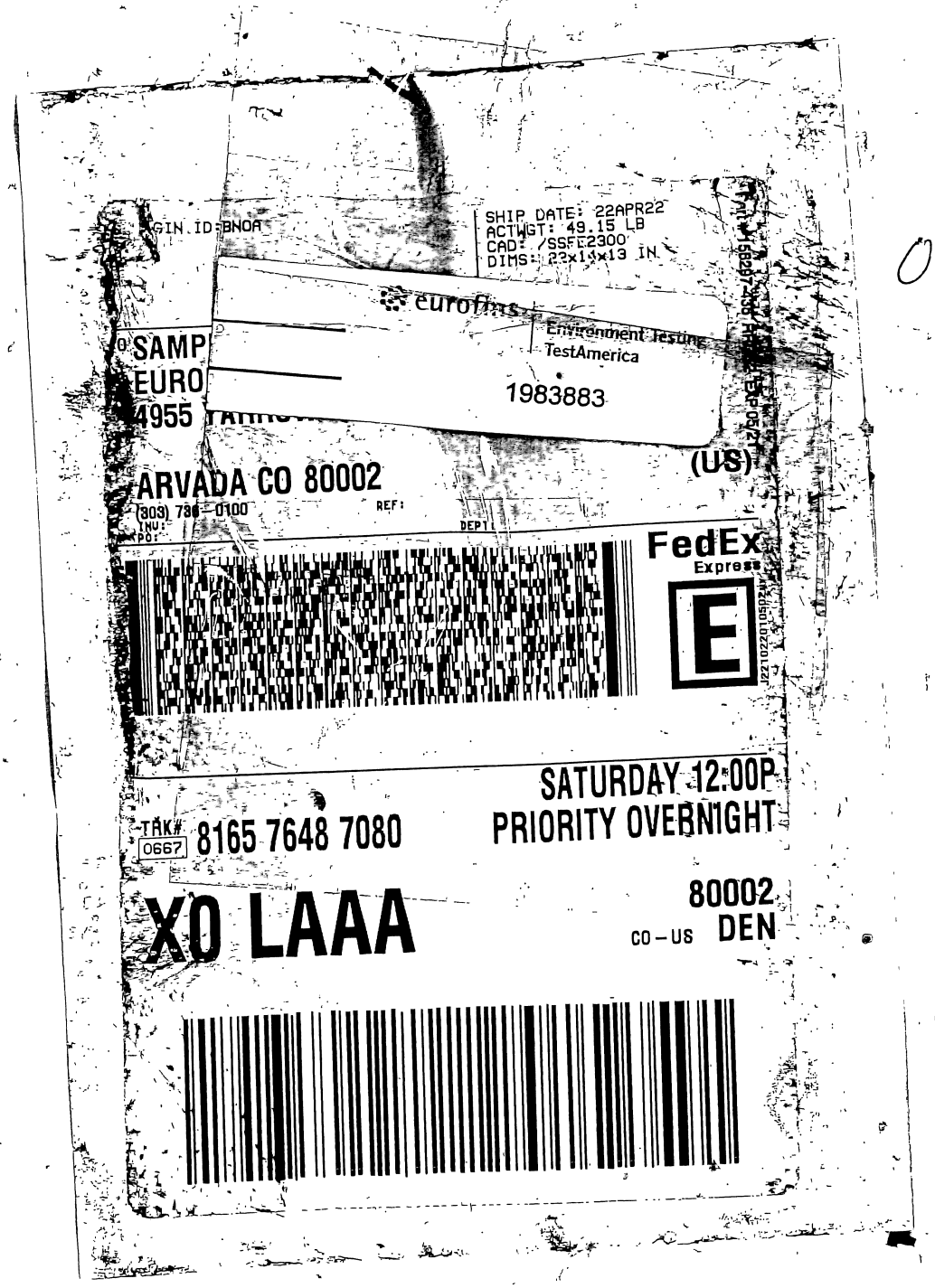
Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp (°C)	DTW	Diss O_2 (mg/l)	Water Quality
0	A(1030)	0.00	7.60	338.3	2600	11.7	~	2.96	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

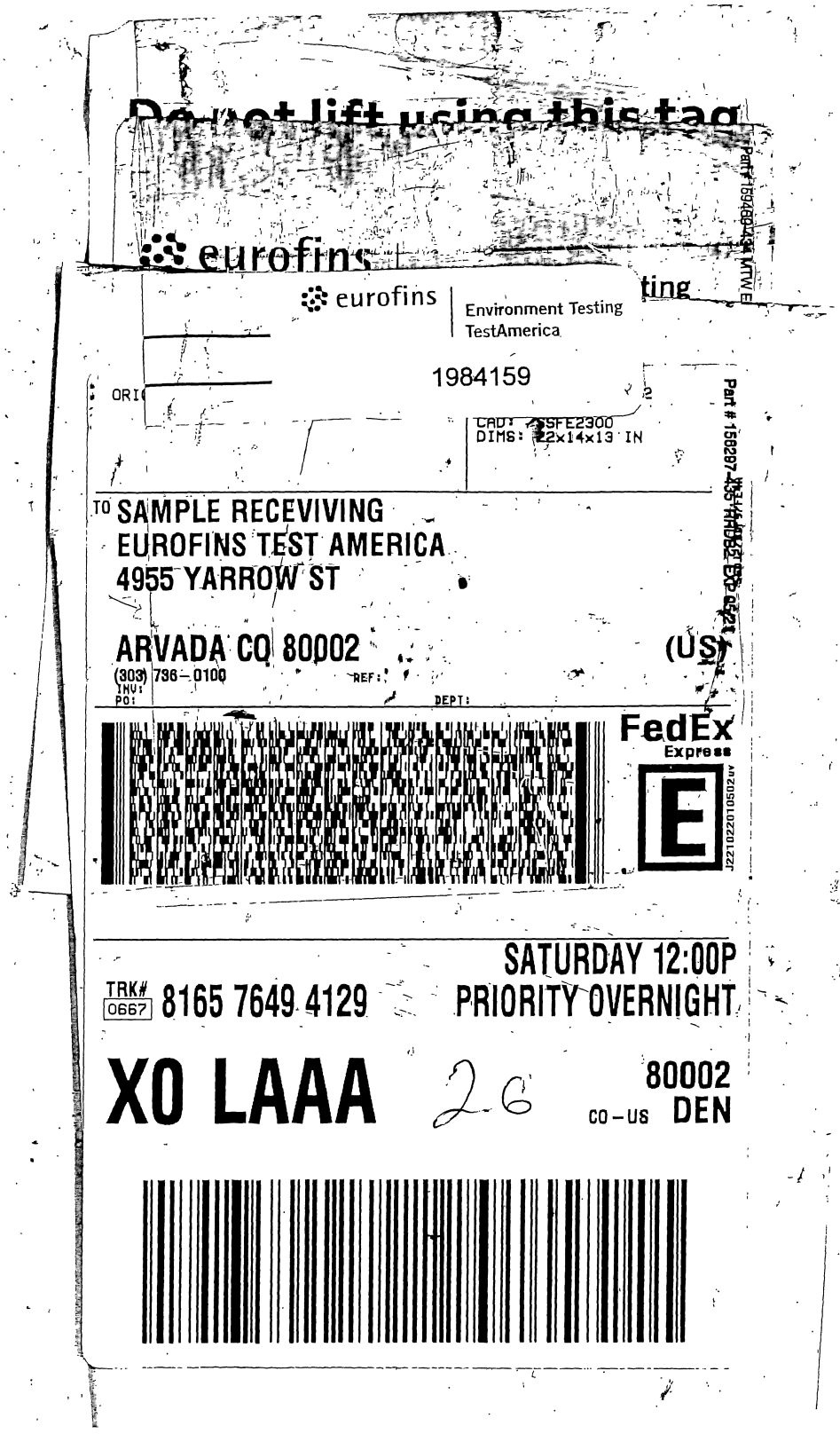
[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

Liquid level lead

SAMPLER: EDAN TAYLOR (PRINTED NAME) (SIGNATURE)

280-161447 Waybill




eurofins
eurofins
Environment Testing
TestAmerica
1984159
TO SAMPLE RECEIVIVING
EUROFINS TEST AMERICA
4955 YARROW ST
ARVADA CO 80002
(US)
(303) 736-0100
FedEx
Express
SATURDAY 12:00P
TRK# 0667 8165 7649 4129
PRIORITY OVERNIGHT
XO LAAA
80002
CO-US DEN

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:** L 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) 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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/20/22	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	4/20/22	10 : 30	A	2	250, 500, (1L)	(None)	(YES)	(NO)	NA	
Yellow Glass	4/20/22	10 : 30	A	2	250, (500) 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/20/22	10 : 30	A	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	4/20/22	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 — 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) (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	336.3	2600	11.7	~	2.96	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Liquid level 10.2 ft

SAMPLER: EDAN TAYLOR (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:**	(°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)
4/20/22	:	.	.	.	.	.	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	4/20/22	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	4/20/22	09:45	G	2	250, 500, (1L)	None	(YES)	(NO)	NA	
Yellow Glass	4/20/22	09:45	G	2	250, (500) 1L	(H_2SO_4)	(YES)	(NO)		
Red Total Poly	4/20/22	9:45	G	1	125, 250, (500)	(HNO_3)	(YES)	(NO)		
Red Diss. Poly	4/20/22	9:45	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 | 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: : 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	(E-0945)	0.00	6.23	273	8237	10.0	-	2.95	DARK Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected from base of truck hauler tree.

SAMPLER: EDAN TAYLOR (PRINTED NAME) (SIGNATURE)

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161447-1

Login Number: 161447
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.	False	Refer to job narrative for details
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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
LF Module Sumps - Apr

JOB NUMBER

280-161446-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

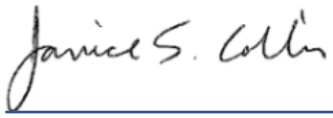
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

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.

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
H	Sample was prepped or analyzed beyond the specified holding time
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 280-161446-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-161446-1

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 04/23/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.5°C, 0.7°C, 1.0°C, 2.7°C and 3.0°C

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): FB2 (280-161446-4). The container labels list the sample collection time as 1245, while the COC lists 1240. The sample was logged per the COC.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 8P (280-161446-8). The container labels list the sample collection time as 0945, while the COC lists 0915. The sample was logged per the COC.

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)

The Method 8260B analytes 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane recovered outside control limits for the LCS associated with analytical batch 280-573649. This is not indicative of a systematic control problem because these were random marginal exceedances. Therefore, the results have been reported.

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 (Batch 573649), however, an LCS/LCSD pair was analyzed to demonstrate method precision and accuracy.

Job ID: 280-161446-1 (Continued)

Laboratory: Eurofins 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 Sodium Method 6010B because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Nitrate/Nitrite Method 353.2 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.

Sample Duplicate

The RPD for pH performed on a sample from another was outside control limits. Because all other QC and calibration criteria were met no corrective action was needed.

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 matrix. As a result, the reporting limits were elevated.

The prepreserved hydrochloric acid preserved vials for Method 8260B analysis for the samples 6/7S, 8P, 9P and 9S 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 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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: TB2 — Lab Sample ID: 280-161446-1

No Detections.

Client Sample ID: 1/5P — Lab Sample ID: 280-161446-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	8.5		1.0		ug/L	5		8260B	Total/NA
Silicon	25000		100		ug/L	1		6010B	Total Recoverable
Zinc	42		26		ug/L	1		6010B	Total Recoverable
Calcium	80000		500		ug/L	1		6010B	Dissolved
Iron	2800		30		ug/L	1		6010B	Dissolved
Magnesium	87000		200		ug/L	1		6010B	Dissolved
Manganese	820		3.0		ug/L	1		6010B	Dissolved
Potassium	260000		500		ug/L	1		6010B	Dissolved
Sodium	1100000	F1	1000		ug/L	1		6010B	Dissolved
Antimony	2.0		0.60		ug/L	1		6020	Total Recoverable
Arsenic	51		1.0		ug/L	1		6020	Total Recoverable
Barium	360		1.0		ug/L	1		6020	Total Recoverable
Chromium	43		2.0		ug/L	1		6020	Total Recoverable
Cobalt	16		0.20		ug/L	1		6020	Total Recoverable
Copper	12		1.0		ug/L	1		6020	Total Recoverable
Lead	1.1		0.50		ug/L	1		6020	Total Recoverable
Nickel	50		1.0		ug/L	1		6020	Total Recoverable
Vanadium	51		3.0		ug/L	1		6020	Total Recoverable
Chloride	1200		20		mg/L	20		300.0	Total/NA
Sulfate	16		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	480		2.2		mg/L	100		350.1	Total/NA
Nitrate/Nitrite	0.12		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	990		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.6	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	8300		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	280		3.5		mg/L	10		9060	Total/NA
Total Anions	82				meq/L	1		SM 1030E	Total/NA
Total Cations	100				meq/L	1		SM 1030E	Total/NA
Percent Difference	9.8				%	1		SM 1030E	Total/NA
Calcium	80				mg/L	1		SM 1030E	Total/NA
Magnesium	87				mg/L	1		SM 1030E	Total/NA
Potassium	260				mg/L	1		SM 1030E	Total/NA
Sodium	1100				mg/L	1		SM 1030E	Total/NA
Ammonia as N	480				mg/L	1		SM 1030E	Total/NA
Chloride	1200				mg/L	1		SM 1030E	Total/NA
Sulfate	16				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	2400				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	2400				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 1/5P (Continued)

Lab Sample ID: 280-161446-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	0.12				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	9.8				%	1		SM 1030E	Total/NA
Calculated TDS	4600				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.75				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	3500				mg/L	1		SM 1030E	Total/NA
Iron	2.8				mg/L	1		SM 1030E	Total/NA
Calcium	4.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	7.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	6.6				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	48				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	34				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	34				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.33				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	48				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	48				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0086				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.15				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	2400		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	2400		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	570		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	3500		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	9.2		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.24				SU	1		Field Sampling	Total/NA
Field Conductivity	7524				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	20.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	0.74				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	75.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 4/5S

Lab Sample ID: 280-161446-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	29000		100		ug/L	1		6010B	Total Recoverable
Calcium	120000		500		ug/L	1		6010B	Dissolved
Iron	6700		30		ug/L	1		6010B	Dissolved
Magnesium	53000		200		ug/L	1		6010B	Dissolved
Manganese	7400		3.0		ug/L	1		6010B	Dissolved
Potassium	7200		500		ug/L	1		6010B	Dissolved
Sodium	84000		1000		ug/L	1		6010B	Dissolved
Antimony	0.95		0.60		ug/L	1		6020	Total Recoverable
Arsenic	25		1.0		ug/L	1		6020	Total Recoverable
Barium	250		1.0		ug/L	1		6020	Total Recoverable
Cobalt	1.1		0.20		ug/L	1		6020	Total Recoverable
Nickel	3.7		1.0		ug/L	1		6020	Total Recoverable
Chloride	68		3.0		mg/L	1		300.0	Total/NA
Ammonia as N	35		0.22		mg/L	10		350.1	Total/NA
Chemical Oxygen Demand (COD)	48		20		mg/L	1		410.4	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 4/5S (Continued)

Lab Sample ID: 280-161446-3

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	7.0	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	1600		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	13		1.0		mg/L	1		9060	Total/NA
Total Anions	17				meq/L	1		SM 1030E	Total/NA
Total Cations	17				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.6				%	1		SM 1030E	Total/NA
Calcium	120				mg/L	1		SM 1030E	Total/NA
Magnesium	53				mg/L	1		SM 1030E	Total/NA
Potassium	7.2				mg/L	1		SM 1030E	Total/NA
Sodium	84				mg/L	1		SM 1030E	Total/NA
Ammonia as N	35				mg/L	1		SM 1030E	Total/NA
Chloride	68				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	730				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	730				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.6				%	1		SM 1030E	Total/NA
Calculated TDS	810				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.96				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	780				mg/L	1		SM 1030E	Total/NA
Iron	6.7				mg/L	1		SM 1030E	Total/NA
Calcium	6.0				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	4.4				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.18				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	3.7				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	2.5				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.9				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	15				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	15				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.36				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	730		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	730		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	540		3.0		mg/L	1		SM 2340C	Total/NA
Total Dissolved Solids	780		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	15		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.44				SU	1		Field Sampling	Total/NA
Field Conductivity	1552				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	27.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.76				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	3.7				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB2

Lab Sample ID: 280-161446-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	8.4	HF	0.1		SU	1		9040B	Total/NA
Total Anions	0.00				meq/L	1		SM 1030E	Total/NA
Total Cations	0.00				meq/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB2 (Continued)

Lab Sample ID: 280-161446-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
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	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
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Total 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: 6/7P

Lab Sample ID: 280-161446-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.5		1.0		ug/L	5		8260B	Total/NA
2-Butanone (MEK)	840		10		ug/L	5		8260B	Total/NA
4-Isopropyltoluene	2.7		1.0		ug/L	5		8260B	Total/NA
4-Methyl-2-pentanone	160		5.0		ug/L	5		8260B	Total/NA
Acetone	1100		10		ug/L	5		8260B	Total/NA
Benzene	12		1.0		ug/L	5		8260B	Total/NA
Ethylbenzene	7.6		1.0		ug/L	5		8260B	Total/NA
Naphthalene	22		1.1		ug/L	5		8260B	Total/NA
Toluene	18		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	20		2.0		ug/L	5		8260B	Total/NA
Silicon	20000		100		ug/L	1		6010B	Total Recoverable
Calcium	91000		500		ug/L	1		6010B	Dissolved
Iron	6400		30		ug/L	1		6010B	Dissolved
Magnesium	69000		200		ug/L	1		6010B	Dissolved
Manganese	3300		3.0		ug/L	1		6010B	Dissolved
Potassium	59000		500		ug/L	1		6010B	Dissolved
Sodium	360000		1000		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: 280-161446-1

Client Sample ID: 6/7P (Continued)

Lab Sample ID: 280-161446-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	64		0.60		ug/L	1		6020	Total Recoverable
Arsenic	310		1.0		ug/L	1		6020	Total Recoverable
Barium	710		1.0		ug/L	1		6020	Total Recoverable
Chromium	34		2.0		ug/L	1		6020	Total Recoverable
Cobalt	22		0.20		ug/L	1		6020	Total Recoverable
Nickel	68		1.0		ug/L	1		6020	Total Recoverable
Vanadium	39		3.0		ug/L	1		6020	Total Recoverable
Chloride	890		100		mg/L	100		300.0	Total/NA
Ammonia as N	1100		5.5		mg/L	250		350.1	Total/NA
Chemical Oxygen Demand (COD)	1100		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	11000		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	260		3.5		mg/L	10		9060	Total/NA
Total Anions	110				meq/L	1		SM 1030E	Total/NA
Total Cations	110				meq/L	1		SM 1030E	Total/NA
Percent Difference	-2.2				%	1		SM 1030E	Total/NA
Calcium	91				mg/L	1		SM 1030E	Total/NA
Magnesium	69				mg/L	1		SM 1030E	Total/NA
Potassium	59				mg/L	1		SM 1030E	Total/NA
Sodium	360				mg/L	1		SM 1030E	Total/NA
Ammonia as N	1100				mg/L	1		SM 1030E	Total/NA
Chloride	890				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	4300				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	4300				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	5200				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.56				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2900				mg/L	1		SM 1030E	Total/NA
Iron	6.4				mg/L	1		SM 1030E	Total/NA
Calcium	4.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	5.7				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	16				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	79				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	25				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	86				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	86				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.34				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	4300	H	10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	4300	H	10		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 6/7P (Continued)

Lab Sample ID: 280-161446-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hardness, as CaCO3	940		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2900		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	39		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.32				SU	1		Field Sampling	Total/NA
Field Conductivity	11177				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	21.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.12				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-20.9				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 6/7S

Lab Sample ID: 280-161446-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	25000		100		ug/L	1		6010B	Total Recoverable
Calcium	230000		500		ug/L	1		6010B	Dissolved
Iron	10000		30		ug/L	1		6010B	Dissolved
Magnesium	140000		200		ug/L	1		6010B	Dissolved
Manganese	9900		3.0		ug/L	1		6010B	Dissolved
Potassium	35000		500		ug/L	1		6010B	Dissolved
Sodium	450000		1000		ug/L	1		6010B	Dissolved
Antimony	1.3		0.60		ug/L	1		6020	Total Recoverable
Arsenic	31		1.0		ug/L	1		6020	Total Recoverable
Barium	590		1.0		ug/L	1		6020	Total Recoverable
Chromium	6.9		2.0		ug/L	1		6020	Total Recoverable
Cobalt	6.1		0.20		ug/L	1		6020	Total Recoverable
Nickel	55		1.0		ug/L	1		6020	Total Recoverable
Vanadium	9.7		3.0		ug/L	1		6020	Total Recoverable
Chloride	700		20		mg/L	20		300.0	Total/NA
Ammonia as N	49		0.22		mg/L	10		350.1	Total/NA
Chemical Oxygen Demand (COD)	300		43		mg/L	5		410.4	Total/NA
pH adj. to 25 deg C	7.1	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	4200		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	77		1.7		mg/L	5		9060	Total/NA
Total Anions	46				meq/L	1		SM 1030E	Total/NA
Total Cations	48				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.9				%	1		SM 1030E	Total/NA
Calcium	230				mg/L	1		SM 1030E	Total/NA
Magnesium	140				mg/L	1		SM 1030E	Total/NA
Potassium	35				mg/L	1		SM 1030E	Total/NA
Sodium	450				mg/L	1		SM 1030E	Total/NA
Ammonia as N	49				mg/L	1		SM 1030E	Total/NA
Chloride	700				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	1300				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1300				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 6/7S (Continued)

Lab Sample ID: 280-161446-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.9				%	1		SM 1030E	Total/NA
Calculated TDS	2400				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.96				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2300				mg/L	1		SM 1030E	Total/NA
Iron	10				mg/L	1		SM 1030E	Total/NA
Calcium	11				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	12				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.90				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	20				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	3.5				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	20				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	26				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	26				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.54				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	1300		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	1300		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	1400		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2300		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	35		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	6.65				SU	1		Field Sampling	Total/NA
Field Conductivity	2614				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	25.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	2.21				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-22.1				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 8S

Lab Sample ID: 280-161446-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	21000		100		ug/L	1		6010B	Total Recoverable
Calcium	95000		500		ug/L	1		6010B	Dissolved
Magnesium	48000		200		ug/L	1		6010B	Dissolved
Manganese	1400		3.0		ug/L	1		6010B	Dissolved
Potassium	2800		500		ug/L	1		6010B	Dissolved
Sodium	320000		1000		ug/L	1		6010B	Dissolved
Arsenic	2.0		1.0		ug/L	1		6020	Total Recoverable
Barium	70		1.0		ug/L	1		6020	Total Recoverable
Cobalt	1.3		0.20		ug/L	1		6020	Total Recoverable
Copper	6.9		1.0		ug/L	1		6020	Total Recoverable
Nickel	13		1.0		ug/L	1		6020	Total Recoverable
Vanadium	6.7		3.0		ug/L	1		6020	Total Recoverable
Chloride	98		3.0		mg/L	1		300.0	Total/NA
Sulfate	170		5.0		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 8S (Continued)

Lab Sample ID: 280-161446-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand (COD)	47		20		mg/L	1		410.4	Total/NA
pH adj. to 25 deg C	7.3	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	2100		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	11		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	-1.3				%	1		SM 1030E	Total/NA
Calcium	95				mg/L	1		SM 1030E	Total/NA
Magnesium	48				mg/L	1		SM 1030E	Total/NA
Potassium	2.8				mg/L	1		SM 1030E	Total/NA
Sodium	320				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	98				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	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.3				%	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	4.7				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.072				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	14				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.8				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	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
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	490		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	1300		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.76				SU	1		Field Sampling	Total/NA
Field Conductivity	2258				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	22.2				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.37				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	63.4				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 8P

Lab Sample ID: 280-161446-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.3		1.0		ug/L	5		8260B	Total/NA
Ethylbenzene	1.5		1.0		ug/L	5		8260B	Total/NA
Naphthalene	2.2		1.1		ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 8P (Continued)

Lab Sample ID: 280-161446-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	2.6		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	7.1		2.0		ug/L	5		8260B	Total/NA
Silicon	11000		100		ug/L	1		6010B	Total Recoverable
Calcium	97000		500		ug/L	1		6010B	Dissolved
Iron	2900		30		ug/L	1		6010B	Dissolved
Magnesium	49000		200		ug/L	1		6010B	Dissolved
Manganese	1500		3.0		ug/L	1		6010B	Dissolved
Potassium	82000		500		ug/L	1		6010B	Dissolved
Sodium	320000		1000		ug/L	1		6010B	Dissolved
Antimony	14		0.60		ug/L	1		6020	Total Recoverable
Arsenic	58		1.0		ug/L	1		6020	Total Recoverable
Barium	180		1.0		ug/L	1		6020	Total Recoverable
Chromium	38		2.0		ug/L	1		6020	Total Recoverable
Cobalt	12		0.20		ug/L	1		6020	Total Recoverable
Copper	7.3		1.0		ug/L	1		6020	Total Recoverable
Nickel	25		1.0		ug/L	1		6020	Total Recoverable
Vanadium	24		3.0		ug/L	1		6020	Total Recoverable
Chloride	420		20		mg/L	20		300.0	Total/NA
Sulfate	25		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	380		0.040		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.47		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	3000		870		mg/L	100		410.4	Total/NA
pH adj. to 25 deg C	7.3	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	3800		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	400		6.9		mg/L	20		9060	Total/NA
Total Anions	40				meq/L	1		SM 1030E	Total/NA
Total Cations	52				meq/L	1		SM 1030E	Total/NA
Percent Difference	13				%	1		SM 1030E	Total/NA
Calcium	97				mg/L	1		SM 1030E	Total/NA
Magnesium	49				mg/L	1		SM 1030E	Total/NA
Potassium	82				mg/L	1		SM 1030E	Total/NA
Sodium	320				mg/L	1		SM 1030E	Total/NA
Ammonia as N	380				mg/L	1		SM 1030E	Total/NA
Chloride	420				mg/L	1		SM 1030E	Total/NA
Sulfate	25				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	0.47				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	13				%	1		SM 1030E	Total/NA
Calculated TDS	2200				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.73				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	1600				mg/L	1		SM 1030E	Total/NA
Iron	2.9				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 8P (Continued)

Lab Sample ID: 280-161446-8

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Calcium	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	4.0				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	2.1				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	14				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	27				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	12				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.52				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	0.034				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.16				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	480		3.0		mg/L	2		SM 2340C	Total/NA
Total Dissolved Solids	1600		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	26		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.10				SU	1		Field Sampling	Total/NA
Field Conductivity	5426				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.0				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	4.04				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	50.2				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 9P

Lab Sample ID: 280-161446-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.2		1.0		ug/L	5		8260B	Total/NA
Benzene	1.6		1.0		ug/L	5		8260B	Total/NA
Ethylbenzene	1.5		1.0		ug/L	5		8260B	Total/NA
Naphthalene	2.5		1.1		ug/L	5		8260B	Total/NA
Toluene	2.6		1.0		ug/L	5		8260B	Total/NA
Xylenes (total)	8.3		2.0		ug/L	5		8260B	Total/NA
Silicon	23000		100		ug/L	1		6010B	Total Recoverable
Zinc	29		26		ug/L	1		6010B	Total Recoverable
Calcium	170000		500		ug/L	1		6010B	Dissolved
Iron	4600		30		ug/L	1		6010B	Dissolved
Magnesium	100000		200		ug/L	1		6010B	Dissolved
Manganese	3600		3.0		ug/L	1		6010B	Dissolved
Potassium	230000		500		ug/L	1		6010B	Dissolved
Sodium	910000		1000		ug/L	1		6010B	Dissolved
Antimony	1.6		0.60		ug/L	1		6020	Total Recoverable
Arsenic	31		1.0		ug/L	1		6020	Total Recoverable
Barium	610		1.0		ug/L	1		6020	Total Recoverable
Chromium	87		2.0		ug/L	1		6020	Total Recoverable
Cobalt	36		0.20		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9P (Continued)

Lab Sample ID: 280-161446-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	5.7		1.0		ug/L	1		6020	Total Recoverable
Lead	1.8		0.50		ug/L	1		6020	Total Recoverable
Nickel	100		1.0		ug/L	1		6020	Total Recoverable
Vanadium	110		3.0		ug/L	1		6020	Total Recoverable
Chloride	1100		20		mg/L	20		300.0	Total/NA
Sulfate	26		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	490		0.040		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	3.5		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	1200		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.7	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	8400		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	310		3.5		mg/L	10		9060	Total/NA
Total Anions	90				meq/L	1		SM 1030E	Total/NA
Total Cations	97				meq/L	1		SM 1030E	Total/NA
Percent Difference	4.1				%	1		SM 1030E	Total/NA
Calcium	170				mg/L	1		SM 1030E	Total/NA
Magnesium	100				mg/L	1		SM 1030E	Total/NA
Potassium	230				mg/L	1		SM 1030E	Total/NA
Sodium	910				mg/L	1		SM 1030E	Total/NA
Ammonia as N	490				mg/L	1		SM 1030E	Total/NA
Chloride	1100				mg/L	1		SM 1030E	Total/NA
Sulfate	26				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	3.5				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	4.1				%	1		SM 1030E	Total/NA
Calculated TDS	4700				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.80				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	3800				mg/L	1		SM 1030E	Total/NA
Iron	4.6				mg/L	1		SM 1030E	Total/NA
Calcium	8.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	8.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	5.9				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	40				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	35				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	31				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.54				meq/L	1		SM 1030E (meq)	Total/NA
Carbonate Alkalinity	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	58				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	58				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.25				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.25				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	1200		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	3800		19		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	20		4.0		mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9P (Continued)

Lab Sample ID: 280-161446-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.01				SU	1		Field Sampling	Total/NA
Field Conductivity	4578				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	25.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.45				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-14.6				millivolts	1		Field Sampling	Total/NA

Client Sample ID: 9S

Lab Sample ID: 280-161446-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon	25000		100		ug/L	1		6010B	Total Recoverable
Calcium	150000		500		ug/L	1		6010B	Dissolved
Iron	4700		30		ug/L	1		6010B	Dissolved
Magnesium	79000		200		ug/L	1		6010B	Dissolved
Manganese	2400		3.0		ug/L	1		6010B	Dissolved
Potassium	35000		500		ug/L	1		6010B	Dissolved
Sodium	410000		1000		ug/L	1		6010B	Dissolved
Antimony	0.60		0.60		ug/L	1		6020	Total Recoverable
Arsenic	17		1.0		ug/L	1		6020	Total Recoverable
Barium	390		1.0		ug/L	1		6020	Total Recoverable
Chromium	24		2.0		ug/L	1		6020	Total Recoverable
Cobalt	11		0.20		ug/L	1		6020	Total Recoverable
Copper	2.1		1.0		ug/L	1		6020	Total Recoverable
Nickel	39		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.1		1.0		ug/L	1		6020	Total Recoverable
Vanadium	23		3.0		ug/L	1		6020	Total Recoverable
Chloride	550		20		mg/L	20		300.0	Total/NA
Sulfate	27		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	160		2.2		mg/L	100		350.1	Total/NA
Chemical Oxygen Demand (COD)	740		43		mg/L	5		410.4	Total/NA
pH adj. to 25 deg C	7.4	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	3400		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	190		3.5		mg/L	10		9060	Total/NA
Total Anions	46				meq/L	1		SM 1030E	Total/NA
Total Cations	44				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.8				%	1		SM 1030E	Total/NA
Calcium	150				mg/L	1		SM 1030E	Total/NA
Magnesium	79				mg/L	1		SM 1030E	Total/NA
Potassium	35				mg/L	1		SM 1030E	Total/NA
Sodium	410				mg/L	1		SM 1030E	Total/NA
Ammonia as N	160				mg/L	1		SM 1030E	Total/NA
Chloride	550				mg/L	1		SM 1030E	Total/NA
Sulfate	27				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

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9S (Continued)

Lab Sample ID: 280-161446-10

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	1500				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.8				%	1		SM 1030E	Total/NA
Calculated TDS	2300				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.96				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2200				mg/L	1		SM 1030E	Total/NA
Iron	4.7				mg/L	1		SM 1030E	Total/NA
Calcium	7.5				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	6.5				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.90				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	18				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	11				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	16				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.56				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	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.25				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
Hardness, as CaCO3	800		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2200		10		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	13		4.0		mg/L	1		SM 2540D	Total/NA
Field pH	7.01				SU	1		Field Sampling	Total/NA
Field Conductivity	4578				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	25.6				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	1.45				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	-14.6				millivolts	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-161446-1	TB2	Water	04/20/22 07:00	04/23/22 11:25
280-161446-2	1/5P	Water	04/20/22 11:30	04/23/22 11:25
280-161446-3	4/5S	Water	04/20/22 12:15	04/23/22 11:25
280-161446-4	FB2	Water	04/20/22 12:40	04/23/22 11:25
280-161446-5	6/7P	Water	04/20/22 13:30	04/23/22 11:25
280-161446-6	6/7S	Water	04/22/22 11:00	04/23/22 11:25
280-161446-7	8S	Water	04/22/22 10:15	04/23/22 11:25
280-161446-8	8P	Water	04/22/22 09:15	04/23/22 11:25
280-161446-9	9P	Water	04/22/22 12:00	04/23/22 11:25
280-161446-10	9S	Water	04/22/22 12:20	04/23/22 11:25

Method Summary

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
6020	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
410.4	COD	EPA	EET DEN
9040B	pH	SW846	EET DEN
9050A	Specific Conductance	SW846	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: TB2

Date Collected: 04/20/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-1

Matrix: Water

Method: SW846 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			05/03/22 10:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 10:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 10:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 10:46	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 10:46	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 10:46	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 10:46	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 10:46	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 10:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 10:46	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
1,2-Dibromo-3-Chloropropane	ND	*-	5.0		ug/L			05/03/22 10:46	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 10:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:46	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 10:46	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 10:46	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:46	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 10:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 10:46	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 10:46	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 10:46	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 10:46	1
2-Hexanone	ND		5.0		ug/L			05/03/22 10:46	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 10:46	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 10:46	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 10:46	1
Acetone	ND		10		ug/L			05/03/22 10:46	1
Benzene	ND		1.0		ug/L			05/03/22 10:46	1
Bromobenzene	ND		1.0		ug/L			05/03/22 10:46	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 10:46	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 10:46	1
Bromoform	ND		1.0		ug/L			05/03/22 10:46	1
Bromomethane	ND		2.0		ug/L			05/03/22 10:46	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 10:46	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 10:46	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 10:46	1
Chloroethane	ND		2.0		ug/L			05/03/22 10:46	1
Chloroform	ND		1.0		ug/L			05/03/22 10:46	1
Chloromethane	ND		2.0		ug/L			05/03/22 10:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 10:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 10:46	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 10:46	1
Dibromomethane	ND		1.0		ug/L			05/03/22 10:46	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 10:46	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 10:46	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 10:46	1

Client Sample ID: TB2

Date Collected: 04/20/22 07:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-1
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			05/03/22 10:46	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
Styrene	ND		1.0		ug/L			05/03/22 10:46	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 10:46	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 10:46	1
Toluene	ND		1.0		ug/L			05/03/22 10:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 10:46	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 10:46	1
Trichloroethene	ND		1.0		ug/L			05/03/22 10:46	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 10:46	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 10:46	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 10:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 10:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 10:46*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/03/22 10:46*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 10:46*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 10:46*	*1*

Client Sample ID: 1/5P

Date Collected: 04/20/22 11:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-2
Matrix: Water

Method: SW846 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			05/03/22 16:06	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 16:06	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/03/22 16:06	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/03/22 16:06	5
1,1-Dichloroethane	ND		1.1		ug/L			05/03/22 16:06	5
1,1-Dichloroethene	ND		1.2		ug/L			05/03/22 16:06	5
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 16:06	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:06	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/03/22 16:06	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:06	5
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 16:06	5
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 16:06	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:06	5
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 16:06	5
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 16:06	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:06	5
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 16:06	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:06	5

Client Sample ID: 1/5P
Date Collected: 04/20/22 11:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-2
Matrix: Water

Method: SW846 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			05/03/22 16:06	5
2-Butanone (MEK)	ND		10		ug/L			05/03/22 16:06	5
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 16:06	5
2-Hexanone	ND		8.5		ug/L			05/03/22 16:06	5
4-Chlorotoluene	ND		1.1		ug/L			05/03/22 16:06	5
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 16:06	5
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 16:06	5
Acetone	ND		10		ug/L			05/03/22 16:06	5
Benzene	ND		1.0		ug/L			05/03/22 16:06	5
Bromobenzene	ND		1.0		ug/L			05/03/22 16:06	5
Bromochloromethane	ND		1.0		ug/L			05/03/22 16:06	5
Bromodichloromethane	ND		1.0		ug/L			05/03/22 16:06	5
Bromoform	ND		2.3		ug/L			05/03/22 16:06	5
Bromomethane	ND		2.0		ug/L			05/03/22 16:06	5
Carbon disulfide	ND		2.0		ug/L			05/03/22 16:06	5
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 16:06	5
Chlorobenzene	ND		1.0		ug/L			05/03/22 16:06	5
Chloroethane	ND		2.1		ug/L			05/03/22 16:06	5
Chloroform	ND		1.0		ug/L			05/03/22 16:06	5
Chloromethane	ND		2.0		ug/L			05/03/22 16:06	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:06	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 16:06	5
Dibromochloromethane	ND		1.0		ug/L			05/03/22 16:06	5
Dibromomethane	ND		1.0		ug/L			05/03/22 16:06	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 16:06	5
Ethylbenzene	**8.5**		1.0		ug/L			05/03/22 16:06	5
Hexachlorobutadiene	ND		1.8		ug/L			05/03/22 16:06	5
Isopropylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
Methylene Chloride	ND		5.0		ug/L			05/03/22 16:06	5
Naphthalene	ND		1.1		ug/L			05/03/22 16:06	5
n-Butylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
N-Propylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
Styrene	ND		1.8		ug/L			05/03/22 16:06	5
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 16:06	5
Tetrachloroethene	ND		1.0		ug/L			05/03/22 16:06	5
Toluene	ND		1.0		ug/L			05/03/22 16:06	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:06	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 16:06	5
Trichloroethene	ND		1.0		ug/L			05/03/22 16:06	5
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 16:06	5
Vinyl chloride	ND		1.0		ug/L			05/03/22 16:06	5
Xylenes (total)	ND		2.0		ug/L			05/03/22 16:06	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 16:06*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 16:06*	*5*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 16:06*	*5*

Client Sample ID: 1/5P

Date Collected: 04/20/22 11:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*87*		*77 - 120*		*05/03/22 16:06*	*5*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 16:06*	*5*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**25000**		100		ug/L		05/05/22 09:39	05/05/22 20:16	1
Silver	ND		3.0		ug/L		05/05/22 09:39	05/05/22 20:16	1
Zinc	**42**		26		ug/L		05/05/22 09:39	05/05/22 20:16	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**80000**		500		ug/L		05/04/22 09:55	05/05/22 09:55	1
Iron	**2800**		30		ug/L		05/04/22 09:55	05/05/22 09:55	1
Magnesium	**87000**		200		ug/L		05/04/22 09:55	05/05/22 09:55	1
Manganese	**820**		3.0		ug/L		05/04/22 09:55	05/05/22 09:55	1
Potassium	**260000**		500		ug/L		05/04/22 09:55	05/05/22 09:55	1
Sodium	**1100000**	**F1**	1000		ug/L		05/04/22 09:55	05/05/22 09:55	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.0**		0.60		ug/L		05/12/22 09:40	05/13/22 02:34	1
Arsenic	**51**		1.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Barium	**360**		1.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Beryllium	ND		0.40		ug/L		05/12/22 09:40	05/13/22 02:34	1
Cadmium	ND		0.30		ug/L		05/12/22 09:40	05/13/22 02:34	1
Chromium	**43**		2.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Cobalt	**16**		0.20		ug/L		05/12/22 09:40	05/13/22 02:34	1
Copper	**12**		1.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Lead	**1.1**		0.50		ug/L		05/12/22 09:40	05/13/22 02:34	1
Nickel	**50**		1.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Selenium	ND		1.0		ug/L		05/12/22 09:40	05/13/22 02:34	1
Thallium	ND		0.20		ug/L		05/12/22 09:40	05/13/22 02:34	1
Vanadium	**51**		3.0		ug/L		05/12/22 09:40	05/13/22 02:34	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**82**				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	**100**				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	**9.8**				%			05/11/22 10:42	1
Calcium (SM 1030E)	**80**				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	**87**				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	**260**				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	**1100**				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	**480**				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	**1200**				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	**16**				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	**2400**				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	**2400**				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	**0.12**				mg/L			05/11/22 10:42	1

Client Sample ID: 1/5P

Date Collected: 04/20/22 11:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	9.8				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	4600				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.75				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	3500				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	2.8				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	4.0				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	7.2				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	6.6				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	48				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	34				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	34				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.33				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	48				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	48				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.0086				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.15				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1200		20		mg/L			05/09/22 16:50	20
Sulfate (EPA 300.0)	16		5.0		mg/L			05/09/22 16:35	1
Ammonia as N (EPA 350.1)	480		2.2		mg/L			05/09/22 13:14	100
Nitrate/Nitrite (EPA 353.2)	0.12		0.050		mg/L			05/04/22 17:32	1
Chemical Oxygen Demand (COD) (EPA 410.4)	990		170		mg/L			05/10/22 11:26	20
Total Organic Carbon - Average (SW846 9060)	280		3.5		mg/L			05/02/22 20:38	10
Total Alkalinity (SM 2320B)	2400		10		mg/L			05/03/22 20:17	1
Bicarbonate Alkalinity (SM 2320B)	2400		10		mg/L			05/03/22 20:17	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 20:17	1
Hardness, as CaCO3 (SM 2340C)	570		3.0		mg/L			05/10/22 18:37	2
Total Dissolved Solids (SM 2540C)	3500		19		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	9.2		4.0		mg/L			04/27/22 15:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.6	HF	0.1		SU			05/05/22 15:01	1
Specific Conductance (SW846 9050A)	8300		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.24				SU			04/20/22 12:30	1
Field Conductivity	7524				umhos/cm			04/20/22 12:30	1
Field Temperature	20.1				Degrees C			04/20/22 12:30	1
Field Dissolved Oxygen	0.74				mg/L			04/20/22 12:30	1
Field EH/ORP	75.2				millivolts			04/20/22 12:30	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 4/5S
Date Collected: 04/20/22 12:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-3
Matrix: Water

Method: SW846 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			05/03/22 15:44	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 15:44	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 15:44	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 15:44	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 15:44	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 15:44	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 15:44	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 15:44	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 15:44	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 15:44	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 15:44	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 15:44	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 15:44	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 15:44	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 15:44	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:44	1
2-Hexanone	ND		5.0		ug/L			05/03/22 15:44	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 15:44	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 15:44	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 15:44	1
Acetone	ND		10		ug/L			05/03/22 15:44	1
Benzene	ND		1.0		ug/L			05/03/22 15:44	1
Bromobenzene	ND		1.0		ug/L			05/03/22 15:44	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 15:44	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 15:44	1
Bromoform	ND		1.0		ug/L			05/03/22 15:44	1
Bromomethane	ND		2.0		ug/L			05/03/22 15:44	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 15:44	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 15:44	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 15:44	1
Chloroethane	ND		2.0		ug/L			05/03/22 15:44	1
Chloroform	ND		1.0		ug/L			05/03/22 15:44	1
Chloromethane	ND		2.0		ug/L			05/03/22 15:44	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:44	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 15:44	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 15:44	1
Dibromomethane	ND		1.0		ug/L			05/03/22 15:44	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 15:44	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 15:44	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 15:44	1

Client Sample ID: 4/5S

Date Collected: 04/20/22 12:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			05/03/22 15:44	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
Styrene	ND		1.0		ug/L			05/03/22 15:44	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 15:44	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 15:44	1
Toluene	ND		1.0		ug/L			05/03/22 15:44	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 15:44	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 15:44	1
Trichloroethene	ND		1.0		ug/L			05/03/22 15:44	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 15:44	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 15:44	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 15:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Silanol, trimethyl-	*14*	*T J N*	*ug/L*		*4.63*	*1066-40-6*		*05/03/22 15:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 15:44*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 15:44*	*1*
Dibromofluoromethane (Surr)	*92*		*77 - 120*		*05/03/22 15:44*	*1*
Toluene-d8 (Surr)	*110*		*80 - 125*		*05/03/22 15:44*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**29000**		100		ug/L		05/04/22 10:41	05/05/22 08:36	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 08:36	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 08:36	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**120000**		500		ug/L		05/04/22 09:55	05/05/22 10:28	1
Iron	**6700**		30		ug/L		05/04/22 09:55	05/05/22 10:28	1
Magnesium	**53000**		200		ug/L		05/04/22 09:55	05/05/22 10:28	1
Manganese	**7400**		3.0		ug/L		05/04/22 09:55	05/05/22 10:28	1
Potassium	**7200**		500		ug/L		05/04/22 09:55	05/05/22 10:28	1
Sodium	**84000**		1000		ug/L		05/04/22 09:55	05/05/22 10:28	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.95**		0.60		ug/L		05/04/22 08:40	05/04/22 20:19	1
Arsenic	**25**		1.0		ug/L		05/04/22 08:40	05/04/22 20:19	1
Barium	**250**		1.0		ug/L		05/04/22 08:40	05/04/22 20:19	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 20:19	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 20:19	1
Chromium	ND		2.0		ug/L		05/04/22 08:40	05/04/22 20:19	1
Cobalt	**1.1**		0.20		ug/L		05/04/22 08:40	05/04/22 20:19	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:19	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 20:19	1
Nickel	**3.7**		1.0		ug/L		05/04/22 08:40	05/04/22 20:19	1

Client Sample ID: 4/5S

Date Collected: 04/20/22 12:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-3

Matrix: Water

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:19	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 20:19	1
Vanadium	ND		3.0		ug/L		05/04/22 08:40	05/04/22 20:19	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**17**				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	**17**				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	**1.6**				%			05/11/22 10:42	1
Calcium (SM 1030E)	**120**				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	**53**				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	**7.2**				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	**84**				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	**35**				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	**68**				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	**730**				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	**730**				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	**1.6**				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	**810**				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	**0.96**				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	**780**				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	**6.7**				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	**6.0**				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	**4.4**				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	**0.18**				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	**3.7**				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	**2.5**				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	**1.9**				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	**15**				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	**15**				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	**0.36**				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**68**		3.0		mg/L			05/09/22 17:05	1
Sulfate (EPA 300.0)	ND		5.0		mg/L			05/09/22 17:05	1
Ammonia as N (EPA 350.1)	**35**		0.22		mg/L			05/09/22 13:17	10
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/03/22 17:20	1
Chemical Oxygen Demand (COD) (EPA 410.4)	**48**		20		mg/L			05/10/22 11:26	1
Total Organic Carbon - Average (SW846 9060)	**13**		1.0		mg/L			04/28/22 20:12	1
Total Alkalinity (SM 2320B)	**730**		10		mg/L			04/29/22 18:03	1
Bicarbonate Alkalinity (SM 2320B)	**730**		10		mg/L			04/29/22 18:03	1

Client Sample ID: 4/5S

Date Collected: 04/20/22 12:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/29/22 18:03	1
Hardness, as CaCO3 (SM 2340C)	**540**		3.0		mg/L			05/10/22 18:37	1
Total Dissolved Solids (SM 2540C)	**780**		10		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	**15**		4.0		mg/L			04/25/22 12:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**7.0**	**HF**	0.1		SU			05/06/22 17:57	1
Specific Conductance (SW846 9050A)	**1600**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.44**				SU			04/20/22 13:15	1
Field Conductivity	**1552**				umhos/cm			04/20/22 13:15	1
Field Temperature	**27.6**				Degrees C			04/20/22 13:15	1
Field Dissolved Oxygen	**2.76**				mg/L			04/20/22 13:15	1
Field EH/ORP	**3.7**				millivolts			04/20/22 13:15	1

Client Sample ID: FB2

Date Collected: 04/20/22 12:40
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-4

Matrix: Water

Method: SW846 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			05/03/22 11:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 11:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 11:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 11:07	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 11:07	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 11:07	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 11:07	1
1,2,3-Trichlorobenzene	ND	*-	1.0		ug/L			05/03/22 11:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 11:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 11:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
1,2-Dibromo-3-Chloropropane	ND	*-	5.0		ug/L			05/03/22 11:07	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 11:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 11:07	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 11:07	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 11:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 11:07	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 11:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 11:07	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 11:07	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 11:07	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 11:07	1
2-Hexanone	ND		5.0		ug/L			05/03/22 11:07	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 11:07	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 11:07	1

Client Sample ID: FB2
Date Collected: 04/20/22 12:40
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-4
Matrix: Water

Method: SW846 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			05/03/22 11:07	1
Acetone	ND		10		ug/L			05/03/22 11:07	1
Benzene	ND		1.0		ug/L			05/03/22 11:07	1
Bromobenzene	ND		1.0		ug/L			05/03/22 11:07	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 11:07	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 11:07	1
Bromoform	ND		1.0		ug/L			05/03/22 11:07	1
Bromomethane	ND		2.0		ug/L			05/03/22 11:07	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 11:07	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 11:07	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 11:07	1
Chloroethane	ND		2.0		ug/L			05/03/22 11:07	1
Chloroform	ND		1.0		ug/L			05/03/22 11:07	1
Chloromethane	ND		2.0		ug/L			05/03/22 11:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 11:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 11:07	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 11:07	1
Dibromomethane	ND		1.0		ug/L			05/03/22 11:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 11:07	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 11:07	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
Methylene Chloride	ND		5.0		ug/L			05/03/22 11:07	1
Naphthalene	ND		1.0		ug/L			05/03/22 11:07	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
Styrene	ND		1.0		ug/L			05/03/22 11:07	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 11:07	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 11:07	1
Toluene	ND		1.0		ug/L			05/03/22 11:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 11:07	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 11:07	1
Trichloroethene	ND		1.0		ug/L			05/03/22 11:07	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 11:07	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 11:07	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 11:07	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 11:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 11:07*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 11:07*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 11:07*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 11:07*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		05/04/22 10:41	05/05/22 08:40	1

Client Sample ID: FB2

Date Collected: 04/20/22 12:40
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-4

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 08:40	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 08:40	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 10:33	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 10:33	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 10:33	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 10:33	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 10:33	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 10:33	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		05/04/22 08:40	05/04/22 20:22	1
Arsenic	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Barium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 20:22	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 20:22	1
Chromium	ND		2.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Cobalt	ND		0.20		ug/L		05/04/22 08:40	05/04/22 20:22	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 20:22	1
Nickel	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 20:22	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 20:22	1
Vanadium	ND		3.0		ug/L		05/04/22 08:40	05/04/22 20:22	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	0.00				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	0.00				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	NC				%			05/11/22 10:42	1
Calcium (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	NC				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	NC				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1

Client Sample ID: FB2

Date Collected: 04/20/22 12:40
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		3.0		mg/L			05/09/22 17:35	1
Sulfate (EPA 300.0)	ND		5.0		mg/L			05/09/22 17:35	1
Ammonia as N (EPA 350.1)	ND		0.040		mg/L			05/09/22 13:33	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/03/22 17:22	1
Chemical Oxygen Demand (COD) (EPA 410.4)	ND		20		mg/L			05/10/22 11:26	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			04/28/22 20:28	1
Total Alkalinity (SM 2320B)	ND		10		mg/L			04/29/22 18:08	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/29/22 18:08	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			04/29/22 18:08	1
Hardness, as CaCO3 (SM 2340C)	ND		3.0		mg/L			05/10/22 18:37	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			04/25/22 12:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**8.4**	**HF**	0.1		SU			05/09/22 22:26	1
Specific Conductance (SW846 9050A)	ND		2.0		umhos/cm			04/25/22 10:28	1

Client Sample ID: 6/7P

Date Collected: 04/20/22 13:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-5
Matrix: Water

Method: SW846 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			05/03/22 16:28	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 16:28	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/03/22 16:28	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/03/22 16:28	5
1,1-Dichloroethane	ND		1.1		ug/L			05/03/22 16:28	5
1,1-Dichloroethene	ND		1.2		ug/L			05/03/22 16:28	5
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 16:28	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:28	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/03/22 16:28	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/03/22 16:28	5
1,2,4-Trimethylbenzene	**1.5**		1.0		ug/L			05/03/22 16:28	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 16:28	5

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 6/7P
Date Collected: 04/20/22 13:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-5
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 16:28	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:28	5
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 16:28	5
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 16:28	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:28	5
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 16:28	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 16:28	5
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 16:28	5
2-Butanone (MEK)	**840**		10		ug/L			05/03/22 16:28	5
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 16:28	5
2-Hexanone	ND		8.5		ug/L			05/03/22 16:28	5
4-Chlorotoluene	ND		1.1		ug/L			05/03/22 16:28	5
4-Isopropyltoluene	**2.7**		1.0		ug/L			05/03/22 16:28	5
4-Methyl-2-pentanone	**160**		5.0		ug/L			05/03/22 16:28	5
Acetone	**1100**		10		ug/L			05/03/22 16:28	5
Benzene	**12**		1.0		ug/L			05/03/22 16:28	5
Bromobenzene	ND		1.0		ug/L			05/03/22 16:28	5
Bromochloromethane	ND		1.0		ug/L			05/03/22 16:28	5
Bromodichloromethane	ND		1.0		ug/L			05/03/22 16:28	5
Bromoform	ND		2.3		ug/L			05/03/22 16:28	5
Bromomethane	ND		2.0		ug/L			05/03/22 16:28	5
Carbon disulfide	ND		2.0		ug/L			05/03/22 16:28	5
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 16:28	5
Chlorobenzene	ND		1.0		ug/L			05/03/22 16:28	5
Chloroethane	ND		2.1		ug/L			05/03/22 16:28	5
Chloroform	ND		1.0		ug/L			05/03/22 16:28	5
Chloromethane	ND		2.0		ug/L			05/03/22 16:28	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:28	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 16:28	5
Dibromochloromethane	ND		1.0		ug/L			05/03/22 16:28	5
Dibromomethane	ND		1.0		ug/L			05/03/22 16:28	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 16:28	5
Ethylbenzene	**7.6**		1.0		ug/L			05/03/22 16:28	5
Hexachlorobutadiene	ND		1.8		ug/L			05/03/22 16:28	5
Isopropylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
Methylene Chloride	ND		5.0		ug/L			05/03/22 16:28	5
Naphthalene	**22**		1.1		ug/L			05/03/22 16:28	5
n-Butylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
N-Propylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
Styrene	ND		1.8		ug/L			05/03/22 16:28	5
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 16:28	5
Tetrachloroethene	ND		1.0		ug/L			05/03/22 16:28	5
Toluene	**18**		1.0		ug/L			05/03/22 16:28	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 16:28	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 16:28	5
Trichloroethene	ND		1.0		ug/L			05/03/22 16:28	5
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 16:28	5

Client Sample ID: 6/7P

Date Collected: 04/20/22 13:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-5

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			05/03/22 16:28	5
Xylenes (total)	**20**		2.0		ug/L			05/03/22 16:28	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*52*	*T J*	*ug/L*		*3.69*	*N/A*		*05/03/22 16:28*	*5*
Unknown	*330*	*T J*	*ug/L*		*4.63*	*N/A*		*05/03/22 16:28*	*5*
Unknown	*27*	*T J*	*ug/L*		*4.87*	*N/A*		*05/03/22 16:28*	*5*
Furan, tetrahydro-	*120*	*T J N*	*ug/L*		*4.95*	*109-99-9*		*05/03/22 16:28*	*5*
m-Xylene & p-Xylene	*14*		*ug/L*		*8.67*	*179601-23-1*		*05/03/22 16:28*	*5*
o-Xylene	*5.6*		*ug/L*		*9.05*	*95-47-6*		*05/03/22 16:28*	*5*
Eucalyptol	*48*	*T J N*	*ug/L*		*10.80*	*470-82-6*		*05/03/22 16:28*	*5*
Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl-	*35*	*T J N*	*ug/L*		*11.82*	*1195-79-5*		*05/03/22 16:28*	*5*
Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1R)-	*44*	*T J N*	*ug/L*		*12.62*	*464-49-3*		*05/03/22 16:28*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 16:28*	*5*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 16:28*	*5*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 16:28*	*5*
Toluene-d8 (Surr)	*111*		*80 - 125*		*05/03/22 16:28*	*5*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**20000**		100		ug/L		05/04/22 10:41	05/05/22 08:44	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 08:44	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 08:44	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**91000**		500		ug/L		05/04/22 09:55	05/05/22 10:37	1
Iron	**6400**		30		ug/L		05/04/22 09:55	05/05/22 10:37	1
Magnesium	**69000**		200		ug/L		05/04/22 09:55	05/05/22 10:37	1
Manganese	**3300**		3.0		ug/L		05/04/22 09:55	05/05/22 10:37	1
Potassium	**59000**		500		ug/L		05/04/22 09:55	05/05/22 10:37	1
Sodium	**360000**		1000		ug/L		05/04/22 09:55	05/05/22 10:37	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**64**		0.60		ug/L		05/04/22 08:40	05/04/22 21:15	1
Arsenic	**310**		1.0		ug/L		05/04/22 08:40	05/09/22 15:00	1
Barium	**710**		1.0		ug/L		05/04/22 08:40	05/04/22 21:15	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:15	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:15	1
Chromium	**34**		2.0		ug/L		05/04/22 08:40	05/04/22 21:15	1
Cobalt	**22**		0.20		ug/L		05/04/22 08:40	05/04/22 21:15	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:15	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 21:15	1
Nickel	**68**		1.0		ug/L		05/04/22 08:40	05/04/22 21:15	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:15	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:15	1

Client Sample ID: 6/7P

Date Collected: 04/20/22 13:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-5

Matrix: Water

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	39		3.0		ug/L		05/04/22 08:40	05/04/22 21:15	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	110				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	110				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	-2.2				%			05/11/22 10:42	1
Calcium (SM 1030E)	91				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	69				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	59				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	360				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	1100				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	890				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	4300				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	4300				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	-2.2				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	5200				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.56				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	2900				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	6.4				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	4.5				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	5.7				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	1.5				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	16				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	79				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	25				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	86				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	86				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.34				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	890		100		mg/L			05/09/22 19:20	100
Sulfate (EPA 300.0)	ND		5.0		mg/L			05/09/22 19:05	1
Ammonia as N (EPA 350.1)	1100		5.5		mg/L			05/10/22 14:13	250
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/04/22 17:34	1
Chemical Oxygen Demand (COD) (EPA 410.4)	1100		170		mg/L			05/10/22 11:26	20
Total Organic Carbon - Average (SW846 9060)	260		3.5		mg/L			04/28/22 21:19	10
Total Alkalinity (SM 2320B)	4300	H	10		mg/L			05/06/22 10:28	1
Bicarbonate Alkalinity (SM 2320B)	4300	H	10		mg/L			05/06/22 10:28	1
Carbonate Alkalinity (SM 2320B)	ND	H	10		mg/L			05/06/22 10:28	1
Hardness, as CaCO3 (SM 2340C)	940		3.0		mg/L			05/10/22 18:37	5

Client Sample ID: 6/7P

Date Collected: 04/20/22 13:30
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	2900		19		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	39		4.0		mg/L			04/25/22 12:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.7	HF	0.1		SU			05/05/22 15:07	1
Specific Conductance (SW846 9050A)	11000		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.32				SU			04/20/22 14:30	1
Field Conductivity	11177				umhos/cm			04/20/22 14:30	1
Field Temperature	21.6				Degrees C			04/20/22 14:30	1
Field Dissolved Oxygen	1.12				mg/L			04/20/22 14:30	1
Field EH/ORP	-20.9				millivolts			04/20/22 14:30	1

Client Sample ID: 6/7S

Date Collected: 04/22/22 11:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-6
Matrix: Water

Method: SW846 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			05/05/22 03:13	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 03:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 03:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 03:13	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 03:13	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 03:13	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 03:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 03:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/05/22 03:13	1
1,2-Dibromoethane	ND		1.0		ug/L			05/05/22 03:13	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 03:13	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 03:13	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 03:13	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 03:13	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 03:13	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 03:13	1
2-Hexanone	ND		5.0		ug/L			05/05/22 03:13	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 03:13	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 03:13	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 03:13	1
Acetone	ND		10		ug/L			05/05/22 03:13	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 6/7S
Date Collected: 04/22/22 11:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-6
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/05/22 03:13	1
Bromobenzene	ND		1.0		ug/L			05/05/22 03:13	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 03:13	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 03:13	1
Bromoform	ND		1.0		ug/L			05/05/22 03:13	1
Bromomethane	ND		2.0		ug/L			05/05/22 03:13	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 03:13	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 03:13	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 03:13	1
Chloroethane	ND		2.0		ug/L			05/05/22 03:13	1
Chloroform	ND		1.0		ug/L			05/05/22 03:13	1
Chloromethane	ND		2.0		ug/L			05/05/22 03:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 03:13	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 03:13	1
Dibromomethane	ND		1.0		ug/L			05/05/22 03:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 03:13	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 03:13	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 03:13	1
Naphthalene	ND		1.0		ug/L			05/05/22 03:13	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
Styrene	ND		1.0		ug/L			05/05/22 03:13	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 03:13	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 03:13	1
Toluene	ND		1.0		ug/L			05/05/22 03:13	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:13	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 03:13	1
Trichloroethene	ND		1.0		ug/L			05/05/22 03:13	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 03:13	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 03:13	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 03:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*190*	*T J*	*ug/L*		*1.29*	*N/A*		*05/05/22 03:13*	*1*
Unknown	*9.2*	*T J*	*ug/L*		*1.83*	*N/A*		*05/05/22 03:13*	*1*
Unknown	*17*	*T J*	*ug/L*		*3.15*	*N/A*		*05/05/22 03:13*	*1*
Silanol, trimethyl-	*83*	*T J N*	*ug/L*		*3.98*	*1066-40-6*		*05/05/22 03:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/05/22 03:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*05/05/22 03:13*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*05/05/22 03:13*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*05/05/22 03:13*	*1*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 6/7S

Date Collected: 04/22/22 11:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-6

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**25000**		100		ug/L		05/04/22 10:41	05/05/22 09:05	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 09:05	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 09:05	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**230000**		500		ug/L		05/04/22 09:55	05/05/22 10:57	1
Iron	**10000**		30		ug/L		05/04/22 09:55	05/05/22 10:57	1
Magnesium	**140000**		200		ug/L		05/04/22 09:55	05/05/22 10:57	1
Manganese	**9900**		3.0		ug/L		05/04/22 09:55	05/05/22 10:57	1
Potassium	**35000**		500		ug/L		05/04/22 09:55	05/05/22 10:57	1
Sodium	**450000**		1000		ug/L		05/04/22 09:55	05/05/22 10:57	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.3**		0.60		ug/L		05/04/22 08:40	05/04/22 21:19	1
Arsenic	**31**		1.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Barium	**590**		1.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:19	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:19	1
Chromium	**6.9**		2.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Cobalt	**6.1**		0.20		ug/L		05/04/22 08:40	05/04/22 21:19	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 21:19	1
Nickel	**55**		1.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:19	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:19	1
Vanadium	**9.7**		3.0		ug/L		05/04/22 08:40	05/04/22 21:19	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**46**				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	**48**				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	**1.9**				%			05/11/22 10:42	1
Calcium (SM 1030E)	**230**				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	**140**				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	**35**				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	**450**				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	**49**				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	**700**				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	**1300**				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	**1300**				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	**1.9**				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	**2400**				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	**0.96**				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	**2300**				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	**10**				mg/L			05/11/22 10:42	1

Client Sample ID: 6/7S

Date Collected: 04/22/22 11:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-6

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium (SM 1030E (meq))	11				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	12				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	0.90				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	20				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	3.5				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	20				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	26				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	26				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.54				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	700		20		mg/L			05/09/22 19:50	20
Sulfate (EPA 300.0)	ND		5.0		mg/L			05/09/22 19:35	1
Ammonia as N (EPA 350.1)	49		0.22		mg/L			05/09/22 13:30	10
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/03/22 17:26	1
Chemical Oxygen Demand (COD) (EPA 410.4)	300		43		mg/L			05/10/22 13:22	5
Total Organic Carbon - Average (SW846 9060)	77		1.7		mg/L			04/28/22 21:36	5
Total Alkalinity (SM 2320B)	1300		10		mg/L			05/05/22 20:17	1
Bicarbonate Alkalinity (SM 2320B)	1300		10		mg/L			05/05/22 20:17	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/05/22 20:17	1
Hardness, as CaCO3 (SM 2340C)	1400		3.0		mg/L			05/10/22 18:37	5
Total Dissolved Solids (SM 2540C)	2300		19		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	35		4.0		mg/L			04/27/22 15:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.1	HF	0.1		SU			05/05/22 15:10	1
Specific Conductance (SW846 9050A)	4200		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.65				SU			04/22/22 12:00	1
Field Conductivity	2614				umhos/cm			04/22/22 12:00	1
Field Temperature	25.5				Degrees C			04/22/22 12:00	1
Field Dissolved Oxygen	2.21				mg/L			04/22/22 12:00	1
Field EH/ORP	-22.1				millivolts			04/22/22 12:00	1

Client Sample ID: 8S

Date Collected: 04/22/22 10:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-7

Matrix: Water

Method: SW846 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			05/05/22 03:33	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 03:33	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 8S
Date Collected: 04/22/22 10:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-7
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 03:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 03:33	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 03:33	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 03:33	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 03:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 03:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/05/22 03:33	1
1,2-Dibromoethane	ND		1.0		ug/L			05/05/22 03:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 03:33	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 03:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 03:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 03:33	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 03:33	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 03:33	1
2-Hexanone	ND		5.0		ug/L			05/05/22 03:33	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 03:33	1
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 03:33	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 03:33	1
Acetone	ND		10		ug/L			05/05/22 03:33	1
Benzene	ND		1.0		ug/L			05/05/22 03:33	1
Bromobenzene	ND		1.0		ug/L			05/05/22 03:33	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 03:33	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 03:33	1
Bromoform	ND		1.0		ug/L			05/05/22 03:33	1
Bromomethane	ND		2.0		ug/L			05/05/22 03:33	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 03:33	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 03:33	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 03:33	1
Chloroethane	ND		2.0		ug/L			05/05/22 03:33	1
Chloroform	ND		1.0		ug/L			05/05/22 03:33	1
Chloromethane	ND		2.0		ug/L			05/05/22 03:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 03:33	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 03:33	1
Dibromomethane	ND		1.0		ug/L			05/05/22 03:33	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 03:33	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 03:33	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 03:33	1
Naphthalene	ND		1.0		ug/L			05/05/22 03:33	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 03:33	1

Client Sample ID: 8S

Date Collected: 04/22/22 10:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-7

Matrix: Water

Method: SW846 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			05/05/22 03:33	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
Styrene	ND		1.0		ug/L			05/05/22 03:33	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 03:33	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 03:33	1
Toluene	ND		1.0		ug/L			05/05/22 03:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:33	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 03:33	1
Trichloroethene	ND		1.0		ug/L			05/05/22 03:33	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 03:33	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 03:33	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 03:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*150*	*T J*	*ug/L*		*1.29*	*N/A*		*05/05/22 03:33*	*1*
Silanol, trimethyl-	*5.4*	*T J N*	*ug/L*		*3.99*	*1066-40-6*		*05/05/22 03:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/05/22 03:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*05/05/22 03:33*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*05/05/22 03:33*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/05/22 03:33*	*1*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**21000**		100		ug/L		05/04/22 10:41	05/05/22 09:09	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 09:09	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 09:09	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**95000**		500		ug/L		05/04/22 09:55	05/05/22 11:02	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 11:02	1
Magnesium	**48000**		200		ug/L		05/04/22 09:55	05/05/22 11:02	1
Manganese	**1400**		3.0		ug/L		05/04/22 09:55	05/05/22 11:02	1
Potassium	**2800**		500		ug/L		05/04/22 09:55	05/05/22 11:02	1
Sodium	**320000**		1000		ug/L		05/04/22 09:55	05/05/22 11:02	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		05/04/22 08:40	05/04/22 21:23	1
Arsenic	**2.0**		1.0		ug/L		05/04/22 08:40	05/04/22 21:23	1
Barium	**70**		1.0		ug/L		05/04/22 08:40	05/04/22 21:23	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:23	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:23	1
Chromium	ND		2.0		ug/L		05/04/22 08:40	05/04/22 21:23	1
Cobalt	**1.3**		0.20		ug/L		05/04/22 08:40	05/04/22 21:23	1
Copper	**6.9**		1.0		ug/L		05/04/22 08:40	05/04/22 21:23	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 21:23	1
Nickel	**13**		1.0		ug/L		05/04/22 08:40	05/04/22 21:23	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:23	1

Client Sample ID: 8S

Date Collected: 04/22/22 10:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-7

Matrix: Water

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:23	1
Vanadium	**6.7**		3.0		ug/L		05/04/22 08:40	05/04/22 21:23	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**23**				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	**23**				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	**-1.3**				%			05/11/22 10:42	1
Calcium (SM 1030E)	**95**				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	**48**				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	**2.8**				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	**320**				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	**98**				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	**170**				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	**850**				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	**850**				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	**-1.3**				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	**1100**				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	**1.2**				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	**1300**				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	**0.00**				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	**4.7**				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	**3.9**				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	**0.072**				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	**14**				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	**2.8**				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	**3.5**				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	**17**				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	**17**				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	**0.00**				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**98**		3.0		mg/L			05/09/22 20:05	1
Sulfate (EPA 300.0)	**170**		5.0		mg/L			05/09/22 20:05	1
Ammonia as N (EPA 350.1)	ND		0.040		mg/L			05/02/22 16:04	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/04/22 17:36	1
Chemical Oxygen Demand (COD) (EPA 410.4)	**47**		20		mg/L			05/10/22 13:22	1
Total Organic Carbon - Average (SW846 9060)	**11**		1.0		mg/L			04/28/22 21:53	1
Total Alkalinity (SM 2320B)	**850**		10		mg/L			05/03/22 21:16	1
Bicarbonate Alkalinity (SM 2320B)	**850**		10		mg/L			05/03/22 21:16	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 21:16	1

Client Sample ID: 8S

Date Collected: 04/22/22 10:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3 (SM 2340C)	**490**		3.0		mg/L			05/10/22 18:37	2
Total Dissolved Solids (SM 2540C)	**1300**		10		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			04/27/22 15:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**7.3**	**HF**	0.1		SU			05/06/22 18:09	1
Specific Conductance (SW846 9050A)	**2100**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.76**				SU			04/22/22 11:15	1
Field Conductivity	**2258**				umhos/cm			04/22/22 11:15	1
Field Temperature	**22.2**				Degrees C			04/22/22 11:15	1
Field Dissolved Oxygen	**1.37**				mg/L			04/22/22 11:15	1
Field EH/ORP	**63.4**				millivolts			04/22/22 11:15	1

Client Sample ID: 8P

Date Collected: 04/22/22 09:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-8
Matrix: Water

Method: SW846 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			05/05/22 03:54	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 03:54	5
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/05/22 03:54	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/05/22 03:54	5
1,1-Dichloroethane	ND		1.1		ug/L			05/05/22 03:54	5
1,1-Dichloroethene	ND		1.2		ug/L			05/05/22 03:54	5
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 03:54	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/05/22 03:54	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/05/22 03:54	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/05/22 03:54	5
1,2,4-Trimethylbenzene	**1.3**		1.0		ug/L			05/05/22 03:54	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/05/22 03:54	5
1,2-Dibromoethane	ND		1.0		ug/L			05/05/22 03:54	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:54	5
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 03:54	5
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 03:54	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:54	5
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 03:54	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 03:54	5
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 03:54	5
2-Butanone (MEK)	ND		10		ug/L			05/05/22 03:54	5
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 03:54	5
2-Hexanone	ND		8.5		ug/L			05/05/22 03:54	5
4-Chlorotoluene	ND		1.1		ug/L			05/05/22 03:54	5
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 03:54	5
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 03:54	5
Acetone	ND		10		ug/L			05/05/22 03:54	5

Client Sample ID: 8P
Date Collected: 04/22/22 09:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-8
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/05/22 03:54	5
Bromobenzene	ND		1.0		ug/L			05/05/22 03:54	5
Bromochloromethane	ND		1.0		ug/L			05/05/22 03:54	5
Bromodichloromethane	ND		1.0		ug/L			05/05/22 03:54	5
Bromoform	ND		2.3		ug/L			05/05/22 03:54	5
Bromomethane	ND		2.0		ug/L			05/05/22 03:54	5
Carbon disulfide	ND		2.0		ug/L			05/05/22 03:54	5
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 03:54	5
Chlorobenzene	ND		1.0		ug/L			05/05/22 03:54	5
Chloroethane	ND		2.1		ug/L			05/05/22 03:54	5
Chloroform	ND		1.0		ug/L			05/05/22 03:54	5
Chloromethane	ND		2.0		ug/L			05/05/22 03:54	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:54	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 03:54	5
Dibromochloromethane	ND		1.0		ug/L			05/05/22 03:54	5
Dibromomethane	ND		1.0		ug/L			05/05/22 03:54	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 03:54	5
Ethylbenzene	**1.5**		1.0		ug/L			05/05/22 03:54	5
Hexachlorobutadiene	ND		1.8		ug/L			05/05/22 03:54	5
Isopropylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
Methylene Chloride	ND		5.0		ug/L			05/05/22 03:54	5
Naphthalene	**2.2**		1.1		ug/L			05/05/22 03:54	5
n-Butylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
N-Propylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
Styrene	ND		1.8		ug/L			05/05/22 03:54	5
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 03:54	5
Tetrachloroethene	ND		1.0		ug/L			05/05/22 03:54	5
Toluene	**2.6**		1.0		ug/L			05/05/22 03:54	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 03:54	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 03:54	5
Trichloroethene	ND		1.0		ug/L			05/05/22 03:54	5
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 03:54	5
Vinyl chloride	ND		1.0		ug/L			05/05/22 03:54	5
Xylenes (total)	**7.1**		2.0		ug/L			05/05/22 03:54	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*1100*	*T J*	*ug/L*		*1.28*	*N/A*		*05/05/22 03:54*	*5*
Unknown	*55*	*T J*	*ug/L*		*3.98*	*N/A*		*05/05/22 03:54*	*5*
m-Xylene & p-Xylene	*5.3*		*ug/L*		*7.83*	*179601-23-1*		*05/05/22 03:54*	*5*
o-Xylene	*1.8*		*ug/L*		*8.19*	*95-47-6*		*05/05/22 03:54*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/05/22 03:54*	*5*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*05/05/22 03:54*	*5*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*05/05/22 03:54*	*5*
Toluene-d8 (Surr)	*100*		*80 - 125*		*05/05/22 03:54*	*5*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 8P

Date Collected: 04/22/22 09:15
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-8

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	11000		100		ug/L		05/04/22 10:41	05/05/22 09:13	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 09:13	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 09:13	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	97000		500		ug/L		05/04/22 09:55	05/05/22 11:06	1
Iron	2900		30		ug/L		05/04/22 09:55	05/05/22 11:06	1
Magnesium	49000		200		ug/L		05/04/22 09:55	05/05/22 11:06	1
Manganese	1500		3.0		ug/L		05/04/22 09:55	05/05/22 11:06	1
Potassium	82000		500		ug/L		05/04/22 09:55	05/05/22 11:06	1
Sodium	320000		1000		ug/L		05/04/22 09:55	05/05/22 11:06	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	14		0.60		ug/L		05/04/22 08:40	05/04/22 21:26	1
Arsenic	58		1.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Barium	180		1.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:26	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:26	1
Chromium	38		2.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Cobalt	12		0.20		ug/L		05/04/22 08:40	05/04/22 21:26	1
Copper	7.3		1.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 21:26	1
Nickel	25		1.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:26	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:26	1
Vanadium	24		3.0		ug/L		05/04/22 08:40	05/04/22 21:26	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	40				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	52				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	13				%			05/11/22 10:42	1
Calcium (SM 1030E)	97				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	49				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	82				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	320				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	380				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	420				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	25				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	1400				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	1400				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	0.47				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	13				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	2200				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.73				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	1600				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	2.9				mg/L			05/11/22 10:42	1

Client Sample ID: 8P

Lab Sample ID: 280-161446-8

Date Collected: 04/22/22 09:15

Matrix: Water

Date Received: 04/23/22 11:25

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium (SM 1030E (meq))	4.8				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	4.0				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	2.1				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	14				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	27				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	12				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.52				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	28				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	28				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.034				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.16				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	420		20		mg/L			05/09/22 20:50	20
Sulfate (EPA 300.0)	25		5.0		mg/L			05/09/22 20:35	1
Ammonia as N (EPA 350.1)	380		0.040		mg/L			05/02/22 16:07	1
Nitrate/Nitrite (EPA 353.2)	0.47		0.050		mg/L			05/03/22 17:42	1
Chemical Oxygen Demand (COD) (EPA 410.4)	3000		870		mg/L			05/10/22 13:22	100
Total Organic Carbon - Average (SW846 9060)	400		6.9		mg/L			05/06/22 17:19	20
Total Alkalinity (SM 2320B)	1400		10		mg/L			05/03/22 21:33	1
Bicarbonate Alkalinity (SM 2320B)	1400		10		mg/L			05/03/22 21:33	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 21:33	1
Hardness, as CaCO3 (SM 2340C)	480		3.0		mg/L			05/10/22 18:37	2
Total Dissolved Solids (SM 2540C)	1600		19		mg/L			04/29/22 11:13	1
Total Suspended Solids (SM 2540D)	26		4.0		mg/L			04/27/22 15:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.3	HF	0.1		SU			05/06/22 18:12	1
Specific Conductance (SW846 9050A)	3800		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.10				SU			04/22/22 10:15	1
Field Conductivity	5426				umhos/cm			04/22/22 10:15	1
Field Temperature	14.0				Degrees C			04/22/22 10:15	1
Field Dissolved Oxygen	4.04				mg/L			04/22/22 10:15	1
Field EH/ORP	50.2				millivolts			04/22/22 10:15	1

Client Sample ID: 9P

Lab Sample ID: 280-161446-9

Date Collected: 04/22/22 12:00

Matrix: Water

Date Received: 04/23/22 11:25

Method: SW846 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			05/05/22 04:15	5
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 04:15	5

Client Sample ID: 9P
Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-9
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.1		ug/L			05/05/22 04:15	5
1,1,2-Trichloroethane	ND		1.4		ug/L			05/05/22 04:15	5
1,1-Dichloroethane	ND		1.1		ug/L			05/05/22 04:15	5
1,1-Dichloroethene	ND		1.2		ug/L			05/05/22 04:15	5
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 04:15	5
1,2,3-Trichlorobenzene	ND		1.1		ug/L			05/05/22 04:15	5
1,2,3-Trichloropropane	ND		1.7		ug/L			05/05/22 04:15	5
1,2,4-Trichlorobenzene	ND		1.1		ug/L			05/05/22 04:15	5
1,2,4-Trimethylbenzene	**1.2**		1.0		ug/L			05/05/22 04:15	5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/05/22 04:15	5
1,2-Dibromoethane	ND		1.0		ug/L			05/05/22 04:15	5
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:15	5
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 04:15	5
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 04:15	5
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 04:15	5
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:15	5
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 04:15	5
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:15	5
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 04:15	5
2-Butanone (MEK)	ND		10		ug/L			05/05/22 04:15	5
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 04:15	5
2-Hexanone	ND		8.5		ug/L			05/05/22 04:15	5
4-Chlorotoluene	ND		1.1		ug/L			05/05/22 04:15	5
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 04:15	5
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 04:15	5
Acetone	ND		10		ug/L			05/05/22 04:15	5
Benzene	**1.6**		1.0		ug/L			05/05/22 04:15	5
Bromobenzene	ND		1.0		ug/L			05/05/22 04:15	5
Bromochloromethane	ND		1.0		ug/L			05/05/22 04:15	5
Bromodichloromethane	ND		1.0		ug/L			05/05/22 04:15	5
Bromoform	ND		2.3		ug/L			05/05/22 04:15	5
Bromomethane	ND		2.0		ug/L			05/05/22 04:15	5
Carbon disulfide	ND		2.0		ug/L			05/05/22 04:15	5
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 04:15	5
Chlorobenzene	ND		1.0		ug/L			05/05/22 04:15	5
Chloroethane	ND		2.1		ug/L			05/05/22 04:15	5
Chloroform	ND		1.0		ug/L			05/05/22 04:15	5
Chloromethane	ND		2.0		ug/L			05/05/22 04:15	5
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 04:15	5
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 04:15	5
Dibromochloromethane	ND		1.0		ug/L			05/05/22 04:15	5
Dibromomethane	ND		1.0		ug/L			05/05/22 04:15	5
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 04:15	5
Ethylbenzene	**1.5**		1.0		ug/L			05/05/22 04:15	5
Hexachlorobutadiene	ND		1.8		ug/L			05/05/22 04:15	5
Isopropylbenzene	ND		1.0		ug/L			05/05/22 04:15	5
Methylene Chloride	ND		5.0		ug/L			05/05/22 04:15	5
Naphthalene	**2.5**		1.1		ug/L			05/05/22 04:15	5
n-Butylbenzene	ND		1.0		ug/L			05/05/22 04:15	5

Client Sample ID: 9P

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-9

Matrix: Water

Method: SW846 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			05/05/22 04:15	5
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 04:15	5
Styrene	ND		1.8		ug/L			05/05/22 04:15	5
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 04:15	5
Tetrachloroethene	ND		1.0		ug/L			05/05/22 04:15	5
Toluene	**2.6**		1.0		ug/L			05/05/22 04:15	5
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 04:15	5
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 04:15	5
Trichloroethene	ND		1.0		ug/L			05/05/22 04:15	5
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 04:15	5
Vinyl chloride	ND		1.0		ug/L			05/05/22 04:15	5
Xylenes (total)	**8.3**		2.0		ug/L			05/05/22 04:15	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*1100*	*T J*	*ug/L*		*1.28*	*N/A*		*05/05/22 04:15*	*5*
Unknown	*57*	*T J*	*ug/L*		*3.98*	*N/A*		*05/05/22 04:15*	*5*
m-Xylene & p-Xylene	*6.7*		*ug/L*		*7.83*	*179601-23-1*		*05/05/22 04:15*	*5*
o-Xylene	*1.6*		*ug/L*		*8.18*	*95-47-6*		*05/05/22 04:15*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/05/22 04:15*	*5*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*05/05/22 04:15*	*5*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*05/05/22 04:15*	*5*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/05/22 04:15*	*5*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**23000**		100		ug/L		05/04/22 10:41	05/05/22 09:18	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 09:18	1
Zinc	**29**		26		ug/L		05/04/22 10:41	05/05/22 09:18	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**170000**		500		ug/L		05/04/22 09:55	05/05/22 11:10	1
Iron	**4600**		30		ug/L		05/04/22 09:55	05/05/22 11:10	1
Magnesium	**100000**		200		ug/L		05/04/22 09:55	05/05/22 11:10	1
Manganese	**3600**		3.0		ug/L		05/04/22 09:55	05/05/22 11:10	1
Potassium	**230000**		500		ug/L		05/04/22 09:55	05/05/22 11:10	1
Sodium	**910000**		1000		ug/L		05/04/22 09:55	05/05/22 11:10	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.6**		0.60		ug/L		05/04/22 08:40	05/04/22 21:30	1
Arsenic	**31**		1.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Barium	**610**		1.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:30	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:30	1
Chromium	**87**		2.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Cobalt	**36**		0.20		ug/L		05/04/22 08:40	05/04/22 21:30	1
Copper	**5.7**		1.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Lead	**1.8**		0.50		ug/L		05/04/22 08:40	05/04/22 21:30	1

Client Sample ID: 9P

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-9

Matrix: Water

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	100		1.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 21:30	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:30	1
Vanadium	110		3.0		ug/L		05/04/22 08:40	05/04/22 21:30	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	90				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	97				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	4.1				%			05/11/22 10:42	1
Calcium (SM 1030E)	170				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	100				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	230				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	910				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	490				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	1100				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	26				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	2900				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	2900				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	3.5				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	4.1				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	4700				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.80				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	3800				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	4.6				mg/L			05/11/22 10:42	1
Calcium (SM 1030E (meq))	8.5				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	8.2				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	5.9				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	40				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	35				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	31				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.54				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	58				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	58				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.25				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.25				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1100		20		mg/L			05/09/22 21:20	20
Sulfate (EPA 300.0)	26		5.0		mg/L			05/09/22 21:05	1
Ammonia as N (EPA 350.1)	490		0.040		mg/L			05/02/22 16:09	1
Nitrate/Nitrite (EPA 353.2)	3.5		0.050		mg/L			05/04/22 17:38	1
Chemical Oxygen Demand (COD) (EPA 410.4)	1200		170		mg/L			05/10/22 13:22	20
Total Organic Carbon - Average (SW846 9060)	310		3.5		mg/L			05/02/22 21:35	10
Total Alkalinity (SM 2320B)	2900		10		mg/L			05/06/22 10:47	1

Client Sample ID: 9P

Date Collected: 04/22/22 12:00
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 2320B)	**2900**		10		mg/L			05/06/22 10:47	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/06/22 10:47	1
Hardness, as CaCO3 (SM 2340C)	**1200**		3.0		mg/L			05/10/22 18:37	5
Total Dissolved Solids (SM 2540C)	**3800**		19		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	**20**		4.0		mg/L			04/29/22 15:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	**7.7**	**HF**	0.1		SU			05/06/22 18:16	1
Specific Conductance (SW846 9050A)	**8400**		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.01**				SU			04/22/22 13:00	1
Field Conductivity	**4578**				umhos/cm			04/22/22 13:00	1
Field Temperature	**25.6**				Degrees C			04/22/22 13:00	1
Field Dissolved Oxygen	**1.45**				mg/L			04/22/22 13:00	1
Field EH/ORP	**-14.6**				millivolts			04/22/22 13:00	1

Client Sample ID: 9S

Date Collected: 04/22/22 12:20
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-10
Matrix: Water

Method: SW846 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			05/05/22 04:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/05/22 04:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/05/22 04:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/05/22 04:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/05/22 04:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/05/22 04:36	1
1,1-Dichloropropene	ND		1.0		ug/L			05/05/22 04:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/05/22 04:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/05/22 04:36	1
1,2-Dibromoethane	ND		1.0		ug/L			05/05/22 04:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,2-Dichloroethane	ND		1.0		ug/L			05/05/22 04:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/05/22 04:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
1,3-Dichloropropane	ND		1.0		ug/L			05/05/22 04:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
2,2-Dichloropropane	ND		5.0		ug/L			05/05/22 04:36	1
2-Butanone (MEK)	ND		6.0		ug/L			05/05/22 04:36	1
2-Chlorotoluene	ND		1.0		ug/L			05/05/22 04:36	1
2-Hexanone	ND		5.0		ug/L			05/05/22 04:36	1
4-Chlorotoluene	ND		1.0		ug/L			05/05/22 04:36	1

Client Sample ID: 9S
Date Collected: 04/22/22 12:20
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-10
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		1.0		ug/L			05/05/22 04:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/05/22 04:36	1
Acetone	ND		10		ug/L			05/05/22 04:36	1
Benzene	ND		1.0		ug/L			05/05/22 04:36	1
Bromobenzene	ND		1.0		ug/L			05/05/22 04:36	1
Bromochloromethane	ND		1.0		ug/L			05/05/22 04:36	1
Bromodichloromethane	ND		1.0		ug/L			05/05/22 04:36	1
Bromoform	ND		1.0		ug/L			05/05/22 04:36	1
Bromomethane	ND		2.0		ug/L			05/05/22 04:36	1
Carbon disulfide	ND		2.0		ug/L			05/05/22 04:36	1
Carbon tetrachloride	ND		1.0		ug/L			05/05/22 04:36	1
Chlorobenzene	ND		1.0		ug/L			05/05/22 04:36	1
Chloroethane	ND		2.0		ug/L			05/05/22 04:36	1
Chloroform	ND		1.0		ug/L			05/05/22 04:36	1
Chloromethane	ND		2.0		ug/L			05/05/22 04:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 04:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/05/22 04:36	1
Dibromochloromethane	ND		1.0		ug/L			05/05/22 04:36	1
Dibromomethane	ND		1.0		ug/L			05/05/22 04:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/05/22 04:36	1
Ethylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
Hexachlorobutadiene	ND		1.0		ug/L			05/05/22 04:36	1
Isopropylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
Methylene Chloride	ND		5.0		ug/L			05/05/22 04:36	1
Naphthalene	ND		1.0		ug/L			05/05/22 04:36	1
n-Butylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
N-Propylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
sec-Butylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
Styrene	ND		1.0		ug/L			05/05/22 04:36	1
tert-Butylbenzene	ND		1.0		ug/L			05/05/22 04:36	1
Tetrachloroethene	ND		1.0		ug/L			05/05/22 04:36	1
Toluene	ND		1.0		ug/L			05/05/22 04:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/05/22 04:36	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/05/22 04:36	1
Trichloroethene	ND		1.0		ug/L			05/05/22 04:36	1
Trichlorofluoromethane	ND		2.0		ug/L			05/05/22 04:36	1
Vinyl chloride	ND		1.0		ug/L			05/05/22 04:36	1
Xylenes (total)	ND		2.0		ug/L			05/05/22 04:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*250*	*T J*	*ug/L*		*1.28*	*N/A*		*05/05/22 04:36*	*1*
Unknown	*6.5*	*T J*	*ug/L*		*3.16*	*N/A*		*05/05/22 04:36*	*1*
Silanol, trimethyl-	*31*	*T J N*	*ug/L*		*3.98*	*1066-40-6*		*05/05/22 04:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/05/22 04:36*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*05/05/22 04:36*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*05/05/22 04:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*05/05/22 04:36*	*1*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 9S

Date Collected: 04/22/22 12:20
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-10

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	25000		100		ug/L		05/04/22 10:41	05/05/22 09:22	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 09:22	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 09:22	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	150000		500		ug/L		05/04/22 09:55	05/05/22 11:14	1
Iron	4700		30		ug/L		05/04/22 09:55	05/05/22 11:14	1
Magnesium	79000		200		ug/L		05/04/22 09:55	05/05/22 11:14	1
Manganese	2400		3.0		ug/L		05/04/22 09:55	05/05/22 11:14	1
Potassium	35000		500		ug/L		05/04/22 09:55	05/05/22 11:14	1
Sodium	410000		1000		ug/L		05/04/22 09:55	05/05/22 11:14	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.60		0.60		ug/L		05/04/22 08:40	05/04/22 21:34	1
Arsenic	17		1.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Barium	390		1.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 21:34	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 21:34	1
Chromium	24		2.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Cobalt	11		0.20		ug/L		05/04/22 08:40	05/04/22 21:34	1
Copper	2.1		1.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 21:34	1
Nickel	39		1.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Selenium	1.1		1.0		ug/L		05/04/22 08:40	05/04/22 21:34	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 21:34	1
Vanadium	23		3.0		ug/L		05/04/22 08:40	05/04/22 21:34	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	46				meq/L			05/11/22 10:42	1
Total Cations (SM 1030E)	44				meq/L			05/11/22 10:42	1
Percent Difference (SM 1030E)	-1.8				%			05/11/22 10:42	1
Calcium (SM 1030E)	150				mg/L			05/11/22 10:42	1
Magnesium (SM 1030E)	79				mg/L			05/11/22 10:42	1
Potassium (SM 1030E)	35				mg/L			05/11/22 10:42	1
Sodium (SM 1030E)	410				mg/L			05/11/22 10:42	1
Ammonia as N (SM 1030E)	160				mg/L			05/11/22 10:42	1
Chloride (SM 1030E)	550				mg/L			05/11/22 10:42	1
Sulfate (SM 1030E)	27				mg/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E)	1500				mg/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E)	1500				mg/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			05/11/22 10:42	1
Anion/Cation Balance (SM 1030E)	-1.8				%			05/11/22 10:42	1
Calculated TDS (SM 1030E)	2300				mg/L			05/11/22 10:42	1
TDS Ratio (SM 1030E)	0.96				NONE			05/11/22 10:42	1
Total Dissolved Solids (SM 1030E)	2200				mg/L			05/11/22 10:42	1
Iron (SM 1030E)	4.7				mg/L			05/11/22 10:42	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

Client Sample ID: 9S

Date Collected: 04/22/22 12:20
Date Received: 04/23/22 11:25

Lab Sample ID: 280-161446-10

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Calcium (SM 1030E (meq))	7.5				meq/L			05/11/22 10:42	1
Magnesium (SM 1030E (meq))	6.5				meq/L			05/11/22 10:42	1
Potassium (SM 1030E (meq))	0.90				meq/L			05/11/22 10:42	1
Sodium (SM 1030E (meq))	18				meq/L			05/11/22 10:42	1
Ammonia as N (SM 1030E (meq))	11				meq/L			05/11/22 10:42	1
Chloride (SM 1030E (meq))	16				meq/L			05/11/22 10:42	1
Sulfate (SM 1030E (meq))	0.56				meq/L			05/11/22 10:42	1
Carbonate Alkalinity (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity (SM 1030E (meq))	30				meq/L			05/11/22 10:42	1
Total Alkalinity (SM 1030E (meq))	30				meq/L			05/11/22 10:42	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			05/11/22 10:42	1
Iron (SM 1030E (meq))	0.25				meq/L			05/11/22 10:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	550		20		mg/L			05/09/22 22:20	20
Sulfate (EPA 300.0)	27		5.0		mg/L			05/09/22 22:05	1
Ammonia as N (EPA 350.1)	160		2.2		mg/L			05/09/22 13:41	100
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			05/04/22 17:52	1
Chemical Oxygen Demand (COD) (EPA 410.4)	740		43		mg/L			05/10/22 13:22	5
Total Organic Carbon - Average (SW846 9060)	190		3.5		mg/L			05/02/22 21:49	10
Total Alkalinity (SM 2320B)	1500		10		mg/L			05/03/22 22:12	1
Bicarbonate Alkalinity (SM 2320B)	1500		10		mg/L			05/03/22 22:12	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			05/03/22 22:12	1
Hardness, as CaCO3 (SM 2340C)	800		3.0		mg/L			05/10/22 18:37	5
Total Dissolved Solids (SM 2540C)	2200		10		mg/L			04/27/22 11:28	1
Total Suspended Solids (SM 2540D)	13		4.0		mg/L			04/29/22 15:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.4	HF	0.1		SU			05/06/22 18:20	1
Specific Conductance (SW846 9050A)	3400		2.0		umhos/cm			04/25/22 10:28	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.01				SU			04/22/22 13:20	1
Field Conductivity	4578				umhos/cm			04/22/22 13:20	1
Field Temperature	25.6				Degrees C			04/22/22 13:20	1
Field Dissolved Oxygen	1.45				mg/L			04/22/22 13:20	1
Field EH/ORP	-14.6				millivolts			04/22/22 13:20	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-161446-1

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)
280-161411-A-4 MS	Matrix Spike	99	96	98	98
280-161411-B-4 MSD	Matrix Spike Duplicate	98	97	97	100
280-161446-1	TB2	94	99	90	110
280-161446-2	1/5P	94	96	87	110
280-161446-3	4/5S	94	96	92	110
280-161446-4	FB2	94	96	90	109
280-161446-5	6/7P	94	96	90	111
280-161446-6	6/7S	94	99	96	97
280-161446-7	8S	94	101	97	101
280-161446-8	8P	94	101	97	100
280-161446-9	9P	94	100	96	101
280-161446-10	9S	94	100	96	101
LCS 280-573649/4	Lab Control Sample	91	97	90	110
LCS 280-573914/4	Lab Control Sample	99	99	97	98
LCSD 280-573649/5	Lab Control Sample Dup	93	96	90	109
LCSD 280-573914/5	Lab Control Sample Dup	97	98	97	99
MB 280-573649/9	Method Blank	94	96	90	109
MB 280-573914/8	Method Blank	95	100	96	100

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 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
1,1-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/03/22 08:59	1
1,2-Dibromoethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloroethane	ND		1.0		ug/L			05/03/22 08:59	1
1,2-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
1,3-Dichloropropane	ND		1.0		ug/L			05/03/22 08:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
2,2-Dichloropropane	ND		5.0		ug/L			05/03/22 08:59	1
2-Butanone (MEK)	ND		6.0		ug/L			05/03/22 08:59	1
2-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
2-Hexanone	ND		5.0		ug/L			05/03/22 08:59	1
4-Chlorotoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Isopropyltoluene	ND		1.0		ug/L			05/03/22 08:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/03/22 08:59	1
Acetone	ND		10		ug/L			05/03/22 08:59	1
Benzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Bromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromodichloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Bromoform	ND		1.0		ug/L			05/03/22 08:59	1
Bromomethane	ND		2.0		ug/L			05/03/22 08:59	1
Carbon disulfide	ND		2.0		ug/L			05/03/22 08:59	1
Carbon tetrachloride	ND		1.0		ug/L			05/03/22 08:59	1
Chlorobenzene	ND		1.0		ug/L			05/03/22 08:59	1
Chloroethane	ND		2.0		ug/L			05/03/22 08:59	1
Chloroform	ND		1.0		ug/L			05/03/22 08:59	1
Chloromethane	ND		2.0		ug/L			05/03/22 08:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/03/22 08:59	1
Dibromochloromethane	ND		1.0		ug/L			05/03/22 08:59	1
Dibromomethane	ND		1.0		ug/L			05/03/22 08:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Ethylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Hexachlorobutadiene	ND		1.0		ug/L			05/03/22 08:59	1
Isopropylbenzene	ND		1.0		ug/L			05/03/22 08:59	1

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

Lab Sample ID: MB 280-573649/9
Matrix: Water
Analysis Batch: 573649

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			05/03/22 08:59	1
Naphthalene	ND		1.0		ug/L			05/03/22 08:59	1
n-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
N-Propylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
sec-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Styrene	ND		1.0		ug/L			05/03/22 08:59	1
tert-Butylbenzene	ND		1.0		ug/L			05/03/22 08:59	1
Tetrachloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Toluene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/03/22 08:59	1
Trichloroethene	ND		1.0		ug/L			05/03/22 08:59	1
Trichlorofluoromethane	ND		2.0		ug/L			05/03/22 08:59	1
Vinyl chloride	ND		1.0		ug/L			05/03/22 08:59	1
Xylenes (total)	ND		2.0		ug/L			05/03/22 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*05/03/22 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*05/03/22 08:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*05/03/22 08:59*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 120*		*05/03/22 08:59*	*1*
Toluene-d8 (Surr)	*109*		*80 - 125*		*05/03/22 08:59*	*1*

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	23.0		ug/L		92	74 - 121
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	62 - 132
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	72 - 122
1,1,2-Trichloroethane	25.0	20.2		ug/L		81	72 - 128
1,1-Dichloroethane	25.0	21.3		ug/L		85	66 - 130
1,1-Dichloroethene	25.0	20.3		ug/L		81	62 - 130
1,1-Dichloropropene	25.0	22.1		ug/L		88	64 - 133
1,2,3-Trichlorobenzene	25.0	16.4	*-	ug/L		66	70 - 127
1,2,3-Trichloropropane	25.0	20.6		ug/L		82	74 - 123
1,2,4-Trichlorobenzene	25.0	21.9		ug/L		88	73 - 124
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	74 - 124
1,2-Dibromo-3-Chloropropane	25.0	14.3	*-	ug/L		57	58 - 122
1,2-Dibromoethane	25.0	23.4		ug/L		94	81 - 118
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 121
1,2-Dichloroethane	25.0	20.4		ug/L		82	61 - 130
1,2-Dichloropropane	25.0	20.9		ug/L		84	68 - 127
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	73 - 127
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	76 - 121

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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	25.0		ug/L		100	80 - 118
1,4-Dichlorobenzene	25.0	26.1		ug/L		105	76 - 119
2,2-Dichloropropane	25.0	21.6		ug/L		87	57 - 140
2-Butanone (MEK)	100	69.3		ug/L		69	53 - 135
2-Chlorotoluene	25.0	23.6		ug/L		95	75 - 123
2-Hexanone	100	85.8		ug/L		86	58 - 134
4-Chlorotoluene	25.0	23.2		ug/L		93	74 - 124
4-Isopropyltoluene	25.0	26.1		ug/L		104	74 - 127
4-Methyl-2-pentanone	100	64.9		ug/L		65	56 - 135
Acetone	100	65.6		ug/L		66	50 - 137
Benzene	25.0	23.1		ug/L		92	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	19.2		ug/L		77	71 - 130
Bromodichloromethane	25.0	20.6		ug/L		83	67 - 126
Bromoform	25.0	18.2		ug/L		73	57 - 125
Bromomethane	25.0	17.4		ug/L		70	25 - 163
Carbon disulfide	25.0	19.8		ug/L		79	56 - 128
Carbon tetrachloride	25.0	20.4		ug/L		82	60 - 133
Chlorobenzene	25.0	27.2		ug/L		109	78 - 118
Chloroethane	25.0	24.0		ug/L		96	52 - 144
Chloroform	25.0	22.5		ug/L		90	68 - 128
Chloromethane	25.0	17.4		ug/L		70	43 - 142
cis-1,2-Dichloroethene	25.0	21.0		ug/L		84	69 - 126
cis-1,3-Dichloropropene	25.0	21.5		ug/L		86	75 - 120
Dibromochloromethane	25.0	21.4		ug/L		86	71 - 122
Dibromomethane	25.0	19.5		ug/L		78	68 - 129
Dichlorodifluoromethane	25.0	15.3		ug/L		61	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	21.2		ug/L		85	69 - 133
Isopropylbenzene	25.0	26.5		ug/L		106	70 - 127
Methylene Chloride	25.0	21.7		ug/L		87	64 - 128
Naphthalene	25.0	17.3		ug/L		69	63 - 129
n-Butylbenzene	25.0	25.6		ug/L		102	69 - 130
N-Propylbenzene	25.0	23.9		ug/L		95	73 - 127
sec-Butylbenzene	25.0	23.4		ug/L		93	72 - 127
Styrene	25.0	26.1		ug/L		105	79 - 120
tert-Butylbenzene	25.0	21.9		ug/L		87	72 - 126
Tetrachloroethene	25.0	24.4		ug/L		98	72 - 127
Toluene	25.0	23.3		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	21.3		ug/L		85	66 - 129
trans-1,3-Dichloropropene	25.0	19.7		ug/L		79	66 - 127
Trichloroethene	25.0	26.1		ug/L		104	70 - 125
Trichlorofluoromethane	25.0	20.2		ug/L		81	57 - 144
Vinyl chloride	25.0	18.8		ug/L		75	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*

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

Lab Sample ID: LCS 280-573649/4
Matrix: Water
Analysis Batch: 573649

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*110*		*80 - 125*

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	22.9		ug/L		92	74 - 121	0	20
1,1,1-Trichloroethane			25.0	20.8		ug/L		83	62 - 132	8	20
1,1,2,2-Tetrachloroethane			25.0	23.1		ug/L		92	72 - 122	4	20
1,1,2-Trichloroethane			25.0	20.5		ug/L		82	72 - 128	2	20
1,1-Dichloroethane			25.0	20.6		ug/L		82	66 - 130	3	20
1,1-Dichloroethene			25.0	19.0		ug/L		76	62 - 130	7	21
1,1-Dichloropropene			25.0	20.7		ug/L		83	64 - 133	6	20
1,2,3-Trichlorobenzene			25.0	18.5		ug/L		74	70 - 127	12	20
1,2,3-Trichloropropane			25.0	21.4		ug/L		86	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	22.7		ug/L		91	73 - 124	4	20
1,2,4-Trimethylbenzene			25.0	25.3		ug/L		101	74 - 124	3	20
1,2-Dibromo-3-Chloropropane			25.0	15.9		ug/L		64	58 - 122	11	21
1,2-Dibromoethane			25.0	23.7		ug/L		95	81 - 118	1	20
1,2-Dichlorobenzene			25.0	25.2		ug/L		101	77 - 121	2	20
1,2-Dichloroethane			25.0	20.3		ug/L		81	61 - 130	1	20
1,2-Dichloropropane			25.0	20.7		ug/L		83	68 - 127	1	20
1,3,5-Trimethylbenzene			25.0	24.7		ug/L		99	73 - 127	4	20
1,3-Dichlorobenzene			25.0	25.0		ug/L		100	76 - 121	4	20
1,3-Dichloropropane			25.0	25.5		ug/L		102	80 - 118	2	20
1,4-Dichlorobenzene			25.0	25.3		ug/L		101	76 - 119	3	20
2,2-Dichloropropane			25.0	20.4		ug/L		82	57 - 140	6	22
2-Butanone (MEK)			100	78.2		ug/L		78	53 - 135	12	20
2-Chlorotoluene			25.0	22.5		ug/L		90	75 - 123	5	20
2-Hexanone			100	97.3		ug/L		97	58 - 134	13	21
4-Chlorotoluene			25.0	22.3		ug/L		89	74 - 124	4	20
4-Isopropyltoluene			25.0	24.9		ug/L		100	74 - 127	5	20
4-Methyl-2-pentanone			100	73.0		ug/L		73	56 - 135	12	20
Acetone			100	72.8		ug/L		73	50 - 137	10	21
Benzene			25.0	22.3		ug/L		89	69 - 126	4	20
Bromobenzene			25.0	23.9		ug/L		96	75 - 122	3	20
Bromochloromethane			25.0	19.1		ug/L		76	71 - 130	1	20
Bromodichloromethane			25.0	20.0		ug/L		80	67 - 126	3	20
Bromoform			25.0	19.0		ug/L		76	57 - 125	4	20
Bromomethane			25.0	17.5		ug/L		70	25 - 163	0	40
Carbon disulfide			25.0	18.7		ug/L		75	56 - 128	6	20
Carbon tetrachloride			25.0	19.0		ug/L		76	60 - 133	7	20
Chlorobenzene			25.0	26.7		ug/L		107	78 - 118	2	20
Chloroethane			25.0	19.8		ug/L		79	52 - 144	19	30
Chloroform			25.0	21.5		ug/L		86	68 - 128	5	20
Chloromethane			25.0	18.0		ug/L		72	43 - 142	3	20

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

Lab Sample ID: LCSD 280-573649/5
Matrix: Water
Analysis Batch: 573649

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	20.6		ug/L		82	69 - 126	2	20
cis-1,3-Dichloropropene			25.0	21.3		ug/L		85	75 - 120	1	20
Dibromochloromethane			25.0	21.5		ug/L		86	71 - 122	0	20
Dibromomethane			25.0	20.2		ug/L		81	68 - 129	4	20
Dichlorodifluoromethane			25.0	15.5		ug/L		62	26 - 152	2	21
Ethylbenzene			25.0	23.9		ug/L		95	76 - 121	4	20
Hexachlorobutadiene			25.0	20.1		ug/L		80	69 - 133	6	20
Isopropylbenzene			25.0	25.2		ug/L		101	70 - 127	5	20
Methylene Chloride			25.0	21.2		ug/L		85	64 - 128	2	20
Naphthalene			25.0	20.3		ug/L		81	63 - 129	16	21
n-Butylbenzene			25.0	24.6		ug/L		98	69 - 130	4	20
N-Propylbenzene			25.0	22.5		ug/L		90	73 - 127	6	20
sec-Butylbenzene			25.0	22.1		ug/L		88	72 - 127	6	20
Styrene			25.0	25.6		ug/L		102	79 - 120	2	20
tert-Butylbenzene			25.0	20.8		ug/L		83	72 - 126	5	20
Tetrachloroethene			25.0	22.4		ug/L		90	72 - 127	8	20
Toluene			25.0	22.3		ug/L		89	68 - 127	4	20
trans-1,2-Dichloroethene			25.0	19.7		ug/L		79	66 - 129	8	20
trans-1,3-Dichloropropene			25.0	19.7		ug/L		79	66 - 127	0	20
Trichloroethene			25.0	24.5		ug/L		98	70 - 125	6	20
Trichlorofluoromethane			25.0	19.9		ug/L		80	57 - 144	2	28
Vinyl chloride			25.0	19.4		ug/L		78	53 - 141	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*109*		*80 - 125*

Lab Sample ID: MB 280-573914/8
Matrix: Water
Analysis Batch: 573914

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			05/04/22 22:21	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/04/22 22:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/04/22 22:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/04/22 22:21	1
1,1-Dichloroethane	ND		1.0		ug/L			05/04/22 22:21	1
1,1-Dichloroethene	ND		1.0		ug/L			05/04/22 22:21	1
1,1-Dichloropropene	ND		1.0		ug/L			05/04/22 22:21	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1
1,2,3-Trichloropropane	ND		1.0		ug/L			05/04/22 22:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			05/04/22 22:21	1
1,2-Dibromoethane	ND		1.0		ug/L			05/04/22 22:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1

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

Lab Sample ID: MB 280-573914/8
Matrix: Water
Analysis Batch: 573914

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			05/04/22 22:21	1
1,2-Dichloropropane	ND		1.0		ug/L			05/04/22 22:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1
1,3-Dichloropropane	ND		1.0		ug/L			05/04/22 22:21	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1
2,2-Dichloropropane	ND		5.0		ug/L			05/04/22 22:21	1
2-Butanone (MEK)	ND		6.0		ug/L			05/04/22 22:21	1
2-Chlorotoluene	ND		1.0		ug/L			05/04/22 22:21	1
2-Hexanone	ND		5.0		ug/L			05/04/22 22:21	1
4-Chlorotoluene	ND		1.0		ug/L			05/04/22 22:21	1
4-Isopropyltoluene	ND		1.0		ug/L			05/04/22 22:21	1
4-Methyl-2-pentanone	ND		5.0		ug/L			05/04/22 22:21	1
Acetone	ND		10		ug/L			05/04/22 22:21	1
Benzene	ND		1.0		ug/L			05/04/22 22:21	1
Bromobenzene	ND		1.0		ug/L			05/04/22 22:21	1
Bromochloromethane	ND		1.0		ug/L			05/04/22 22:21	1
Bromodichloromethane	ND		1.0		ug/L			05/04/22 22:21	1
Bromoform	ND		1.0		ug/L			05/04/22 22:21	1
Bromomethane	ND		2.0		ug/L			05/04/22 22:21	1
Carbon disulfide	ND		2.0		ug/L			05/04/22 22:21	1
Carbon tetrachloride	ND		1.0		ug/L			05/04/22 22:21	1
Chlorobenzene	ND		1.0		ug/L			05/04/22 22:21	1
Chloroethane	ND		2.0		ug/L			05/04/22 22:21	1
Chloroform	ND		1.0		ug/L			05/04/22 22:21	1
Chloromethane	ND		2.0		ug/L			05/04/22 22:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 22:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			05/04/22 22:21	1
Dibromochloromethane	ND		1.0		ug/L			05/04/22 22:21	1
Dibromomethane	ND		1.0		ug/L			05/04/22 22:21	1
Dichlorodifluoromethane	ND		2.0		ug/L			05/04/22 22:21	1
Ethylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
Hexachlorobutadiene	ND		1.0		ug/L			05/04/22 22:21	1
Isopropylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
Methylene Chloride	ND		5.0		ug/L			05/04/22 22:21	1
Naphthalene	ND		1.0		ug/L			05/04/22 22:21	1
n-Butylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
N-Propylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
sec-Butylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
Styrene	ND		1.0		ug/L			05/04/22 22:21	1
tert-Butylbenzene	ND		1.0		ug/L			05/04/22 22:21	1
Tetrachloroethene	ND		1.0		ug/L			05/04/22 22:21	1
Toluene	ND		1.0		ug/L			05/04/22 22:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/04/22 22:21	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			05/04/22 22:21	1
Trichloroethene	ND		1.0		ug/L			05/04/22 22:21	1
Trichlorofluoromethane	ND		2.0		ug/L			05/04/22 22:21	1
Vinyl chloride	ND		1.0		ug/L			05/04/22 22:21	1
Xylenes (total)	ND		2.0		ug/L			05/04/22 22:21	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			N/A		05/04/22 22:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 127		05/04/22 22:21	1
4-Bromofluorobenzene (Surr)	100		78 - 120		05/04/22 22:21	1
Dibromofluoromethane (Surr)	96		77 - 120		05/04/22 22:21	1
Toluene-d8 (Surr)	100		80 - 125		05/04/22 22:21	1

Lab Sample ID: LCS 280-573914/4
Matrix: Water
Analysis Batch: 573914

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	26.6		ug/L		106	74 - 121
1,1,1-Trichloroethane	25.0	26.5		ug/L		106	62 - 132
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	72 - 122
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	72 - 128
1,1-Dichloroethane	25.0	25.9		ug/L		104	66 - 130
1,1-Dichloroethene	25.0	25.8		ug/L		103	62 - 130
1,1-Dichloropropene	25.0	25.9		ug/L		104	64 - 133
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	70 - 127
1,2,3-Trichloropropane	25.0	25.1		ug/L		100	74 - 123
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	73 - 124
1,2,4-Trimethylbenzene	25.0	27.4		ug/L		110	74 - 124
1,2-Dibromo-3-Chloropropane	25.0	21.5		ug/L		86	58 - 122
1,2-Dibromoethane	25.0	26.3		ug/L		105	81 - 118
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	77 - 121
1,2-Dichloroethane	25.0	23.2		ug/L		93	61 - 130
1,2-Dichloropropane	25.0	24.7		ug/L		99	68 - 127
1,3,5-Trimethylbenzene	25.0	27.1		ug/L		108	73 - 127
1,3-Dichlorobenzene	25.0	26.9		ug/L		107	76 - 121
1,3-Dichloropropane	25.0	26.4		ug/L		106	80 - 118
1,4-Dichlorobenzene	25.0	26.9		ug/L		107	76 - 119
2,2-Dichloropropane	25.0	30.5		ug/L		122	57 - 140
2-Butanone (MEK)	100	77.2		ug/L		77	53 - 135
2-Chlorotoluene	25.0	27.8		ug/L		111	75 - 123
2-Hexanone	100	86.2		ug/L		86	58 - 134
4-Chlorotoluene	25.0	26.2		ug/L		105	74 - 124
4-Isopropyltoluene	25.0	26.9		ug/L		107	74 - 127
4-Methyl-2-pentanone	100	96.6		ug/L		97	56 - 135
Acetone	100	82.1		ug/L		82	50 - 137
Benzene	25.0	25.7		ug/L		103	69 - 126
Bromobenzene	25.0	25.6		ug/L		102	75 - 122
Bromochloromethane	25.0	26.8		ug/L		107	71 - 130
Bromodichloromethane	25.0	25.3		ug/L		101	67 - 126
Bromoform	25.0	22.6		ug/L		91	57 - 125
Bromomethane	25.0	31.4		ug/L		126	25 - 163
Carbon disulfide	25.0	30.2		ug/L		121	56 - 128
Carbon tetrachloride	25.0	26.5		ug/L		106	60 - 133
Chlorobenzene	25.0	26.1		ug/L		104	78 - 118
Chloroethane	25.0	26.4		ug/L		106	52 - 144

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

Lab Sample ID: LCS 280-573914/4
Matrix: Water
Analysis Batch: 573914

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	25.1		ug/L		101	68 - 128
Chloromethane	25.0	25.7		ug/L		103	43 - 142
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	69 - 126
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	75 - 120
Dibromochloromethane	25.0	26.0		ug/L		104	71 - 122
Dibromomethane	25.0	24.9		ug/L		99	68 - 129
Dichlorodifluoromethane	25.0	23.2		ug/L		93	26 - 152
Ethylbenzene	25.0	25.7		ug/L		103	76 - 121
Hexachlorobutadiene	25.0	24.5		ug/L		98	69 - 133
Isopropylbenzene	25.0	27.1		ug/L		108	70 - 127
Methylene Chloride	25.0	23.8		ug/L		95	64 - 128
Naphthalene	25.0	25.2		ug/L		101	63 - 129
n-Butylbenzene	25.0	27.5		ug/L		110	69 - 130
N-Propylbenzene	25.0	25.8		ug/L		103	73 - 127
sec-Butylbenzene	25.0	26.8		ug/L		107	72 - 127
Styrene	25.0	25.1		ug/L		101	79 - 120
tert-Butylbenzene	25.0	26.8		ug/L		107	72 - 126
Tetrachloroethene	25.0	26.4		ug/L		106	72 - 127
Toluene	25.0	25.2		ug/L		101	68 - 127
trans-1,2-Dichloroethene	25.0	26.4		ug/L		106	66 - 129
trans-1,3-Dichloropropene	25.0	23.6		ug/L		94	66 - 127
Trichloroethene	25.0	24.8		ug/L		99	70 - 125
Trichlorofluoromethane	25.0	26.6		ug/L		106	57 - 144
Vinyl chloride	25.0	26.3		ug/L		105	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-573914/5
Matrix: Water
Analysis Batch: 573914

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	26.8		ug/L		107	74 - 121	1	20
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	62 - 132	2	20
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	72 - 122	4	20
1,1,2-Trichloroethane	25.0	25.5		ug/L		102	72 - 128	2	20
1,1-Dichloroethane	25.0	25.9		ug/L		104	66 - 130	0	20
1,1-Dichloroethene	25.0	26.1		ug/L		104	62 - 130	1	21
1,1-Dichloropropene	25.0	26.5		ug/L		106	64 - 133	2	20
1,2,3-Trichlorobenzene	25.0	28.0		ug/L		112	70 - 127	7	20
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	74 - 123	3	20
1,2,4-Trichlorobenzene	25.0	27.6		ug/L		110	73 - 124	4	20
1,2,4-Trimethylbenzene	25.0	28.3		ug/L		113	74 - 124	3	20
1,2-Dibromo-3-Chloropropane	25.0	25.0		ug/L		100	58 - 122	15	21

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

Lab Sample ID: LCSD 280-573914/5
Matrix: Water
Analysis Batch: 573914

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	26.5		ug/L		106	81 - 118	1	20
1,2-Dichlorobenzene	25.0	27.6		ug/L		110	77 - 121	1	20
1,2-Dichloroethane	25.0	22.6		ug/L		90	61 - 130	3	20
1,2-Dichloropropane	25.0	25.0		ug/L		100	68 - 127	1	20
1,3,5-Trimethylbenzene	25.0	28.0		ug/L		112	73 - 127	3	20
1,3-Dichlorobenzene	25.0	28.0		ug/L		112	76 - 121	4	20
1,3-Dichloropropane	25.0	27.1		ug/L		108	80 - 118	2	20
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	76 - 119	0	20
2,2-Dichloropropane	25.0	26.7		ug/L		107	57 - 140	14	22
2-Butanone (MEK)	100	82.7		ug/L		83	53 - 135	7	20
2-Chlorotoluene	25.0	29.0		ug/L		116	75 - 123	4	20
2-Hexanone	100	95.1		ug/L		95	58 - 134	10	21
4-Chlorotoluene	25.0	26.2		ug/L		105	74 - 124	0	20
4-Isopropyltoluene	25.0	29.1		ug/L		117	74 - 127	8	20
4-Methyl-2-pentanone	100	103		ug/L		103	56 - 135	6	20
Acetone	100	81.1		ug/L		81	50 - 137	1	21
Benzene	25.0	26.3		ug/L		105	69 - 126	2	20
Bromobenzene	25.0	26.0		ug/L		104	75 - 122	2	20
Bromochloromethane	25.0	26.1		ug/L		104	71 - 130	3	20
Bromodichloromethane	25.0	25.4		ug/L		102	67 - 126	1	20
Bromoform	25.0	23.4		ug/L		93	57 - 125	3	20
Bromomethane	25.0	30.5		ug/L		122	25 - 163	3	40
Carbon disulfide	25.0	27.5		ug/L		110	56 - 128	9	20
Carbon tetrachloride	25.0	27.6		ug/L		110	60 - 133	4	20
Chlorobenzene	25.0	25.9		ug/L		103	78 - 118	1	20
Chloroethane	25.0	26.6		ug/L		106	52 - 144	1	30
Chloroform	25.0	25.9		ug/L		104	68 - 128	3	20
Chloromethane	25.0	24.0		ug/L		96	43 - 142	7	20
cis-1,2-Dichloroethene	25.0	27.4		ug/L		110	69 - 126	3	20
cis-1,3-Dichloropropene	25.0	27.2		ug/L		109	75 - 120	0	20
Dibromochloromethane	25.0	27.3		ug/L		109	71 - 122	5	20
Dibromomethane	25.0	25.6		ug/L		103	68 - 129	3	20
Dichlorodifluoromethane	25.0	23.0		ug/L		92	26 - 152	1	21
Ethylbenzene	25.0	27.2		ug/L		109	76 - 121	6	20
Hexachlorobutadiene	25.0	27.4		ug/L		110	69 - 133	11	20
Isopropylbenzene	25.0	28.2		ug/L		113	70 - 127	4	20
Methylene Chloride	25.0	23.5		ug/L		94	64 - 128	1	20
Naphthalene	25.0	27.9		ug/L		112	63 - 129	10	21
n-Butylbenzene	25.0	29.7		ug/L		119	69 - 130	8	20
N-Propylbenzene	25.0	27.0		ug/L		108	73 - 127	4	20
sec-Butylbenzene	25.0	28.4		ug/L		114	72 - 127	6	20
Styrene	25.0	26.2		ug/L		105	79 - 120	4	20
tert-Butylbenzene	25.0	28.0		ug/L		112	72 - 126	4	20
Tetrachloroethene	25.0	26.9		ug/L		108	72 - 127	2	20
Toluene	25.0	26.2		ug/L		105	68 - 127	4	20
trans-1,2-Dichloroethene	25.0	27.2		ug/L		109	66 - 129	3	20
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	66 - 127	2	20
Trichloroethene	25.0	25.4		ug/L		102	70 - 125	3	20
Trichlorofluoromethane	25.0	33.1		ug/L		132	57 - 144	22	28

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

Lab Sample ID: LCSD 280-573914/5
Matrix: Water
Analysis Batch: 573914

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	26.9		ug/L		108	53 - 141	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: 280-161411-A-4 MS
Matrix: Water
Analysis Batch: 573914

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	26.0		ug/L		104	74 - 121
1,1,1-Trichloroethane	ND		25.0	25.2		ug/L		101	62 - 132
1,1,2,2-Tetrachloroethane	ND		25.0	25.8		ug/L		103	72 - 122
1,1,2-Trichloroethane	ND		25.0	25.6		ug/L		102	72 - 128
1,1-Dichloroethane	ND		25.0	25.6		ug/L		102	66 - 130
1,1-Dichloroethene	ND		25.0	25.4		ug/L		102	62 - 130
1,1-Dichloropropene	ND		25.0	25.3		ug/L		101	64 - 133
1,2,3-Trichlorobenzene	ND		25.0	25.7		ug/L		103	70 - 127
1,2,3-Trichloropropane	ND		25.0	25.9		ug/L		103	74 - 123
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		100	73 - 124
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	74 - 124
1,2-Dibromo-3-Chloropropane	ND		25.0	23.2		ug/L		93	58 - 122
1,2-Dibromoethane	ND		25.0	26.9		ug/L		108	81 - 118
1,2-Dichlorobenzene	ND		25.0	26.4		ug/L		106	77 - 121
1,2-Dichloroethane	ND		25.0	22.3		ug/L		89	61 - 130
1,2-Dichloropropane	ND		25.0	24.9		ug/L		100	68 - 127
1,3,5-Trimethylbenzene	ND		25.0	25.9		ug/L		104	73 - 127
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	76 - 121
1,3-Dichloropropane	ND		25.0	26.1		ug/L		105	80 - 118
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	76 - 119
2,2-Dichloropropane	ND		25.0	24.7		ug/L		99	57 - 140
2-Butanone (MEK)	ND		100	81.7		ug/L		82	53 - 135
2-Chlorotoluene	ND		25.0	26.0		ug/L		104	75 - 123
2-Hexanone	ND		100	94.8		ug/L		95	58 - 134
4-Chlorotoluene	ND		25.0	24.8		ug/L		99	74 - 124
4-Isopropyltoluene	ND		25.0	25.7		ug/L		103	74 - 127
4-Methyl-2-pentanone	ND		100	107		ug/L		107	56 - 135
Acetone	ND		100	81.5		ug/L		81	50 - 137
Benzene	ND		25.0	25.5		ug/L		102	69 - 126
Bromobenzene	ND		25.0	24.9		ug/L		100	75 - 122
Bromochloromethane	ND		25.0	26.0		ug/L		104	71 - 130
Bromodichloromethane	ND		25.0	25.0		ug/L		100	67 - 126
Bromoform	ND		25.0	23.5		ug/L		94	57 - 125
Bromomethane	ND		25.0	30.6		ug/L		123	25 - 163
Carbon disulfide	ND		25.0	25.7		ug/L		103	56 - 128

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

Lab Sample ID: 280-161411-A-4 MS
Matrix: Water
Analysis Batch: 573914

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
Carbon tetrachloride	ND		25.0	25.6		ug/L		102	60 - 133
Chlorobenzene	ND		25.0	25.8		ug/L		103	78 - 118
Chloroethane	ND		25.0	24.2		ug/L		97	52 - 144
Chloroform	ND		25.0	25.1		ug/L		100	68 - 128
Chloromethane	ND		25.0	24.5		ug/L		98	43 - 142
cis-1,2-Dichloroethene	ND		25.0	27.0		ug/L		108	69 - 126
cis-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	75 - 120
Dibromochloromethane	ND		25.0	25.5		ug/L		102	71 - 122
Dibromomethane	ND		25.0	25.3		ug/L		101	68 - 129
Dichlorodifluoromethane	ND		25.0	23.3		ug/L		93	26 - 152
Ethylbenzene	ND		25.0	25.8		ug/L		103	76 - 121
Hexachlorobutadiene	ND		25.0	22.5		ug/L		90	69 - 133
Isopropylbenzene	ND		25.0	26.2		ug/L		105	70 - 127
Methylene Chloride	ND		25.0	23.4		ug/L		94	64 - 128
Naphthalene	ND		25.0	25.7		ug/L		103	63 - 129
n-Butylbenzene	ND		25.0	25.4		ug/L		102	69 - 130
N-Propylbenzene	ND		25.0	24.5		ug/L		98	73 - 127
sec-Butylbenzene	ND		25.0	25.3		ug/L		101	72 - 127
Styrene	ND		25.0	24.8		ug/L		99	79 - 120
tert-Butylbenzene	ND		25.0	25.4		ug/L		102	72 - 126
Tetrachloroethene	ND		25.0	25.0		ug/L		100	72 - 127
Toluene	ND		25.0	25.4		ug/L		101	68 - 127
trans-1,2-Dichloroethene	ND		25.0	26.4		ug/L		106	66 - 129
trans-1,3-Dichloropropene	ND		25.0	23.2		ug/L		93	66 - 127
Trichloroethene	ND		25.0	24.2		ug/L		97	70 - 125
Trichlorofluoromethane	ND		25.0	23.8		ug/L		95	57 - 144
Vinyl chloride	ND		25.0	26.1		ug/L		104	53 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: 280-161411-B-4 MSD
Matrix: Water
Analysis Batch: 573914

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	28.1		ug/L		112	74 - 121	8	20
1,1,1-Trichloroethane	ND		25.0	27.0		ug/L		108	62 - 132	7	20
1,1,2,2-Tetrachloroethane	ND		25.0	28.3		ug/L		113	72 - 122	9	20
1,1,2-Trichloroethane	ND		25.0	27.4		ug/L		110	72 - 128	7	20
1,1-Dichloroethane	ND		25.0	27.5		ug/L		110	66 - 130	7	20
1,1-Dichloroethene	ND		25.0	26.9		ug/L		108	62 - 130	6	21
1,1-Dichloropropene	ND		25.0	26.8		ug/L		107	64 - 133	6	20
1,2,3-Trichlorobenzene	ND		25.0	28.3		ug/L		113	70 - 127	10	20
1,2,3-Trichloropropane	ND		25.0	28.1		ug/L		112	74 - 123	8	20

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

Lab Sample ID: 280-161411-B-4 MSD
Matrix: Water
Analysis Batch: 573914

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
1,2,4-Trichlorobenzene	ND		25.0	27.8		ug/L		111	73 - 124	11	20
1,2,4-Trimethylbenzene	ND		25.0	28.6		ug/L		114	74 - 124	7	20
1,2-Dibromo-3-Chloropropane	ND		25.0	25.1		ug/L		101	58 - 122	8	21
1,2-Dibromoethane	ND		25.0	28.5		ug/L		114	81 - 118	6	20
1,2-Dichlorobenzene	ND		25.0	28.2		ug/L		113	77 - 121	7	20
1,2-Dichloroethane	ND		25.0	23.4		ug/L		94	61 - 130	5	20
1,2-Dichloropropane	ND		25.0	26.7		ug/L		107	68 - 127	7	20
1,3,5-Trimethylbenzene	ND		25.0	28.4		ug/L		114	73 - 127	9	20
1,3-Dichlorobenzene	ND		25.0	28.4		ug/L		113	76 - 121	8	20
1,3-Dichloropropane	ND		25.0	28.4		ug/L		114	80 - 118	8	20
1,4-Dichlorobenzene	ND		25.0	26.8		ug/L		107	76 - 119	4	20
2,2-Dichloropropane	ND		25.0	26.2		ug/L		105	57 - 140	6	22
2-Butanone (MEK)	ND		100	85.1		ug/L		85	53 - 135	4	20
2-Chlorotoluene	ND		25.0	29.3		ug/L		117	75 - 123	12	20
2-Hexanone	ND		100	103		ug/L		103	58 - 134	8	21
4-Chlorotoluene	ND		25.0	26.9		ug/L		108	74 - 124	8	20
4-Isopropyltoluene	ND		25.0	28.1		ug/L		113	74 - 127	9	20
4-Methyl-2-pentanone	ND		100	113		ug/L		113	56 - 135	5	20
Acetone	ND		100	88.8		ug/L		89	50 - 137	9	21
Benzene	ND		25.0	27.4		ug/L		109	69 - 126	7	20
Bromobenzene	ND		25.0	26.4		ug/L		105	75 - 122	6	20
Bromochloromethane	ND		25.0	27.8		ug/L		111	71 - 130	7	20
Bromodichloromethane	ND		25.0	26.5		ug/L		106	67 - 126	6	20
Bromoform	ND		25.0	25.0		ug/L		100	57 - 125	6	20
Bromomethane	ND		25.0	32.0		ug/L		128	25 - 163	4	40
Carbon disulfide	ND		25.0	28.2		ug/L		113	56 - 128	9	20
Carbon tetrachloride	ND		25.0	27.8		ug/L		111	60 - 133	8	20
Chlorobenzene	ND		25.0	28.0		ug/L		112	78 - 118	8	20
Chloroethane	ND		25.0	26.9		ug/L		108	52 - 144	11	30
Chloroform	ND		25.0	26.7		ug/L		107	68 - 128	6	20
Chloromethane	ND		25.0	25.7		ug/L		103	43 - 142	4	20
cis-1,2-Dichloroethene	ND		25.0	28.4		ug/L		114	69 - 126	5	20
cis-1,3-Dichloropropene	ND		25.0	27.9		ug/L		112	75 - 120	8	20
Dibromochloromethane	ND		25.0	28.8		ug/L		115	71 - 122	12	20
Dibromomethane	ND		25.0	26.1		ug/L		104	68 - 129	3	20
Dichlorodifluoromethane	ND		25.0	23.9		ug/L		96	26 - 152	2	21
Ethylbenzene	ND		25.0	28.7		ug/L		115	76 - 121	10	20
Hexachlorobutadiene	ND		25.0	25.1		ug/L		100	69 - 133	11	20
Isopropylbenzene	ND		25.0	28.7		ug/L		115	70 - 127	9	20
Methylene Chloride	ND		25.0	25.1		ug/L		101	64 - 128	7	20
Naphthalene	ND		25.0	28.6		ug/L		115	63 - 129	11	21
n-Butylbenzene	ND		25.0	28.0		ug/L		112	69 - 130	10	20
N-Propylbenzene	ND		25.0	26.9		ug/L		108	73 - 127	9	20
sec-Butylbenzene	ND		25.0	27.8		ug/L		111	72 - 127	10	20
Styrene	ND		25.0	27.7		ug/L		111	79 - 120	11	20
tert-Butylbenzene	ND		25.0	27.9		ug/L		112	72 - 126	9	20
Tetrachloroethene	ND		25.0	27.8		ug/L		111	72 - 127	11	20
Toluene	ND		25.0	27.1		ug/L		108	68 - 127	6	20
trans-1,2-Dichloroethene	ND		25.0	28.2		ug/L		113	66 - 129	7	20

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

Lab Sample ID: 280-161411-B-4 MSD
Matrix: Water
Analysis Batch: 573914

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
trans-1,3-Dichloropropene	ND		25.0	23.8		ug/L		95	66 - 127	2	20
Trichloroethene	ND		25.0	26.8		ug/L		107	70 - 125	10	20
Trichlorofluoromethane	ND		25.0	25.8		ug/L		103	57 - 144	8	28
Vinyl chloride	ND		25.0	27.2		ug/L		109	53 - 141	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*97*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: 280-161812-C-1-B MS
Matrix: Water
Analysis Batch: 574120

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 573814

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	13000		2000	15100	4	ug/L		121	79 - 140
Silver	ND		50.0	52.5		ug/L		105	75 - 141
Zinc	ND		500	481		ug/L		95	60 - 137

Lab Sample ID: 280-161812-C-1-C MSD
Matrix: Water
Analysis Batch: 574120

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 573814

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silicon	13000		2000	15100	4	ug/L		120	79 - 140	0	20
Silver	ND		50.0	52.9		ug/L		106	75 - 141	1	20
Zinc	ND		500	486		ug/L		96	60 - 137	1	20

Lab Sample ID: MB 280-573691/1-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		05/04/22 10:41	05/05/22 07:26	1
Silver	ND		3.0		ug/L		05/04/22 10:41	05/05/22 07:26	1
Zinc	ND		26		ug/L		05/04/22 10:41	05/05/22 07:26	1

Lab Sample ID: LCS 280-573691/2-A
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	2000	2020		ug/L		101	90 - 110
Silver	50.0	50.7		ug/L		101	86 - 115
Zinc	500	484		ug/L		97	85 - 111

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-161233-C-1-B MS
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	28000		2000	30600	4	ug/L		135	79 - 140
Silver	ND		50.0	55.2		ug/L		110	75 - 141
Zinc	ND		500	486		ug/L		97	60 - 137

Lab Sample ID: 280-161233-C-1-C MSD
Matrix: Water
Analysis Batch: 574011

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 573691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silicon	28000		2000	29100	4	ug/L		60	79 - 140	5	20
Silver	ND		50.0	53.2		ug/L		106	75 - 141	4	20
Zinc	ND		500	470		ug/L		94	60 - 137	3	20

Lab Sample ID: MB 280-573718/1-A
Matrix: Water
Analysis Batch: 574034

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Iron	ND		30		ug/L		05/04/22 09:55	05/05/22 09:47	1
Magnesium	ND		200		ug/L		05/04/22 09:55	05/05/22 09:47	1
Manganese	ND		3.0		ug/L		05/04/22 09:55	05/05/22 09:47	1
Potassium	ND		500		ug/L		05/04/22 09:55	05/05/22 09:47	1
Sodium	ND		1000		ug/L		05/04/22 09:55	05/05/22 09:47	1

Lab Sample ID: LCS 280-573718/2-A
Matrix: Water
Analysis Batch: 574115

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	49400		ug/L		99	90 - 111
Iron	10000	9800		ug/L		98	89 - 115
Magnesium	50000	48500		ug/L		97	90 - 113
Manganese	1000	960		ug/L		96	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	49600		ug/L		99	90 - 115

Lab Sample ID: MB 280-573814/1-A
Matrix: Water
Analysis Batch: 574120

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	ND		100		ug/L		05/05/22 09:39	05/05/22 19:11	1
Silver	ND		3.0		ug/L		05/05/22 09:39	05/05/22 19:11	1
Zinc	ND		26		ug/L		05/05/22 09:39	05/05/22 19:11	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-573814/2-A
Matrix: Water
Analysis Batch: 574120

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573814

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silicon			2000	2090		ug/L		105	90 - 110		
Silver			50.0	52.1		ug/L		104	86 - 115		
Zinc			500	482		ug/L		96	85 - 111		

Lab Sample ID: 280-161446-2 MS
Matrix: Water
Analysis Batch: 574148

Client Sample ID: 1/5P
Prep Type: Dissolved
Prep Batch: 573718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	80000		50000	125000		ug/L		91	48 - 153		
Iron	2800		10000	12000		ug/L		92	52 - 155		
Magnesium	87000		50000	132000		ug/L		90	62 - 146		
Manganese	820		1000	1710		ug/L		89	79 - 121		
Potassium	260000		50000	313000	4	ug/L		103	76 - 132		
Sodium	1100000	F1	50000	1160000	4	ug/L		190	70 - 203		

Lab Sample ID: 280-161446-2 MSD
Matrix: Water
Analysis Batch: 574148

Client Sample ID: 1/5P
Prep Type: Dissolved
Prep Batch: 573718

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	80000		50000	129000		ug/L		98	48 - 153	3	20
Iron	2800		10000	12300		ug/L		95	52 - 155	3	20
Magnesium	87000		50000	137000		ug/L		99	62 - 146	3	20
Manganese	820		1000	1760		ug/L		94	79 - 121	3	20
Potassium	260000		50000	320000	4	ug/L		118	76 - 132	2	20
Sodium	1100000	F1	50000	1200000	4	ug/L		262	70 - 203	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-573706/1-A
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 573706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		05/04/22 08:40	05/04/22 19:33	1
Arsenic	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Barium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Beryllium	ND		0.40		ug/L		05/04/22 08:40	05/04/22 19:33	1
Cadmium	ND		0.30		ug/L		05/04/22 08:40	05/04/22 19:33	1
Chromium	ND		2.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Cobalt	ND		0.20		ug/L		05/04/22 08:40	05/04/22 19:33	1
Copper	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Lead	ND		0.50		ug/L		05/04/22 08:40	05/04/22 19:33	1
Nickel	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Selenium	ND		1.0		ug/L		05/04/22 08:40	05/04/22 19:33	1
Thallium	ND		0.20		ug/L		05/04/22 08:40	05/04/22 19:33	1
Vanadium	ND		3.0		ug/L		05/04/22 08:40	05/04/22 19:33	1

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

Lab Sample ID: LCS 280-573706/2-A
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 573706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	42.9		ug/L		107	85 - 115
Arsenic	40.0	42.3		ug/L		106	85 - 117
Barium	40.0	41.1		ug/L		103	85 - 118
Beryllium	40.0	41.7		ug/L		104	80 - 125
Cadmium	40.0	41.3		ug/L		103	85 - 115
Chromium	40.0	42.8		ug/L		107	84 - 121
Cobalt	40.0	41.8		ug/L		104	85 - 120
Copper	40.0	43.1		ug/L		108	85 - 119
Lead	40.0	41.6		ug/L		104	85 - 118
Nickel	40.0	42.4		ug/L		106	85 - 119
Selenium	40.0	41.2		ug/L		103	77 - 122
Thallium	40.0	41.2		ug/L		103	85 - 118
Vanadium	40.0	42.6		ug/L		107	85 - 120

Lab Sample ID: MB 280-574522/1-A
Matrix: Water
Analysis Batch: 574842

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 574522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		05/12/22 09:40	05/13/22 00:34	1
Arsenic	ND		1.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Barium	ND		1.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Beryllium	ND		0.40		ug/L		05/12/22 09:40	05/13/22 00:34	1
Cadmium	ND		0.30		ug/L		05/12/22 09:40	05/13/22 00:34	1
Chromium	ND		2.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Cobalt	ND		0.20		ug/L		05/12/22 09:40	05/13/22 00:34	1
Copper	ND		1.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Lead	ND		0.50		ug/L		05/12/22 09:40	05/13/22 00:34	1
Nickel	ND		1.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Selenium	ND		1.0		ug/L		05/12/22 09:40	05/13/22 00:34	1
Thallium	ND		0.20		ug/L		05/12/22 09:40	05/13/22 00:34	1
Vanadium	ND		3.0		ug/L		05/12/22 09:40	05/13/22 00:34	1

Lab Sample ID: LCS 280-574522/2-A
Matrix: Water
Analysis Batch: 574842

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 574522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	41.1		ug/L		103	85 - 115
Arsenic	40.0	39.1		ug/L		98	85 - 117
Barium	40.0	39.6		ug/L		99	85 - 118
Beryllium	40.0	38.4		ug/L		96	80 - 125
Cadmium	40.0	39.3		ug/L		98	85 - 115
Chromium	40.0	40.4		ug/L		101	84 - 121
Cobalt	40.0	39.5		ug/L		99	85 - 120
Copper	40.0	42.3		ug/L		106	85 - 119
Lead	40.0	40.0		ug/L		100	85 - 118
Nickel	40.0	40.2		ug/L		101	85 - 119
Selenium	40.0	37.9		ug/L		95	77 - 122

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

Lab Sample ID: LCS 280-574522/2-A
Matrix: Water
Analysis Batch: 574842

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 574522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	40.0	39.3		ug/L		98	85 - 118
Vanadium	40.0	40.9		ug/L		102	85 - 120

Lab Sample ID: 280-161614-K-1-G MS
Matrix: Water
Analysis Batch: 574842

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 574522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		40.0	41.0		ug/L		103	85 - 115
Arsenic	50		40.0	88.4		ug/L		95	85 - 117
Barium	290		40.0	329	4	ug/L		89	85 - 118
Beryllium	ND		40.0	41.5		ug/L		104	80 - 125
Cadmium	ND		40.0	39.4		ug/L		99	85 - 115
Chromium	ND		40.0	40.1		ug/L		99	84 - 121
Cobalt	3.0		40.0	40.7		ug/L		94	85 - 120
Copper	1.1		40.0	40.4		ug/L		98	85 - 119
Lead	0.61		40.0	39.4		ug/L		97	85 - 118
Nickel	8.3		40.0	46.3		ug/L		95	85 - 119
Selenium	ND		40.0	39.9		ug/L		98	77 - 122
Thallium	ND		40.0	39.2		ug/L		98	85 - 118
Vanadium	ND		40.0	43.3		ug/L		104	85 - 120

Lab Sample ID: 280-161614-K-1-H MSD
Matrix: Water
Analysis Batch: 574842

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 574522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	41.5		ug/L		104	85 - 115	1	20
Arsenic	50		40.0	89.4		ug/L		98	85 - 117	1	20
Barium	290		40.0	327	4	ug/L		86	85 - 118	0	20
Beryllium	ND		40.0	39.7		ug/L		99	80 - 125	4	20
Cadmium	ND		40.0	37.6		ug/L		94	85 - 115	5	20
Chromium	ND		40.0	39.7		ug/L		98	84 - 121	1	20
Cobalt	3.0		40.0	40.9		ug/L		95	85 - 120	0	20
Copper	1.1		40.0	39.4		ug/L		96	85 - 119	3	20
Lead	0.61		40.0	38.5		ug/L		95	85 - 118	2	20
Nickel	8.3		40.0	46.5		ug/L		96	85 - 119	0	20
Selenium	ND		40.0	38.4		ug/L		95	77 - 122	4	20
Thallium	ND		40.0	38.0		ug/L		95	85 - 118	3	20
Vanadium	ND		40.0	40.6		ug/L		97	85 - 120	6	20

Lab Sample ID: 280-161727-J-1-E MS
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	2.2		40.0	44.8		ug/L		107	85 - 115
Arsenic	2.6		40.0	44.3		ug/L		104	85 - 117
Barium	70		40.0	112		ug/L		106	85 - 118

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

Lab Sample ID: 280-161727-J-1-E MS
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 573706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	ND		40.0	42.2		ug/L		105	80 - 125
Cadmium	ND		40.0	40.8		ug/L		102	85 - 115
Chromium	ND		40.0	42.6		ug/L		107	84 - 121
Cobalt	0.39		40.0	40.4		ug/L		100	85 - 120
Copper	ND		40.0	39.6		ug/L		99	85 - 119
Lead	ND		40.0	39.7		ug/L		99	85 - 118
Nickel	ND		40.0	40.6		ug/L		99	85 - 119
Selenium	ND		40.0	40.2		ug/L		99	77 - 122
Thallium	ND		40.0	39.1		ug/L		98	85 - 118
Vanadium	3.5		40.0	46.4		ug/L		107	85 - 120

Lab Sample ID: 280-161727-J-1-F MSD
Matrix: Water
Analysis Batch: 573944

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 573706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	2.2		40.0	45.7		ug/L		109	85 - 115	2	20
Arsenic	2.6		40.0	45.0		ug/L		106	85 - 117	1	20
Barium	70		40.0	114		ug/L		110	85 - 118	1	20
Beryllium	ND		40.0	43.4		ug/L		109	80 - 125	3	20
Cadmium	ND		40.0	42.9		ug/L		107	85 - 115	5	20
Chromium	ND		40.0	41.3		ug/L		103	84 - 121	3	20
Cobalt	0.39		40.0	40.7		ug/L		101	85 - 120	1	20
Copper	ND		40.0	40.4		ug/L		101	85 - 119	2	20
Lead	ND		40.0	40.1		ug/L		100	85 - 118	1	20
Nickel	ND		40.0	39.3		ug/L		96	85 - 119	3	20
Selenium	ND		40.0	40.9		ug/L		101	77 - 122	2	20
Thallium	ND		40.0	39.6		ug/L		99	85 - 118	1	20
Vanadium	3.5		40.0	45.4		ug/L		105	85 - 120	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-574260/6
Matrix: Water
Analysis Batch: 574260

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			05/09/22 12:06	1
Sulfate	ND		5.0		mg/L			05/09/22 12:06	1

Lab Sample ID: LCS 280-574260/4
Matrix: Water
Analysis Batch: 574260

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	99.2		mg/L		99	90 - 110
Sulfate	100	91.0		mg/L		91	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-574260/5
Matrix: Water
Analysis Batch: 574260

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	99.3		mg/L		99	90 - 110	0	10
Sulfate			100	91.1		mg/L		91	90 - 110	0	10

Lab Sample ID: MRL 280-574260/3
Matrix: Water
Analysis Batch: 574260

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	4.64		mg/L		93	50 - 150		
Sulfate			5.00	ND		mg/L		91	50 - 150		

Lab Sample ID: 280-161446-4 MS
Matrix: Water
Analysis Batch: 574260

Client Sample ID: FB2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		50.0	56.9		mg/L		114	80 - 120		
Sulfate	ND		50.0	55.9		mg/L		112	80 - 120		

Lab Sample ID: 280-161446-4 MSD
Matrix: Water
Analysis Batch: 574260

Client Sample ID: FB2
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	51.0		mg/L		102	80 - 120	11	20
Sulfate	ND		50.0	49.4		mg/L		99	80 - 120	12	20

Lab Sample ID: 280-161446-4 DU
Matrix: Water
Analysis Batch: 574260

Client Sample ID: FB2
Prep Type: Total/NA

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

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-573617/90
Matrix: Water
Analysis Batch: 573617

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			05/02/22 14:41	1

Lab Sample ID: LCS 280-573617/89
Matrix: Water
Analysis Batch: 573617

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		101	90 - 110		

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-161400-D-11 MS
Matrix: Water
Analysis Batch: 573617

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	1.09		mg/L		109	90 - 110		

Lab Sample ID: 280-161400-D-11 MSD
Matrix: Water
Analysis Batch: 573617

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	1.10		mg/L		110	90 - 110	1	10

Lab Sample ID: MB 280-574325/18
Matrix: Water
Analysis Batch: 574325

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			05/09/22 12:50	1

Lab Sample ID: LCS 280-574325/17
Matrix: Water
Analysis Batch: 574325

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			5.00	4.85		mg/L		97	90 - 110		

Lab Sample ID: 280-161446-4 MS
Matrix: Water
Analysis Batch: 574325

Client Sample ID: FB2
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	1.05		mg/L		105	90 - 110		

Lab Sample ID: 280-161446-4 MSD
Matrix: Water
Analysis Batch: 574325

Client Sample ID: FB2
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	1.05		mg/L		105	90 - 110	0	10

Lab Sample ID: MB 280-574631/90
Matrix: Water
Analysis Batch: 574631

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			05/10/22 13:52	1

Lab Sample ID: LCS 280-574631/88
Matrix: Water
Analysis Batch: 574631

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		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: LCSD 280-574631/89
Matrix: Water
Analysis Batch: 574631

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	2.54		mg/L		102	90 - 110	0	10

Lab Sample ID: 280-161408-A-11 MS
Matrix: Water
Analysis Batch: 574631

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	1.03		mg/L		103	90 - 110		

Lab Sample ID: 280-161408-A-11 MSD
Matrix: Water
Analysis Batch: 574631

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	1.03		mg/L		103	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-573773/22
Matrix: Water
Analysis Batch: 573773

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			05/03/22 16:34	1

Lab Sample ID: LCS 280-573773/21
Matrix: Water
Analysis Batch: 573773

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	5.09		mg/L		102	90 - 110		

Lab Sample ID: 280-161434-C-1 MS
Matrix: Water
Analysis Batch: 573773

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	4.15		mg/L		104	90 - 110		

Lab Sample ID: 280-161434-C-1 MSD
Matrix: Water
Analysis Batch: 573773

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	4.18		mg/L		104	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 280-573912/23
Matrix: Water
Analysis Batch: 573912

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			05/04/22 17:18	1

Lab Sample ID: LCS 280-573912/21
Matrix: Water
Analysis Batch: 573912

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	5.06		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-573912/22
Matrix: Water
Analysis Batch: 573912

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	5.02		mg/L		100	90 - 110	1	10

Lab Sample ID: 280-161408-A-13 MS
Matrix: Water
Analysis Batch: 573912

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	5.0	F1	4.00	8.53	F1	mg/L		89	90 - 110		

Lab Sample ID: 280-161408-A-13 MSD
Matrix: Water
Analysis Batch: 573912

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	5.0	F1	4.00	8.64		mg/L		92	90 - 110	1	10

Method: 410.4 - COD

Lab Sample ID: MB 280-574418/32
Matrix: Water
Analysis Batch: 574418

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			05/10/22 13:22	1

Lab Sample ID: MB 280-574418/5
Matrix: Water
Analysis Batch: 574418

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			05/10/22 11:26	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 280-574418/3
Matrix: Water
Analysis Batch: 574418

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	94.7		mg/L		95	90 - 110		

Lab Sample ID: LCS 280-574418/30
Matrix: Water
Analysis Batch: 574418

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	93.5		mg/L		93	90 - 110		

Lab Sample ID: LCSD 280-574418/31
Matrix: Water
Analysis Batch: 574418

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	95.7		mg/L		96	90 - 110	2	11

Lab Sample ID: LCSD 280-574418/4
Matrix: Water
Analysis Batch: 574418

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	95.4		mg/L		95	90 - 110	1	11

Lab Sample ID: 280-161382-E-4 MS
Matrix: Water
Analysis Batch: 574418

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	58.0	F1	mg/L		82	90 - 110		

Lab Sample ID: 280-161382-E-4 MSD
Matrix: Water
Analysis Batch: 574418

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	55.7	F1	mg/L		77	90 - 110	4	11

Lab Sample ID: 280-161398-C-1 MS
Matrix: Water
Analysis Batch: 574418

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)	130	F2 F1	250	307	F1	mg/L		71	90 - 110		

Lab Sample ID: 280-161398-C-1 MSD
Matrix: Water
Analysis Batch: 574418

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)	130	F2 F1	250	315	F1	mg/L		74	90 - 110	3	11

Method: 9040B - pH

Lab Sample ID: LCS 280-574080/4
Matrix: Water
Analysis Batch: 574080

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	7.0		SU		100	99 - 101		

Lab Sample ID: 280-161699-D-1 DU
Matrix: Water
Analysis Batch: 574080

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	7.2			7.2		SU				0.3	5

Lab Sample ID: LCS 280-574240/27
Matrix: Water
Analysis Batch: 574240

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	7.0		SU		100	99 - 101		

Lab Sample ID: 280-161755-I-1 DU
Matrix: Water
Analysis Batch: 574240

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	7.5			8.1	F3	SU				7	5

Lab Sample ID: LCS 280-574377/96
Matrix: Water
Analysis Batch: 574377

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	7.0		SU		100	99 - 101		

Lab Sample ID: 280-161425-D-2 DU
Matrix: Water
Analysis Batch: 574377

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	7.8			7.9		SU				2	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-572874/5
Matrix: Water
Analysis Batch: 572874

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			04/25/22 10:28	1

Method: 9050A - Specific Conductance (Continued)

Lab Sample ID: LCS 280-572874/4
Matrix: Water
Analysis Batch: 572874

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	1470		umhos/cm		104	90 - 110

Lab Sample ID: 280-161382-I-2 DU
Matrix: Water
Analysis Batch: 572874

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	79		78.3		umhos/cm		0.9	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-573362/4
Matrix: Water
Analysis Batch: 573362

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			04/28/22 17:29	1

Lab Sample ID: LCS 280-573362/3
Matrix: Water
Analysis Batch: 573362

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: 280-161418-B-4 MS
Matrix: Water
Analysis Batch: 573362

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	25.6		mg/L		102	88 - 112

Lab Sample ID: 280-161418-B-4 MSD
Matrix: Water
Analysis Batch: 573362

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	25.7		mg/L		103	88 - 112	0	15

Lab Sample ID: MB 280-573694/4
Matrix: Water
Analysis Batch: 573694

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			05/02/22 15:25	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-573694/3
Matrix: Water
Analysis Batch: 573694

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	24.6		mg/L		98	88 - 112		

Lab Sample ID: 280-161337-A-2 MS
Matrix: Water
Analysis Batch: 573694

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	25		50.1	77.1		mg/L		104	88 - 112		

Lab Sample ID: 280-161337-A-2 MSD
Matrix: Water
Analysis Batch: 573694

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	25		50.1	77.3		mg/L		104	88 - 112	0	15

Lab Sample ID: MB 280-574237/4
Matrix: Water
Analysis Batch: 574237

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			05/06/22 15:30	1

Lab Sample ID: LCS 280-574237/3
Matrix: Water
Analysis Batch: 574237

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		

Lab Sample ID: 280-161247-A-4 MS
Matrix: Water
Analysis Batch: 574237

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	1.3		25.0	26.4		mg/L		100	88 - 112		

Lab Sample ID: 280-161247-A-4 MSD
Matrix: Water
Analysis Batch: 574237

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	1.3		25.0	26.6		mg/L		101	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-574559/1
Matrix: Water
Analysis Batch: 574559

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			05/11/22 10:42	1
Magnesium	0.000				meq/L			05/11/22 10:42	1
Potassium	0.000				meq/L			05/11/22 10:42	1
Sodium	0.000				meq/L			05/11/22 10:42	1
Ammonia as N	0.000				meq/L			05/11/22 10:42	1
Chloride	0.000				meq/L			05/11/22 10:42	1
Sulfate	0.000				meq/L			05/11/22 10:42	1
Carbonate Alkalinity	0.000				meq/L			05/11/22 10:42	1
Bicarbonate Alkalinity	0.000				meq/L			05/11/22 10:42	1
Total Alkalinity	0.000				meq/L			05/11/22 10:42	1
Nitrate/Nitrite	0.000				meq/L			05/11/22 10:42	1
Iron	0.000				meq/L			05/11/22 10:42	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-573526/8
Matrix: Water
Analysis Batch: 573526

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			04/29/22 16:19	1
Bicarbonate Alkalinity	ND		10		mg/L			04/29/22 16:19	1
Carbonate Alkalinity	ND		10		mg/L			04/29/22 16:19	1

Lab Sample ID: LCS 280-573526/6
Matrix: Water
Analysis Batch: 573526

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 280-573526/7
Matrix: Water
Analysis Batch: 573526

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	192		mg/L		96	89 - 109	4	10

Lab Sample ID: 280-161600-A-4 DU
Matrix: Water
Analysis Batch: 573526

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	110			111		mg/L				0.6	10
Bicarbonate Alkalinity	110			111		mg/L				0.6	20
Carbonate Alkalinity	ND			ND		mg/L				NC	20

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-573792/58
Matrix: Water
Analysis Batch: 573792

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			05/03/22 18:49	1
Bicarbonate Alkalinity	ND		10		mg/L			05/03/22 18:49	1
Carbonate Alkalinity	ND		10		mg/L			05/03/22 18:49	1

Lab Sample ID: LCS 280-573792/57
Matrix: Water
Analysis Batch: 573792

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	205		mg/L		102	89 - 109

Lab Sample ID: 280-161418-A-2 DU
Matrix: Water
Analysis Batch: 573792

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	130		125		mg/L		0.9	10
Bicarbonate Alkalinity	130		125		mg/L		0.9	20
Carbonate Alkalinity	ND		ND		mg/L		NC	20

Lab Sample ID: MB 280-574081/58
Matrix: Water
Analysis Batch: 574081

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			05/05/22 19:22	1
Bicarbonate Alkalinity	ND		10		mg/L			05/05/22 19:22	1
Carbonate Alkalinity	ND		10		mg/L			05/05/22 19:22	1

Lab Sample ID: LCS 280-574081/57
Matrix: Water
Analysis Batch: 574081

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	203		mg/L		102	89 - 109

Lab Sample ID: MB 280-574136/5
Matrix: Water
Analysis Batch: 574136

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			05/06/22 10:19	1
Bicarbonate Alkalinity	ND		10		mg/L			05/06/22 10:19	1
Carbonate Alkalinity	ND		10		mg/L			05/06/22 10:19	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-574136/4
Matrix: Water
Analysis Batch: 574136

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	950		mg/L		95	89 - 109		

Lab Sample ID: 280-161446-5 DU
Matrix: Water
Analysis Batch: 574136

Client Sample ID: 6/7P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	4300	H		4360		mg/L				0.9	10
Bicarbonate Alkalinity	4300	H		4360		mg/L				0.9	20
Carbonate Alkalinity	ND	H		ND		mg/L				NC	20

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-574489/2
Matrix: Water
Analysis Batch: 574489

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			05/10/22 18:37	1

Lab Sample ID: LCS 280-574489/1
Matrix: Water
Analysis Batch: 574489

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	406		mg/L		102	90 - 110		

Lab Sample ID: 280-161446-4 MS
Matrix: Water
Analysis Batch: 574489

Client Sample ID: FB2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Hardness, as CaCO3	ND		398	383		mg/L		96	90 - 110		

Lab Sample ID: 280-161446-4 MSD
Matrix: Water
Analysis Batch: 574489

Client Sample ID: FB2
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	ND		398	402		mg/L		101	90 - 110	5	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-573148/1
Matrix: Water
Analysis Batch: 573148

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			04/27/22 11:27	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 280-573148/2
Matrix: Water
Analysis Batch: 573148

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			502	500		mg/L		100	88 - 114		

Lab Sample ID: LCSD 280-573148/3
Matrix: Water
Analysis Batch: 573148

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			502	493		mg/L		98	88 - 114	1	20

Lab Sample ID: 280-161488-A-4 DU
Matrix: Water
Analysis Batch: 573148

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	600			609		mg/L				0.8	10

Lab Sample ID: MB 280-573385/1
Matrix: Water
Analysis Batch: 573385

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			04/29/22 11:10	1

Lab Sample ID: LCS 280-573385/2
Matrix: Water
Analysis Batch: 573385

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			505	502		mg/L		99	88 - 114		

Lab Sample ID: LCSD 280-573385/3
Matrix: Water
Analysis Batch: 573385

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			505	487		mg/L		96	88 - 114	3	20

Lab Sample ID: 280-161446-A-2 DU
Matrix: Water
Analysis Batch: 573385

Client Sample ID: 280-161446-A-2 DU
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3300	H		3400		mg/L				2	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-572902/2
Matrix: Water
Analysis Batch: 572902

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			04/25/22 12:19	1

Lab Sample ID: LCS 280-572902/1
Matrix: Water
Analysis Batch: 572902

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	90.8		mg/L		91	79 - 114		

Lab Sample ID: 280-161446-5 DU
Matrix: Water
Analysis Batch: 572902

Client Sample ID: 6/7P
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	39			38.4		mg/L				1	10

Lab Sample ID: MB 280-573189/2
Matrix: Water
Analysis Batch: 573189

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			04/27/22 15:19	1

Lab Sample ID: LCS 280-573189/1
Matrix: Water
Analysis Batch: 573189

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	84.8		mg/L		85	79 - 114		

Lab Sample ID: 280-161504-A-2 DU
Matrix: Water
Analysis Batch: 573189

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	51			51.6		mg/L				0.8	10

Lab Sample ID: MB 280-573436/3
Matrix: Water
Analysis Batch: 573436

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			04/29/22 15:07	1

Lab Sample ID: LCS 280-573436/1
Matrix: Water
Analysis Batch: 573436

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	90.0		mg/L		90	79 - 114		

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: LCSD 280-573436/2
Matrix: Water
Analysis Batch: 573436

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	90.0		mg/L		90	79 - 114	0	20

Lab Sample ID: 280-161377-A-4 DU
Matrix: Water
Analysis Batch: 573436

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	210			207		mg/L				0.2	10

GC/MS VOA

Analysis Batch: 573649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-1	TB2	Total/NA	Water	8260B	
280-161446-2	1/5P	Total/NA	Water	8260B	
280-161446-3	4/5S	Total/NA	Water	8260B	
280-161446-4	FB2	Total/NA	Water	8260B	
280-161446-5	6/7P	Total/NA	Water	8260B	
MB 280-573649/9	Method Blank	Total/NA	Water	8260B	
LCS 280-573649/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573649/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 573914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-6	6/7S	Total/NA	Water	8260B	
280-161446-7	8S	Total/NA	Water	8260B	
280-161446-8	8P	Total/NA	Water	8260B	
280-161446-9	9P	Total/NA	Water	8260B	
280-161446-10	9S	Total/NA	Water	8260B	
MB 280-573914/8	Method Blank	Total/NA	Water	8260B	
LCS 280-573914/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-573914/5	Lab Control Sample Dup	Total/NA	Water	8260B	
280-161411-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
280-161411-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Metals

Prep Batch: 573691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total Recoverable	Water	3005A	
280-161446-4	FB2	Total Recoverable	Water	3005A	
280-161446-5	6/7P	Total Recoverable	Water	3005A	
280-161446-6	6/7S	Total Recoverable	Water	3005A	
280-161446-7	8S	Total Recoverable	Water	3005A	
280-161446-8	8P	Total Recoverable	Water	3005A	
280-161446-9	9P	Total Recoverable	Water	3005A	
280-161446-10	9S	Total Recoverable	Water	3005A	
MB 280-573691/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573691/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161233-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
280-161233-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 573706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total Recoverable	Water	3005A	
280-161446-4	FB2	Total Recoverable	Water	3005A	
280-161446-5	6/7P	Total Recoverable	Water	3005A	
280-161446-6	6/7S	Total Recoverable	Water	3005A	
280-161446-7	8S	Total Recoverable	Water	3005A	
280-161446-8	8P	Total Recoverable	Water	3005A	
280-161446-9	9P	Total Recoverable	Water	3005A	
280-161446-10	9S	Total Recoverable	Water	3005A	
MB 280-573706/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573706/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 573706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161727-J-1-E MS	Matrix Spike	Dissolved	Water	3005A	
280-161727-J-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 573718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Dissolved	Water	3005A	
280-161446-3	4/5S	Dissolved	Water	3005A	
280-161446-4	FB2	Dissolved	Water	3005A	
280-161446-5	6/7P	Dissolved	Water	3005A	
280-161446-6	6/7S	Dissolved	Water	3005A	
280-161446-7	8S	Dissolved	Water	3005A	
280-161446-8	8P	Dissolved	Water	3005A	
280-161446-9	9P	Dissolved	Water	3005A	
280-161446-10	9S	Dissolved	Water	3005A	
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161446-2 MS	1/5P	Dissolved	Water	3005A	
280-161446-2 MSD	1/5P	Dissolved	Water	3005A	

Prep Batch: 573814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total Recoverable	Water	3005A	
MB 280-573814/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-573814/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161812-C-1-B MS	Matrix Spike	Total/NA	Water	3005A	
280-161812-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	

Analysis Batch: 573944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total Recoverable	Water	6020	573706
280-161446-4	FB2	Total Recoverable	Water	6020	573706
280-161446-5	6/7P	Total Recoverable	Water	6020	573706
280-161446-6	6/7S	Total Recoverable	Water	6020	573706
280-161446-7	8S	Total Recoverable	Water	6020	573706
280-161446-8	8P	Total Recoverable	Water	6020	573706
280-161446-9	9P	Total Recoverable	Water	6020	573706
280-161446-10	9S	Total Recoverable	Water	6020	573706
MB 280-573706/1-A	Method Blank	Total Recoverable	Water	6020	573706
LCS 280-573706/2-A	Lab Control Sample	Total Recoverable	Water	6020	573706
280-161727-J-1-E MS	Matrix Spike	Dissolved	Water	6020	573706
280-161727-J-1-F MSD	Matrix Spike Duplicate	Dissolved	Water	6020	573706

Analysis Batch: 574011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total Recoverable	Water	6010B	573691
280-161446-4	FB2	Total Recoverable	Water	6010B	573691
280-161446-5	6/7P	Total Recoverable	Water	6010B	573691
280-161446-6	6/7S	Total Recoverable	Water	6010B	573691
280-161446-7	8S	Total Recoverable	Water	6010B	573691
280-161446-8	8P	Total Recoverable	Water	6010B	573691
280-161446-9	9P	Total Recoverable	Water	6010B	573691

Metals (Continued)

Analysis Batch: 574011 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-10	9S	Total Recoverable	Water	6010B	573691
MB 280-573691/1-A	Method Blank	Total Recoverable	Water	6010B	573691
LCS 280-573691/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573691
280-161233-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	573691
280-161233-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	573691

Analysis Batch: 574034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Dissolved	Water	6010B	573718
280-161446-3	4/5S	Dissolved	Water	6010B	573718
280-161446-4	FB2	Dissolved	Water	6010B	573718
280-161446-5	6/7P	Dissolved	Water	6010B	573718
280-161446-6	6/7S	Dissolved	Water	6010B	573718
280-161446-7	8S	Dissolved	Water	6010B	573718
280-161446-8	8P	Dissolved	Water	6010B	573718
280-161446-9	9P	Dissolved	Water	6010B	573718
280-161446-10	9S	Dissolved	Water	6010B	573718
MB 280-573718/1-A	Method Blank	Total Recoverable	Water	6010B	573718

Analysis Batch: 574115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-573718/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573718

Analysis Batch: 574120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total Recoverable	Water	6010B	573814
MB 280-573814/1-A	Method Blank	Total Recoverable	Water	6010B	573814
LCS 280-573814/2-A	Lab Control Sample	Total Recoverable	Water	6010B	573814
280-161812-C-1-B MS	Matrix Spike	Total/NA	Water	6010B	573814
280-161812-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	573814

Analysis Batch: 574148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2 MS	1/5P	Dissolved	Water	6010B	573718
280-161446-2 MSD	1/5P	Dissolved	Water	6010B	573718

Analysis Batch: 574371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-5	6/7P	Total Recoverable	Water	6020	573706

Prep Batch: 574522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total Recoverable	Water	3005A	
MB 280-574522/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-574522/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-161614-K-1-G MS	Matrix Spike	Total Recoverable	Water	3005A	
280-161614-K-1-H MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 574842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total Recoverable	Water	6020	574522

Metals (Continued)

Analysis Batch: 574842 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-574522/1-A	Method Blank	Total Recoverable	Water	6020	574522
LCS 280-574522/2-A	Lab Control Sample	Total Recoverable	Water	6020	574522
280-161614-K-1-G MS	Matrix Spike	Total Recoverable	Water	6020	574522
280-161614-K-1-H MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	574522

General Chemistry

Analysis Batch: 572874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	9050A	
280-161446-3	4/5S	Total/NA	Water	9050A	
280-161446-4	FB2	Total/NA	Water	9050A	
280-161446-5	6/7P	Total/NA	Water	9050A	
280-161446-6	6/7S	Total/NA	Water	9050A	
280-161446-7	8S	Total/NA	Water	9050A	
280-161446-8	8P	Total/NA	Water	9050A	
280-161446-9	9P	Total/NA	Water	9050A	
280-161446-10	9S	Total/NA	Water	9050A	
MB 280-572874/5	Method Blank	Total/NA	Water	9050A	
LCS 280-572874/4	Lab Control Sample	Total/NA	Water	9050A	
280-161382-I-2 DU	Duplicate	Total/NA	Water	9050A	

Analysis Batch: 572902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total/NA	Water	SM 2540D	
280-161446-4	FB2	Total/NA	Water	SM 2540D	
280-161446-5	6/7P	Total/NA	Water	SM 2540D	
MB 280-572902/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-572902/1	Lab Control Sample	Total/NA	Water	SM 2540D	
280-161446-5 DU	6/7P	Total/NA	Water	SM 2540D	

Analysis Batch: 573148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	SM 2540C	
280-161446-3	4/5S	Total/NA	Water	SM 2540C	
280-161446-4	FB2	Total/NA	Water	SM 2540C	
280-161446-5	6/7P	Total/NA	Water	SM 2540C	
280-161446-6	6/7S	Total/NA	Water	SM 2540C	
280-161446-7	8S	Total/NA	Water	SM 2540C	
280-161446-9	9P	Total/NA	Water	SM 2540C	
280-161446-10	9S	Total/NA	Water	SM 2540C	
MB 280-573148/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573148/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-573148/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-161488-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 573189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	SM 2540D	
280-161446-6	6/7S	Total/NA	Water	SM 2540D	
280-161446-7	8S	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 573189 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-8	8P	Total/NA	Water	SM 2540D	
MB 280-573189/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-573189/1	Lab Control Sample	Total/NA	Water	SM 2540D	
280-161504-A-2 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 573362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total/NA	Water	9060	
280-161446-4	FB2	Total/NA	Water	9060	
280-161446-5	6/7P	Total/NA	Water	9060	
280-161446-6	6/7S	Total/NA	Water	9060	
280-161446-7	8S	Total/NA	Water	9060	
MB 280-573362/4	Method Blank	Total/NA	Water	9060	
LCS 280-573362/3	Lab Control Sample	Total/NA	Water	9060	
280-161418-B-4 MS	Matrix Spike	Total/NA	Water	9060	
280-161418-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-8	8P	Total/NA	Water	SM 2540C	
MB 280-573385/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-573385/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-573385/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-161446-A-2 DU	280-161446-A-2 DU	Total/NA	Water	SM 2540C	

Analysis Batch: 573436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-9	9P	Total/NA	Water	SM 2540D	
280-161446-10	9S	Total/NA	Water	SM 2540D	
MB 280-573436/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-573436/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-573436/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-161377-A-4 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 573526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total/NA	Water	SM 2320B	
280-161446-4	FB2	Total/NA	Water	SM 2320B	
MB 280-573526/8	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573526/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-573526/7	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-161600-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-7	8S	Total/NA	Water	350.1	
280-161446-8	8P	Total/NA	Water	350.1	
280-161446-9	9P	Total/NA	Water	350.1	
MB 280-573617/90	Method Blank	Total/NA	Water	350.1	
LCS 280-573617/89	Lab Control Sample	Total/NA	Water	350.1	
280-161400-D-11 MS	Matrix Spike	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 573617 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161400-D-11 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 573694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	9060	
280-161446-9	9P	Total/NA	Water	9060	
280-161446-10	9S	Total/NA	Water	9060	
MB 280-573694/4	Method Blank	Total/NA	Water	9060	
LCS 280-573694/3	Lab Control Sample	Total/NA	Water	9060	
280-161337-A-2 MS	Matrix Spike	Total/NA	Water	9060	
280-161337-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 573773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total/NA	Water	353.2	
280-161446-4	FB2	Total/NA	Water	353.2	
280-161446-6	6/7S	Total/NA	Water	353.2	
280-161446-8	8P	Total/NA	Water	353.2	
MB 280-573773/22	Method Blank	Total/NA	Water	353.2	
LCS 280-573773/21	Lab Control Sample	Total/NA	Water	353.2	
280-161434-C-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-161434-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 573792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	SM 2320B	
280-161446-7	8S	Total/NA	Water	SM 2320B	
280-161446-8	8P	Total/NA	Water	SM 2320B	
280-161446-10	9S	Total/NA	Water	SM 2320B	
MB 280-573792/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-573792/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161418-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 573912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	353.2	
280-161446-5	6/7P	Total/NA	Water	353.2	
280-161446-7	8S	Total/NA	Water	353.2	
280-161446-9	9P	Total/NA	Water	353.2	
280-161446-10	9S	Total/NA	Water	353.2	
MB 280-573912/23	Method Blank	Total/NA	Water	353.2	
LCS 280-573912/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-573912/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-161408-A-13 MS	Matrix Spike	Total/NA	Water	353.2	
280-161408-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 574080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	9040B	
280-161446-5	6/7P	Total/NA	Water	9040B	
280-161446-6	6/7S	Total/NA	Water	9040B	

General Chemistry (Continued)

Analysis Batch: 574080 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-574080/4	Lab Control Sample	Total/NA	Water	9040B	
280-161699-D-1 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 574081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-6	6/7S	Total/NA	Water	SM 2320B	
MB 280-574081/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-574081/57	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 574136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-5	6/7P	Total/NA	Water	SM 2320B	
280-161446-9	9P	Total/NA	Water	SM 2320B	
MB 280-574136/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-574136/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-161446-5 DU	6/7P	Total/NA	Water	SM 2320B	

Analysis Batch: 574237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-8	8P	Total/NA	Water	9060	
MB 280-574237/4	Method Blank	Total/NA	Water	9060	
LCS 280-574237/3	Lab Control Sample	Total/NA	Water	9060	
280-161247-A-4 MS	Matrix Spike	Total/NA	Water	9060	
280-161247-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 574240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-3	4/5S	Total/NA	Water	9040B	
280-161446-7	8S	Total/NA	Water	9040B	
280-161446-8	8P	Total/NA	Water	9040B	
280-161446-9	9P	Total/NA	Water	9040B	
280-161446-10	9S	Total/NA	Water	9040B	
LCS 280-574240/27	Lab Control Sample	Total/NA	Water	9040B	
280-161755-I-1 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 574260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	300.0	
280-161446-2	1/5P	Total/NA	Water	300.0	
280-161446-3	4/5S	Total/NA	Water	300.0	
280-161446-4	FB2	Total/NA	Water	300.0	
280-161446-5	6/7P	Total/NA	Water	300.0	
280-161446-5	6/7P	Total/NA	Water	300.0	
280-161446-6	6/7S	Total/NA	Water	300.0	
280-161446-6	6/7S	Total/NA	Water	300.0	
280-161446-7	8S	Total/NA	Water	300.0	
280-161446-8	8P	Total/NA	Water	300.0	
280-161446-8	8P	Total/NA	Water	300.0	
280-161446-9	9P	Total/NA	Water	300.0	
280-161446-9	9P	Total/NA	Water	300.0	
280-161446-10	9S	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 574260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-10	9S	Total/NA	Water	300.0	
MB 280-574260/6	Method Blank	Total/NA	Water	300.0	
LCS 280-574260/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-574260/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-574260/3	Lab Control Sample	Total/NA	Water	300.0	
280-161446-4 MS	FB2	Total/NA	Water	300.0	
280-161446-4 MSD	FB2	Total/NA	Water	300.0	
280-161446-4 DU	FB2	Total/NA	Water	300.0	

Analysis Batch: 574325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	350.1	
280-161446-3	4/5S	Total/NA	Water	350.1	
280-161446-4	FB2	Total/NA	Water	350.1	
280-161446-6	6/7S	Total/NA	Water	350.1	
280-161446-10	9S	Total/NA	Water	350.1	
MB 280-574325/18	Method Blank	Total/NA	Water	350.1	
LCS 280-574325/17	Lab Control Sample	Total/NA	Water	350.1	
280-161446-4 MS	FB2	Total/NA	Water	350.1	
280-161446-4 MSD	FB2	Total/NA	Water	350.1	

Analysis Batch: 574377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-4	FB2	Total/NA	Water	9040B	
LCS 280-574377/96	Lab Control Sample	Total/NA	Water	9040B	
280-161425-D-2 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 574418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	410.4	
280-161446-3	4/5S	Total/NA	Water	410.4	
280-161446-4	FB2	Total/NA	Water	410.4	
280-161446-5	6/7P	Total/NA	Water	410.4	
280-161446-6	6/7S	Total/NA	Water	410.4	
280-161446-7	8S	Total/NA	Water	410.4	
280-161446-8	8P	Total/NA	Water	410.4	
280-161446-9	9P	Total/NA	Water	410.4	
280-161446-10	9S	Total/NA	Water	410.4	
MB 280-574418/32	Method Blank	Total/NA	Water	410.4	
MB 280-574418/5	Method Blank	Total/NA	Water	410.4	
LCS 280-574418/3	Lab Control Sample	Total/NA	Water	410.4	
LCS 280-574418/30	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-574418/31	Lab Control Sample Dup	Total/NA	Water	410.4	
LCSD 280-574418/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-161382-E-4 MS	Matrix Spike	Total/NA	Water	410.4	
280-161382-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	
280-161398-C-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-161398-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

General Chemistry

Analysis Batch: 574489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	SM 2340C	
280-161446-3	4/5S	Total/NA	Water	SM 2340C	
280-161446-4	FB2	Total/NA	Water	SM 2340C	
280-161446-5	6/7P	Total/NA	Water	SM 2340C	
280-161446-6	6/7S	Total/NA	Water	SM 2340C	
280-161446-7	8S	Total/NA	Water	SM 2340C	
280-161446-8	8P	Total/NA	Water	SM 2340C	
280-161446-9	9P	Total/NA	Water	SM 2340C	
280-161446-10	9S	Total/NA	Water	SM 2340C	
MB 280-574489/2	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-574489/1	Lab Control Sample	Total/NA	Water	SM 2340C	
280-161446-4 MS	FB2	Total/NA	Water	SM 2340C	
280-161446-4 MSD	FB2	Total/NA	Water	SM 2340C	

Analysis Batch: 574559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	SM 1030E	
280-161446-2	1/5P	Total/NA	Water	SM 1030E (meq)	
280-161446-3	4/5S	Total/NA	Water	SM 1030E	
280-161446-3	4/5S	Total/NA	Water	SM 1030E (meq)	
280-161446-4	FB2	Total/NA	Water	SM 1030E	
280-161446-4	FB2	Total/NA	Water	SM 1030E (meq)	
280-161446-5	6/7P	Total/NA	Water	SM 1030E	
280-161446-5	6/7P	Total/NA	Water	SM 1030E (meq)	
280-161446-6	6/7S	Total/NA	Water	SM 1030E	
280-161446-6	6/7S	Total/NA	Water	SM 1030E (meq)	
280-161446-7	8S	Total/NA	Water	SM 1030E	
280-161446-7	8S	Total/NA	Water	SM 1030E (meq)	
280-161446-8	8P	Total/NA	Water	SM 1030E	
280-161446-8	8P	Total/NA	Water	SM 1030E (meq)	
280-161446-9	9P	Total/NA	Water	SM 1030E	
280-161446-9	9P	Total/NA	Water	SM 1030E (meq)	
280-161446-10	9S	Total/NA	Water	SM 1030E	
280-161446-10	9S	Total/NA	Water	SM 1030E (meq)	
MB 280-574559/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 574631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-5	6/7P	Total/NA	Water	350.1	
MB 280-574631/90	Method Blank	Total/NA	Water	350.1	
LCS 280-574631/88	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-574631/89	Lab Control Sample Dup	Total/NA	Water	350.1	
280-161408-A-11 MS	Matrix Spike	Total/NA	Water	350.1	
280-161408-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Field Service / Mobile Lab

Analysis Batch: 572963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-2	1/5P	Total/NA	Water	Field Sampling	
280-161446-3	4/5S	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 572963 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-161446-5	6/7P	Total/NA	Water	Field Sampling	
280-161446-6	6/7S	Total/NA	Water	Field Sampling	
280-161446-7	8S	Total/NA	Water	Field Sampling	
280-161446-8	8P	Total/NA	Water	Field Sampling	
280-161446-9	9P	Total/NA	Water	Field Sampling	
280-161446-10	9S	Total/NA	Water	Field Sampling	

Client Sample ID: TB2

Lab Sample ID: 280-161446-1

Date Collected: 04/20/22 07:00

Matrix: Water

Date Received: 04/23/22 11:25

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	573649	05/03/22 10:46	TAW	EET DEN

Client Sample ID: 1/5P

Lab Sample ID: 280-161446-2

Date Collected: 04/20/22 11:30

Matrix: Water

Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573649	05/03/22 16:06	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 09:55	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573814	05/05/22 09:39	MAB	EET DEN
Total Recoverable	Analysis	6010B		1			574120	05/05/22 20:16	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	574522	05/12/22 09:40	KMS	EET DEN
Total Recoverable	Analysis	6020		1			574842	05/13/22 02:34	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 16:35	CJ	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	574260	05/09/22 16:50	CJ	EET DEN
Total/NA	Analysis	350.1		100	10 mL	10 mL	574325	05/09/22 13:14	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:32	SVC	EET DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574080	05/05/22 15:01	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	573694	05/02/22 20:38	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 20:17	KEG	EET DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573189	04/27/22 15:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/20/22 12:30	TJ	EET DEN

Client Sample ID: 4/5S

Lab Sample ID: 280-161446-3

Date Collected: 04/20/22 12:15

Matrix: Water

Date Received: 04/23/22 11:25

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	573649	05/03/22 15:44	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 10:28	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 08:36	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 20:19	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 17:05	CJ	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: 4/5S
Lab Sample ID: 280-161446-3
Date Collected: 04/20/22 12:15
Matrix: Water
Date Received: 04/23/22 11:25

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		10	10 mL	10 mL	574325	05/09/22 13:17	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 17:20	SVC	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 17:57	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573362	04/28/22 20:12	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573526	04/29/22 18:03	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	572902	04/25/22 12:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/20/22 13:15	TJ	EET DEN

Client Sample ID: FB2
Lab Sample ID: 280-161446-4
Date Collected: 04/20/22 12:40
Matrix: Water
Date Received: 04/23/22 11:25

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	573649	05/03/22 11:07	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 10:33	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 08:40	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 20:22	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 17:35	CJ	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	574325	05/09/22 13:33	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 17:22	SVC	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574377	05/09/22 22:26	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573362	04/28/22 20:28	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573526	04/29/22 18:08	KEG	EET DEN
Total/NA	Analysis	SM 2340C		1	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	572902	04/25/22 12:19	LRB	EET DEN

Client Sample ID: 6/7P

Lab Sample ID: 280-161446-5

Date Collected: 04/20/22 13:30

Matrix: Water

Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573649	05/03/22 16:28	TAW	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 10:37	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 08:44	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:15	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			574371	05/09/22 15:00	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 19:05	CJ	EET DEN
Total/NA	Analysis	300.0		100	10 mL	10 mL	574260	05/09/22 19:20	CJ	EET DEN
Total/NA	Analysis	350.1		250	10 mL	10 mL	574631	05/10/22 14:13	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:34	SVC	EET DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	574418	05/10/22 11:26	SJD	EET DEN
Total/NA	Analysis	9040B		1			574080	05/05/22 15:07	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	573362	04/28/22 21:19	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			574136	05/06/22 10:28	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	572902	04/25/22 12:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/20/22 14:30	TJ	EET DEN

Client Sample ID: 6/7S

Lab Sample ID: 280-161446-6

Date Collected: 04/22/22 11:00

Matrix: Water

Date Received: 04/23/22 11:25

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	573914	05/05/22 03:13	GO	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 10:57	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 09:05	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:19	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 19:35	CJ	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	574260	05/09/22 19:50	CJ	EET DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	574325	05/09/22 13:30	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 17:26	SVC	EET DEN
Total/NA	Analysis	410.4		5	2 mL	2 mL	574418	05/10/22 13:22	SJD	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: 6/7S
Lab Sample ID: 280-161446-6
Date Collected: 04/22/22 11:00
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9040B		1			574080	05/05/22 15:10	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	573362	04/28/22 21:36	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			574081	05/05/22 20:17	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573189	04/27/22 15:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 12:00	TJ	EET DEN

Client Sample ID: 8S
Lab Sample ID: 280-161446-7
Date Collected: 04/22/22 10:15
Matrix: Water
Date Received: 04/23/22 11:25

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	573914	05/05/22 03:33	GO	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:02	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 09:09	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:23	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 20:05	CJ	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	573617	05/02/22 16:04	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:36	SVC	EET DEN
Total/NA	Analysis	410.4		1	2 mL	2 mL	574418	05/10/22 13:22	SJD	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 18:09	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	573362	04/28/22 21:53	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 21:16	KEG	EET DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573189	04/27/22 15:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 11:15	TJ	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: 8P
Lab Sample ID: 280-161446-8
Date Collected: 04/22/22 09:15
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573914	05/05/22 03:54	GO	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:06	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 09:13	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:26	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 20:35	CJ	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	574260	05/09/22 20:50	CJ	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	573617	05/02/22 16:07	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573773	05/03/22 17:42	SVC	EET DEN
Total/NA	Analysis	410.4		100	2 mL	2 mL	574418	05/10/22 13:22	SJD	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 18:12	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		20	20 mL	20 mL	574237	05/06/22 17:19	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 21:33	KEG	EET DEN
Total/NA	Analysis	SM 2340C		2	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573385	04/29/22 11:13	ABW	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	100 mL	573189	04/27/22 15:19	LRB	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 10:15	TJ	EET DEN

Client Sample ID: 9P
Lab Sample ID: 280-161446-9
Date Collected: 04/22/22 12:00
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	573914	05/05/22 04:15	GO	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:10	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 09:18	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:30	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 21:05	CJ	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	574260	05/09/22 21:20	CJ	EET DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	573617	05/02/22 16:09	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:38	SVC	EET DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	574418	05/10/22 13:22	SJD	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 18:16	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-161446-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: 9P
Lab Sample ID: 280-161446-9
Date Collected: 04/22/22 12:00
Matrix: Water
Date Received: 04/23/22 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060		10	20 mL	20 mL	573694	05/02/22 21:35	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			574136	05/06/22 10:47	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	573436	04/29/22 15:08	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 13:00	TJ	EET DEN

Client Sample ID: 9S
Lab Sample ID: 280-161446-10
Date Collected: 04/22/22 12:20
Matrix: Water
Date Received: 04/23/22 11:25

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	573914	05/05/22 04:36	GO	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	573718	05/04/22 09:55	KMS	EET DEN
Dissolved	Analysis	6010B		1			574034	05/05/22 11:14	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573691	05/04/22 10:41	KMS	EET DEN
Total Recoverable	Analysis	6010B		1			574011	05/05/22 09:22	LMT	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	573706	05/04/22 08:40	PFM	EET DEN
Total Recoverable	Analysis	6020		1			573944	05/04/22 21:34	LMT	EET DEN
Total/NA	Analysis	300.0		1	10 mL	10 mL	574260	05/09/22 22:05	CJ	EET DEN
Total/NA	Analysis	300.0		20	10 mL	10 mL	574260	05/09/22 22:20	CJ	EET DEN
Total/NA	Analysis	350.1		100	10 mL	10 mL	574325	05/09/22 13:41	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	573912	05/04/22 17:52	SVC	EET DEN
Total/NA	Analysis	410.4		5	2 mL	2 mL	574418	05/10/22 13:22	SJD	EET DEN
Total/NA	Analysis	9040B		1			574240	05/06/22 18:20	KEG	EET DEN
Total/NA	Analysis	9050A		1			572874	04/25/22 10:28	KEG	EET DEN
Total/NA	Analysis	9060		10	20 mL	20 mL	573694	05/02/22 21:49	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			574559	05/11/22 10:42	ZPM	EET DEN
Total/NA	Analysis	SM 2320B		1			573792	05/03/22 22:12	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	574489	05/10/22 18:37	LRB	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	573148	04/27/22 11:28	LRB	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	573436	04/29/22 15:08	ABW	EET DEN
Total/NA	Analysis	Field Sampling		1			572963	04/22/22 13:20	TJ	EET DEN

Laboratory References:
EET 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: 280-16515-868.1
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	Project #: 28002786			
Event Desc: LF Module Sumps - Apr				
Site: Oregon	SSOW#:			

Analysis Requested

280-161446 Chain of Custody

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	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			
TB2	4/20/22	0700	G	W			X							2	Short Holds: pH
1/5P	4/20/22	1130	G	W	X		X	X	X	X	X	X	X	11	
4/5S	4/20/22	1215	G	W	X		X	X	X	X	X	X	X	11	
FB2	4/20/22	1240	G	W	X		X	X	X	X	X	X	X	11	
6/7P	4/20/22	1330	G	W	X		X	X	X	X	X	X	X	11	
6/7S	4/22/22	1100	G	W	X		X	X	X	X	X	X	X	11	
8S	4/22/22	1015	G	W	X		X	X	X	X	X	X	X	11	
8P	4/22/22	0915	G	W	X		X	X	X	X	X	X	X	11	
9P	4/22/22	1200	G	W	X		X	X	X	X	X	X	X	11	
9S	4/22/22	1220	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		4/22/22 @ 1630	SCS		4/23/22 1125	GAUEN
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.: 1442297, 1483883, 1484159, 1484164, 1484215

Cooler Temperature(s) °C and Other Remarks: 2.9, 0.6, 2.6, 0.9, 0.4 1/R2 CF+0.1

3/10/2023

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

280-161446 Chain of Custody

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	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			
TB2	4/20/22	0700	G	W			X							2	Short Holds: pH
1/5P	4/20/22	1130	G	W	X		X	X	X	X	X	X	X	11	
4/5S	4/22/22	1215	G	W	X		X	X	X	X	X	X	X	11	
FB2	4/20/22	1240	G	W	X		X	X	X	X	X	X	X	11	
6/7P	4/20/22	1330	G	W	X		X	X	X	X	X	X	X	11	
6/7S	4/22/22	1100	G	W	X		X	X	X	X	X	X	X	11	
8S	4/22/22	1015	G	W	X		X	X	X	X	X	X	X	11	
8P	4/22/22	0915	G	W	X		X	X	X	X	X	X	X	11	
9P	4/22/22	1200	G	W	X		X	X	X	X	X	X	X	11	
9S	4/22/22	1220	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		4/22/22 @1630	SCS		4/23/22 1125	GAIDEN
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.: 1442297, 1983883, 1984159, 1984164, 1987215

Cooler Temperature(s) °C and Other Remarks: 2.9, 0.6, 2.6, 0.9, 0.4 1/2 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:** 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 . ° 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	4/20/22	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	4/20/22	11 :30	A	2	250, 500, 1L	(None)	(YES)	NO	NA	
Yellow Glass	4/20/22	11 : 30	A	4	250, 500, 1L	(H_2SO_4)	(YES)	NO		
Red Total Poly	4/20/22	11 : 30	A	1	125, 250, 500	(HNO_3)	(YES)	NO		
Red Diss. Poly	4/20/22	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 [ ] 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(1130)	0.00	7.24	73.2	9524	20.1	—	0.74	Black / Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Liquid level - 20.9"

SAMPLER: EDAN TAYLOR (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/SS

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: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume		Preservative	Ice	Filter	pH	√
VOA Glass	4/20/22	12:15	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	4/20/22	12:15	A	2	250, 500, 1L	None	YES	NO	NA	
Yellow Glass	4/20/22	12:15	A	4	250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/20/22	12:15	A	1	125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	4/20/22	12:15	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 (1215)	0.00	6.44	3.7	1552	27.6	-	2.76	clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level 16.3"

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:** 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) 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)
/ /	:	.	.	.	.	.	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	4/20/22	12:40	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	4/20/22	12:40	A	2	250, 500, (1D) None	(YES)	(NO)	NA	✓
Yellow Glass	4/20/22	12:40	A	2	250, ~~500~~, 1L H_2SO_4	(YES)	(NO)		✓
Red Total Poly	4/20/22	12:40	A	1	125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/20/22	12:40	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 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	A (12:40)	0.00	—	—	—	—	—	—	—
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected @ 4155 ET

Collected near 4/55 using lab supplied DI water

SAMPLER: EDAN TAYLOR (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:** 0/7P
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)
/ /	:	.	.	.	.	.	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	4/20/22	13 : 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	4/20/22	13 : 30	A	2	250, 500, 1L None	YES	NO	NA	
Yellow Glass	4/20/22	13 : 30	A	4	250, 500, 1L H_2SO_4	YES	NO		
Red Total Poly	4/20/22	13 : 30	A	1	125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	4/20/22	13 : 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) (NO_3/NO_2) (Tannin/Lignin) (TKN) (Total Phos) (TOX) (VOA)
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(1330)	0.00	7.32	-20.9	11177	21 .6	/	1.12	Very DArk
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Liquid lvl ~ 10.8'

SAMPLER: EDAN TAYLOR (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:** 10175

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 .	° 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	4/22/22	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	4/22/22	11:00	A	2 (250, 500) 1L	None	YES	NO	NA	
Yellow Glass	4/22/22	11:00	A	4 (250, 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4/22/22	11:00	A	1 125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	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	6.65	-22.1	2614	25.5	-	2.21	Green / Clear
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level 2.7'

SAMPLER: EDAN TAYLOR (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:** 8S

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) 54.0 °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	4/22/22	10:15	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	4/22/22	10:15	A	2 (250, 500, 1L)	None	YES	NO	NA	
Yellow Glass	4/22/22	10:15	A	4 (250, 500, 1L)	H_2SO_4	YES	NO		
Red Total Poly	4/22/22	10:15	A	1 (125, 250, 500)	HNO_3	YES	NO		
Red Diss. Poly	4/22/22	10:15	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(10:15)	0.00	6.76	63.9	2258	22.2	-	1.37	Clear/greenish
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level - 12.4'

SAMPLER: EDAN TAYLOR
(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) 58 .	°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	4/22/22	7:45	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	4/22/22	7:45	A	2	250, 500, 1L	~~None~~	YES	NO	NA	
Yellow Glass	4/22/22	7:45	A	4	250, 500, 1L	~~H_2SO_4~~	YES	NO		
Red Total Poly	4/22/22	7:45	A	1	125, 250, 500	~~HNO_3~~	YES	NO		
Red Diss. Poly	4/22/22	7:45	A	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 [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 (0745)	0.00	7.10	50.2	5426	14.0	-	4.04	DARK Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

liquid level 11.41'

SAMPLER: EDAN TAYLOR (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 . ° 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 12/22/22	12 :20	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 12/22/22	12 :20	A	2	250, 500, (1L)	None	YES	NO	NA	
Yellow Glass	4 12/22/22	12 :20	A	4	(250) 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	4 12/22/22	12: 20	A	1	125, 250, (500)	HNO_3	YES	NO		
Red Diss. Poly	4 12/22/22	12 : 20	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 (1220)	0.00	7.01	-14.6	4578	25 . 6	<	1 .45	Dark Brown
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

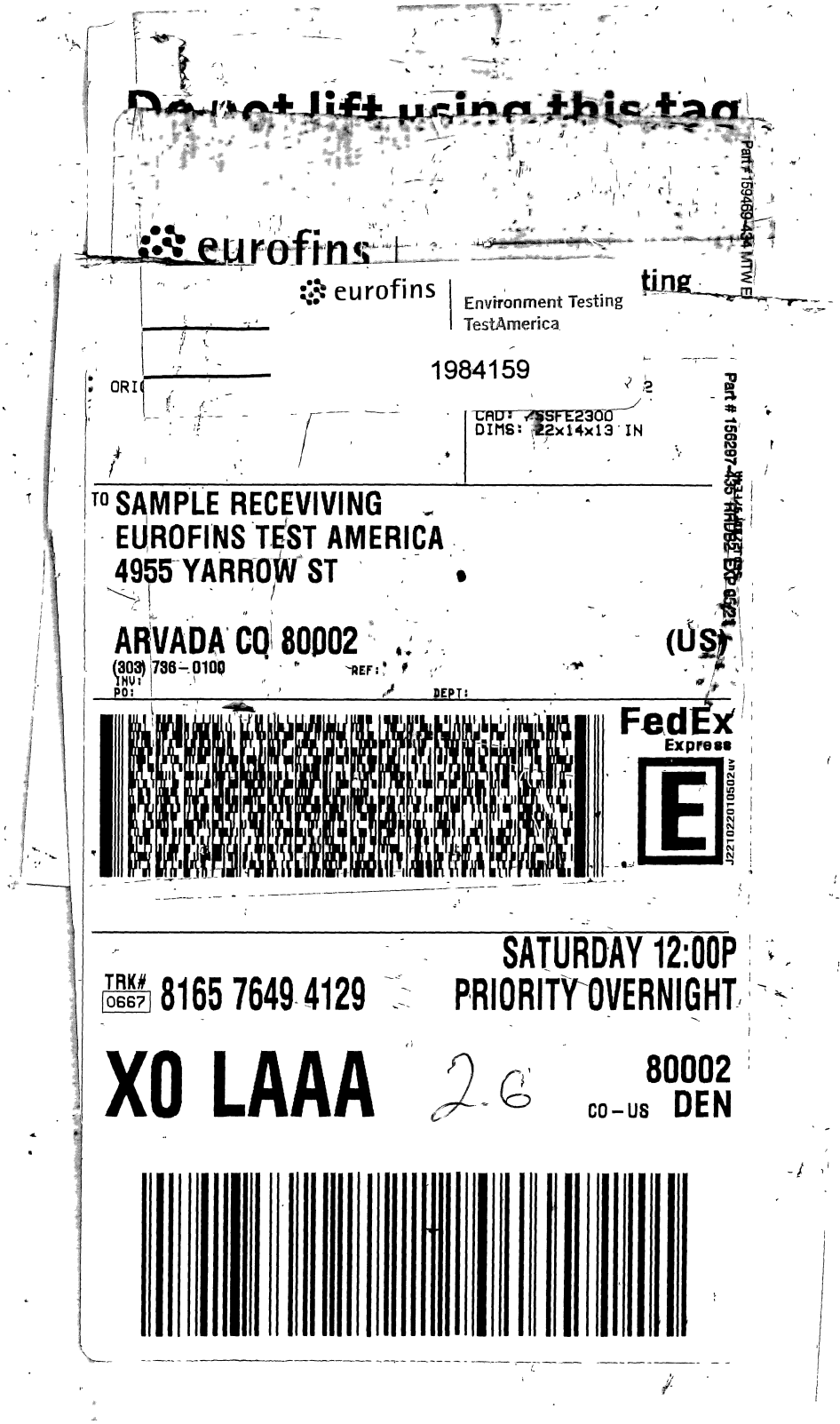
liquid level - 14.7"

Water color lightened as water was sampled

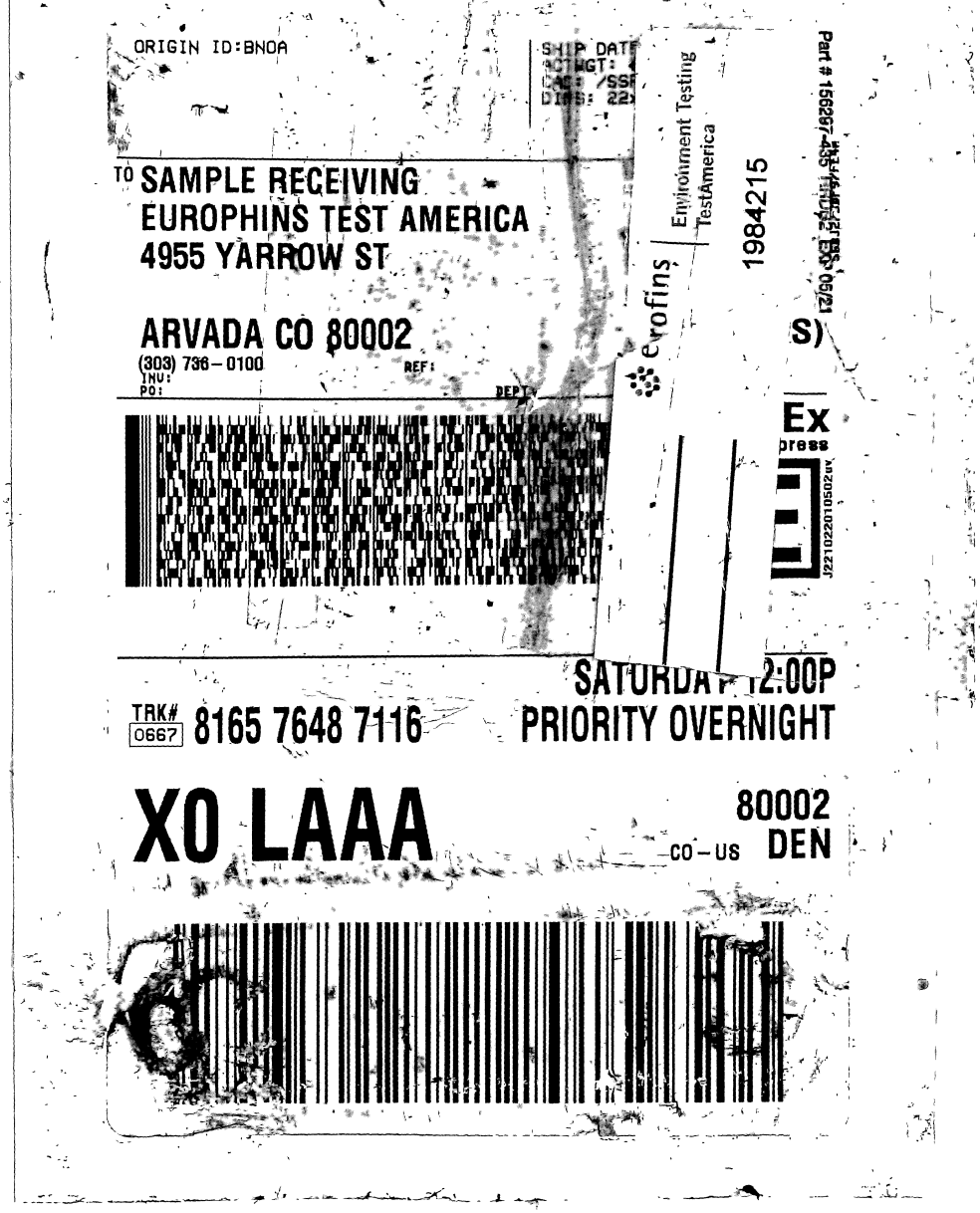
SAMPLER: EDAN TAYLOR
(PRINTED NAME) (SIGNATURE)

280-161446 Waybill

AGIN ID:BNOA
SHIP DATE: 22APR22
ACTWGT: 49.15 LB
CAD: /SSFE2300
DIMS: 22x14x13 IN
0.6
eurofins
Environment Testing
TestAmerica
1983883
SAMP
EURO
4955
ARVADA CO 80002
(US)
(303) 736-0100
REF:
INV:
PO:
DEPT:
FedEx
Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
TRK#
0667
8165 7648 7080
XO LAAA
80002
CO-US DEN


eurofins
eurofins | Environment Testing TestAmerica
1984159
CAD: 7SSFE2300
DIMS: 22x14x13 IN
TO SAMPLE RECEIVIVING
EUROFINS TEST AMERICA
4955 YARROW ST
ARVADA CO 80002
(US)
(303) 736-0100
REF:
INV:
PO:
DEPT:
FedEx
Express
TRK# 0667 8165 7649 4129
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO LAAA
2.6
80002
CO-US DEN

ORIGIN ID:BNOA
eurofins
Environment Testing
TestAmerica
Custody Seal
1984164
ARVADA CO 80002
(303) 736-0100
(US)
REF:
INV:
PO:
DEPT:
FedEx
Express
J22102201050Zuv
SATURDAY 12:00P
PRIORITY OVERNIGHT
TRK#
0667
8165 7648 7090
XO LAAA
80002
CO-US
DEN


ORIGIN ID:BNOA
SHIP DATE
ACTWGT:
CAD: /SSF
DIMS: 22
TO SAMPLE RECEIVING
EUROPHINS TEST AMERICA
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:
Eurofins | Environment Testing
TestAmerica
1984215
Part # 156267-435 REV. EXP 05/21
S)
Ex
press
SATURDAY 12:00P
TRK#
0667
8165 7648 7116
PRIORITY OVERNIGHT
XO LAAA
80002
CO-US
DEN

2.9

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-161446-1

Login Number: 161446

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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.	False	Refer to job narrative for details
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 2022

Compliance Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 1/9/2023 10:42:56 AM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Compliance Wells - Apr Oct

JOB NUMBER

280-169301-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

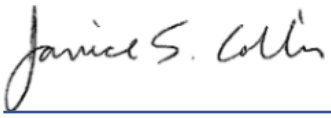
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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1/9/2023 10:42:56 AM

Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-169301-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

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: 280-169301-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-169301-1

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

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

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

RECEIPT

The samples were received on 11/17/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.4°C, 0.8°C and 1.7°C

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): DUP11152201 (280-169301-6). 1L poly lists sample time 1230. COC lists 1030. Logged per COC.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TRIP BLANK (280-169301-1), MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/19/2022 and 11/20/2022.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-594149 exceeded the RPD limit for LCSD 280-594149/4 for Chloromethane (20%) at 22% and Dichlorodifluoromethane (21%) at 26%. The recoveries of these compounds in the LCS and LCSD were within limits and was non-detect in the associated samples.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

1,2-DIBROMOETHANE, 1,2-DIBROMO-3-CHLOROPROPANE, AND 1,2,3-TRICHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TRIP BLANK (280-169301-1), MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared and analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS

Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201

Job ID: 280-169301-1 (Continued)

Laboratory: Eurofins Denver (Continued)

(280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 12/01/2022 and analyzed on 12/02/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/21/2022 and 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 11/18/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 12/02/2022 and 12/06/2022.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/06/2022 and 12/07/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/29/2022 and 12/01/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL ORGANIC CARBON
Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/02/2022 and 12/05/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE

Job ID: 280-169301-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for Cation Anion Balance in accordance with epa methodologies. The samples were analyzed on 12/09/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE

Samples MW-16B (280-169301-2), FB11152201 (280-169301-3), MW-21A (280-169301-4), MW-15B (280-169301-5), DUP11152201 (280-169301-6), MW-14B (280-169301-7), MW-21B (280-169301-8), MW-12A (280-169301-9), MW-12B (280-169301-10), MW-16A (280-169301-11) and DUP11162201 (280-169301-12) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 12/09/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-169301-1

No Detections.

Client Sample ID: MW-16B — Lab Sample ID: 280-169301-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	96000		500		ug/L	1		6010B	Dissolved
Iron	430		30		ug/L	1		6010B	Dissolved
Magnesium	35000		200		ug/L	1		6010B	Dissolved
Manganese	2800		3.0		ug/L	1		6010B	Dissolved
Potassium	530		500		ug/L	1		6010B	Dissolved
Sodium	63000		1000		ug/L	1		6010B	Dissolved
Chloride	120		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.0		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.25		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.058		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	11				meq/L	1		SM 1030E	Total/NA
Total Cations	10				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.95				%	1		SM 1030E	Total/NA
Calcium	96				mg/L	1		SM 1030E	Total/NA
Magnesium	35				mg/L	1		SM 1030E	Total/NA
Potassium	0.53				mg/L	1		SM 1030E	Total/NA
Sodium	63				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.25				mg/L	1		SM 1030E	Total/NA
Chloride	120				mg/L	1		SM 1030E	Total/NA
Sulfate	4.0				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	0.058				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.95				%	1		SM 1030E	Total/NA
Calculated TDS	530				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	530				mg/L	1		SM 1030E	Total/NA
Iron	0.43				mg/L	1		SM 1030E	Total/NA
Calcium	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	2.9				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	2.7				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.018				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.083				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	0.0041				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.023				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	360		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	530		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB11152201 — Lab Sample ID: 280-169301-3

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

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Client Sample ID: FB11152201 (Continued)

Lab Sample ID: 280-169301-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
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-21A

Lab Sample ID: 280-169301-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	35000		500		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Sodium	15000		1000		ug/L	1		6010B	Dissolved
Chloride	8.4		0.50		mg/L	1		300.0	Total/NA
Sulfate	13		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.073		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	1.3		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	3.6				meq/L	1		SM 1030E	Total/NA
Total Cations	3.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.58				%	1		SM 1030E	Total/NA
Calcium	35				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	15				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.073				mg/L	1		SM 1030E	Total/NA
Chloride	8.4				mg/L	1		SM 1030E	Total/NA
Sulfate	13				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

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-21A (Continued)

Lab Sample ID: 280-169301-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	1.3				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.58				%	1		SM 1030E	Total/NA
Calculated TDS	160				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	1.7				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	0.65				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0052				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.24				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.27				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	0.093				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	150		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	190		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-15B

Lab Sample ID: 280-169301-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	81000		500		ug/L	1		6010B	Dissolved
Iron	250		30		ug/L	1		6010B	Dissolved
Magnesium	32000		200		ug/L	1		6010B	Dissolved
Manganese	1000		3.0		ug/L	1		6010B	Dissolved
Sodium	37000		1000		ug/L	1		6010B	Dissolved
Chloride	39		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.4		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.19		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	8.1				meq/L	1		SM 1030E	Total/NA
Total Cations	8.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.1				%	1		SM 1030E	Total/NA
Calcium	81				mg/L	1		SM 1030E	Total/NA
Magnesium	32				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	0.19				mg/L	1		SM 1030E	Total/NA
Chloride	39				mg/L	1		SM 1030E	Total/NA
Sulfate	1.4				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.1				%	1		SM 1030E	Total/NA
Calculated TDS	400				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.93				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	370				mg/L	1		SM 1030E	Total/NA
Iron	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	4.0				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: 280-169301-5

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
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	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.1				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.029				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	350				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	7.0				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	350		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	370		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP11152201

Lab Sample ID: 280-169301-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	81000		500		ug/L	1		6010B	Dissolved
Iron	250		30		ug/L	1		6010B	Dissolved
Magnesium	32000		200		ug/L	1		6010B	Dissolved
Manganese	1000		3.0		ug/L	1		6010B	Dissolved
Sodium	37000		1000		ug/L	1		6010B	Dissolved
Chloride	42		0.50		mg/L	1		300.0	Total/NA
Sulfate	1.3		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.072		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	8.2				meq/L	1		SM 1030E	Total/NA
Total Cations	8.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	0.59				%	1		SM 1030E	Total/NA
Calcium	81				mg/L	1		SM 1030E	Total/NA
Magnesium	32				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	0.072				mg/L	1		SM 1030E	Total/NA
Chloride	42				mg/L	1		SM 1030E	Total/NA
Sulfate	1.3				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Alkalinity	350				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	0.59				%	1		SM 1030E	Total/NA
Calculated TDS	400				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.97				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	390				mg/L	1		SM 1030E	Total/NA
Iron	0.25				mg/L	1		SM 1030E	Total/NA
Calcium	4.0				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	0.0051				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.027				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	350				mg/L	1		SM 1030E (meq)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP11152201 (Continued)

Lab Sample ID: 280-169301-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity	7.0				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	350		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	390		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-14B

Lab Sample ID: 280-169301-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	51000		500		ug/L	1		6010B	Dissolved
Iron	1000		30		ug/L	1		6010B	Dissolved
Magnesium	15000		200		ug/L	1		6010B	Dissolved
Manganese	1100		3.0		ug/L	1		6010B	Dissolved
Sodium	39000		1000		ug/L	1		6010B	Dissolved
Chloride	33		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.3		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.22		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.5		1.0		mg/L	1		9060	Total/NA
Total Anions	5.6				meq/L	1		SM 1030E	Total/NA
Total Cations	5.5				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.64				%	1		SM 1030E	Total/NA
Calcium	51				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	39				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.22				mg/L	1		SM 1030E	Total/NA
Chloride	33				mg/L	1		SM 1030E	Total/NA
Sulfate	4.3				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	230				mg/L	1		SM 1030E	Total/NA
Alkalinity	230				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.64				%	1		SM 1030E	Total/NA
Calculated TDS	280				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.0				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	280				mg/L	1		SM 1030E	Total/NA
Iron	1.0				mg/L	1		SM 1030E	Total/NA
Calcium	2.5				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	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.016				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.93				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.090				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	230				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.6				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	230		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	280		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: MW-21B — Lab Sample ID: 280-169301-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	44000		500		ug/L	1		6010B	Dissolved
Iron	880		30		ug/L	1		6010B	Dissolved
Magnesium	18000		200		ug/L	1		6010B	Dissolved
Manganese	1600		3.0		ug/L	1		6010B	Dissolved
Potassium	620		500		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	15		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	2.7		1.0		mg/L	1		9060	Total/NA
Total Anions	5.2				meq/L	1		SM 1030E	Total/NA
Total Cations	5.2				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.53				%	1		SM 1030E	Total/NA
Calcium	44				mg/L	1		SM 1030E	Total/NA
Magnesium	18				mg/L	1		SM 1030E	Total/NA
Potassium	0.62				mg/L	1		SM 1030E	Total/NA
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.44				mg/L	1		SM 1030E	Total/NA
Chloride	15				mg/L	1		SM 1030E	Total/NA
Sulfate	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	240				mg/L	1		SM 1030E	Total/NA
Alkalinity	240				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.53				%	1		SM 1030E	Total/NA
Calculated TDS	250				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.98				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	250				mg/L	1		SM 1030E	Total/NA
Iron	0.88				mg/L	1		SM 1030E	Total/NA
Calcium	2.2				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.5				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	0.031				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	240				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.047				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	240		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	250		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12A — Lab Sample ID: 280-169301-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	38000		500		ug/L	1		6010B	Dissolved
Magnesium	15000		200		ug/L	1		6010B	Dissolved
Potassium	740		500		ug/L	1		6010B	Dissolved
Sodium	33000		1000		ug/L	1		6010B	Dissolved
Chloride	79		0.50		mg/L	1		300.0	Total/NA
Sulfate	20		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	7.1		0.050		mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-12A (Continued) — Lab Sample ID: 280-169301-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Average	2.7		1.0		mg/L	1		9060	Total/NA
Total Anions	4.7				meq/L	1		SM 1030E	Total/NA
Total Cations	4.6				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.92				%	1		SM 1030E	Total/NA
Calcium	38				mg/L	1		SM 1030E	Total/NA
Magnesium	15				mg/L	1		SM 1030E	Total/NA
Potassium	0.74				mg/L	1		SM 1030E	Total/NA
Sodium	33				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	79				mg/L	1		SM 1030E	Total/NA
Sulfate	20				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	76				mg/L	1		SM 1030E	Total/NA
Alkalinity	76				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	7.1				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.92				%	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	0.00				mg/L	1		SM 1030E	Total/NA
Calcium	1.9				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.019				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.2				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	76				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	1.5				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.51				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	76		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	270		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12B — Lab Sample ID: 280-169301-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	82000		500		ug/L	1		6010B	Dissolved
Iron	1000		30		ug/L	1		6010B	Dissolved
Magnesium	22000		200		ug/L	1		6010B	Dissolved
Manganese	1000		3.0		ug/L	1		6010B	Dissolved
Potassium	520		500		ug/L	1		6010B	Dissolved
Sodium	32000		1000		ug/L	1		6010B	Dissolved
Chloride	100		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.26		0.030		mg/L	1		350.1	Total/NA
Total Organic Carbon - Average	1.7		1.0		mg/L	1		9060	Total/NA
Total Anions	7.2				meq/L	1		SM 1030E	Total/NA
Total Cations	7.4				meq/L	1		SM 1030E	Total/NA
Percent Difference	1.1				%	1		SM 1030E	Total/NA
Calcium	82				mg/L	1		SM 1030E	Total/NA
Magnesium	22				mg/L	1		SM 1030E	Total/NA
Potassium	0.52				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: 280-169301-10

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Sodium	32				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.26				mg/L	1		SM 1030E	Total/NA
Chloride	100				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
Alkalinity	220				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.00				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	1.1				%	1		SM 1030E	Total/NA
Calculated TDS	370				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	400				mg/L	1		SM 1030E	Total/NA
Iron	1.0				mg/L	1		SM 1030E	Total/NA
Calcium	4.1				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.8				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.013				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.4				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.019				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	2.8				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	0.054				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	220		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	400		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-16A

Lab Sample ID: 280-169301-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	30000		500		ug/L	1		6010B	Dissolved
Iron	44		30		ug/L	1		6010B	Dissolved
Magnesium	14000		200		ug/L	1		6010B	Dissolved
Manganese	460		3.0		ug/L	1		6010B	Dissolved
Sodium	31000		1000		ug/L	1		6010B	Dissolved
Chloride	12		0.50		mg/L	1		300.0	Total/NA
Sulfate	20		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.060		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	4.4				meq/L	1		SM 1030E	Total/NA
Total Cations	4.0				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.2				%	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	31				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.060				mg/L	1		SM 1030E	Total/NA
Chloride	12				mg/L	1		SM 1030E	Total/NA
Sulfate	20				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	180				mg/L	1		SM 1030E	Total/NA
Alkalinity	180				mg/L	1		SM 1030E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16A (Continued) — Lab Sample ID: 280-169301-11

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Nitrate/Nitrite	0.11				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.2				%	1		SM 1030E	Total/NA
Calculated TDS	200				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	210				mg/L	1		SM 1030E	Total/NA
Iron	0.044				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	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.0043				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.34				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.42				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	180				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	3.6				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.0079				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0024				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	180		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP11162201 — Lab Sample ID: 280-169301-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	29000		500		ug/L	1		6010B	Dissolved
Magnesium	13000		200		ug/L	1		6010B	Dissolved
Manganese	280		3.0		ug/L	1		6010B	Dissolved
Sodium	30000		1000		ug/L	1		6010B	Dissolved
Chloride	12		0.50		mg/L	1		300.0	Total/NA
Sulfate	20		1.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.066		0.030		mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.071		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	4.2				meq/L	1		SM 1030E	Total/NA
Total Cations	3.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	-4.1				%	1		SM 1030E	Total/NA
Calcium	29				mg/L	1		SM 1030E	Total/NA
Magnesium	13				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	30				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.066				mg/L	1		SM 1030E	Total/NA
Chloride	12				mg/L	1		SM 1030E	Total/NA
Sulfate	20				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	0.071				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-4.1				%	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	210				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

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP11162201 (Continued)

Lab Sample ID: 280-169301-12

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1.1				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	0.0047				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	0.34				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.42				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	0.0051				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	170		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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-169301-1	TRIP BLANK	Water	11/15/22 07:00	11/17/22 10:30
280-169301-2	MW-16B	Water	11/15/22 09:10	11/17/22 10:30
280-169301-3	FB11152201	Water	11/15/22 09:20	11/17/22 10:30
280-169301-4	MW-21A	Water	11/15/22 13:20	11/17/22 10:30
280-169301-5	MW-15B	Water	11/15/22 10:25	11/17/22 10:30
280-169301-6	DUP11152201	Water	11/15/22 10:30	11/17/22 10:30
280-169301-7	MW-14B	Water	11/15/22 12:15	11/17/22 10:30
280-169301-8	MW-21B	Water	11/15/22 14:15	11/17/22 10:30
280-169301-9	MW-12A	Water	11/15/22 15:25	11/17/22 10:30
280-169301-10	MW-12B	Water	11/15/22 15:50	11/17/22 10:30
280-169301-11	MW-16A	Water	11/16/22 08:25	11/17/22 10:30
280-169301-12	DUP11162201	Water	11/16/22 08:30	11/17/22 10:30

Method Summary

Client: Waste Management
Job ID: 280-169301-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	MCAWW	EET BUF
350.1	Nitrogen, Ammonia	MCAWW	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: TRIP BLANK
Date Collected: 11/15/22 07:00
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-1
Matrix: Water

Method: SW846 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			11/19/22 20:35	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 20:35	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 20:35	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 20:35	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 20:35	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 20:35	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 20:35	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 20:35	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 20:35	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 20:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 20:35	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 20:35	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 20:35	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 20:35	1
2-Hexanone	ND		5.0		ug/L			11/19/22 20:35	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 20:35	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 20:35	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 20:35	1
Acetone	ND		10		ug/L			11/19/22 20:35	1
Benzene	ND		1.0		ug/L			11/19/22 20:35	1
Bromobenzene	ND		1.0		ug/L			11/19/22 20:35	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 20:35	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 20:35	1
Bromoform	ND		1.2		ug/L			11/19/22 20:35	1
Bromomethane	ND		2.4		ug/L			11/19/22 20:35	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 20:35	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 20:35	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 20:35	1
Chloroethane	ND		2.0		ug/L			11/19/22 20:35	1
Chloroform	ND		1.0		ug/L			11/19/22 20:35	1
Chloromethane	ND	*1	2.0		ug/L			11/19/22 20:35	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 20:35	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 20:35	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 20:35	1
Dibromomethane	ND		1.0		ug/L			11/19/22 20:35	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/19/22 20:35	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 20:35	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 20:35	1
Naphthalene	ND		1.0		ug/L			11/19/22 20:35	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 20:35	1

Client Sample ID: TRIP BLANK

Date Collected: 11/15/22 07:00
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-1
Matrix: Water

Method: SW846 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			11/19/22 20:35	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
Styrene	ND		1.0		ug/L			11/19/22 20:35	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 20:35	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 20:35	1
Toluene	ND		1.0		ug/L			11/19/22 20:35	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 20:35	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 20:35	1
Trichloroethene	ND		1.0		ug/L			11/19/22 20:35	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 20:35	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 20:35	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 20:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 20:35*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*11/19/22 20:35*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*11/19/22 20:35*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/19/22 20:35*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/19/22 20:35*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 19:01	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*127*		*70 - 130*	*11/22/22 11:24*	*11/22/22 19:01*	*1*

Client Sample ID: MW-16B

Date Collected: 11/15/22 09:10
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-2
Matrix: Water

Method: SW846 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			11/19/22 23:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 23:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 23:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 23:49	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 23:49	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 23:49	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 23:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 23:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 23:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 23:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 23:49	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 23:49	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 23:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 23:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: MW-16B
Date Collected: 11/15/22 09:10
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-2
Matrix: Water

Method: SW846 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			11/19/22 23:49	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 23:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 23:49	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 23:49	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 23:49	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 23:49	1
2-Hexanone	ND		5.0		ug/L			11/19/22 23:49	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 23:49	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 23:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 23:49	1
Acetone	ND		10		ug/L			11/19/22 23:49	1
Benzene	ND		1.0		ug/L			11/19/22 23:49	1
Bromobenzene	ND		1.0		ug/L			11/19/22 23:49	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 23:49	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 23:49	1
Bromoform	ND		1.2		ug/L			11/19/22 23:49	1
Bromomethane	ND		2.4		ug/L			11/19/22 23:49	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 23:49	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 23:49	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 23:49	1
Chloroethane	ND		2.0		ug/L			11/19/22 23:49	1
Chloroform	ND		1.0		ug/L			11/19/22 23:49	1
Chloromethane	ND	*1	2.0		ug/L			11/19/22 23:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 23:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 23:49	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 23:49	1
Dibromomethane	ND		1.0		ug/L			11/19/22 23:49	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/19/22 23:49	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 23:49	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 23:49	1
Naphthalene	ND		1.0		ug/L			11/19/22 23:49	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
N-Propylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
Styrene	ND		1.0		ug/L			11/19/22 23:49	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 23:49	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 23:49	1
Toluene	ND		1.0		ug/L			11/19/22 23:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 23:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 23:49	1
Trichloroethene	ND		1.0		ug/L			11/19/22 23:49	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 23:49	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 23:49	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 23:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 23:49*	*1*

Client Sample ID: MW-16B

Date Collected: 11/15/22 09:10
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 127*		*11/19/22 23:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/19/22 23:49*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/19/22 23:49*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/19/22 23:49*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 19:26	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*121*		*70 - 130*	*11/22/22 11:24*	*11/22/22 19:26*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**96000**		500		ug/L		12/01/22 09:30	12/02/22 06:54	1
Iron	**430**		30		ug/L		12/01/22 09:30	12/02/22 06:54	1
Magnesium	**35000**		200		ug/L		12/01/22 09:30	12/02/22 06:54	1
Manganese	**2800**		3.0		ug/L		12/01/22 09:30	12/02/22 06:54	1
Potassium	**530**		500		ug/L		12/01/22 09:30	12/02/22 06:54	1
Sodium	**63000**		1000		ug/L		12/01/22 09:30	12/02/22 06:54	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**11**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**10**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**-0.95**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**96**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**35**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.53**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**63**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.25**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**120**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**4.0**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**360**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**360**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.058**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**-0.95**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**530**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**1.0**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**530**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.43**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**4.8**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**2.9**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.014**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**2.7**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.018**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**3.4**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.083**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**360**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-16B

Date Collected: 11/15/22 09:10
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	7.2				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.0041				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.023				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	120		0.50		mg/L			12/02/22 18:39	1
Sulfate (MCAWW 300.0)	4.0		1.0		mg/L			12/02/22 18:39	1
Ammonia as N (MCAWW 350.1)	0.25		0.030		mg/L			12/06/22 16:01	1
Nitrate/Nitrite (MCAWW 353.2)	0.058		0.050		mg/L			12/01/22 13:33	1
Total Organic Carbon - Average (SW846 9060)	1.7		1.0		mg/L			12/02/22 15:39	1
Bicarbonate Alkalinity (SM 2320B)	360		10		mg/L			11/21/22 23:32	1
Total Dissolved Solids (SM 2540C)	530		10		mg/L			11/18/22 10:18	1

Client Sample ID: FB11152201

Date Collected: 11/15/22 09:20
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-3

Matrix: Water

Method: SW846 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			11/19/22 12:27	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 12:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 12:27	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 12:27	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 12:27	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 12:27	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 12:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 12:27	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 12:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 12:27	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 12:27	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 12:27	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 12:27	1
2-Hexanone	ND		5.0		ug/L			11/19/22 12:27	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 12:27	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 12:27	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 12:27	1
Acetone	ND		10		ug/L			11/19/22 12:27	1
Benzene	ND		1.0		ug/L			11/19/22 12:27	1
Bromobenzene	ND		1.0		ug/L			11/19/22 12:27	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 12:27	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 12:27	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: FB11152201
Date Collected: 11/15/22 09:20
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.2		ug/L			11/19/22 12:27	1
Bromomethane	ND		2.4		ug/L			11/19/22 12:27	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 12:27	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 12:27	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 12:27	1
Chloroethane	ND		2.0		ug/L			11/19/22 12:27	1
Chloroform	ND		1.0		ug/L			11/19/22 12:27	1
Chloromethane	ND		2.0		ug/L			11/19/22 12:27	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 12:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 12:27	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 12:27	1
Dibromomethane	ND		1.0		ug/L			11/19/22 12:27	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/19/22 12:27	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 12:27	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 12:27	1
Naphthalene	ND		1.0		ug/L			11/19/22 12:27	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
N-Propylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
Styrene	ND		1.0		ug/L			11/19/22 12:27	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 12:27	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 12:27	1
Toluene	ND		1.0		ug/L			11/19/22 12:27	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 12:27	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 12:27	1
Trichloroethene	ND		1.0		ug/L			11/19/22 12:27	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 12:27	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 12:27	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 12:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 12:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*11/19/22 12:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*11/19/22 12:27*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/19/22 12:27*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/19/22 12:27*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 19:50	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*123*		*70 - 130*	*11/22/22 11:24*	*11/22/22 19:50*	*1*

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: FB11152201

Date Collected: 11/15/22 09:20
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-3

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:15	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 07:15	1
Magnesium	ND		200		ug/L		12/01/22 09:30	12/02/22 07:15	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 07:15	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:15	1
Sodium	ND		1000		ug/L		12/01/22 09:30	12/02/22 07:15	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.00**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**0.00**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**NC**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**NC**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**NC**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**0.00**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	ND		0.50		mg/L			12/02/22 18:58	1
Sulfate (MCAWW 300.0)	ND		1.0		mg/L			12/02/22 18:58	1
Ammonia as N (MCAWW 350.1)	ND		0.030		mg/L			12/07/22 14:44	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 11:41	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			12/02/22 16:23	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			11/22/22 00:05	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			11/18/22 10:26	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: MW-21A
Date Collected: 11/15/22 13:20
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-4
Matrix: Water

Method: SW846 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			11/19/22 15:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 15:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 15:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 15:20	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 15:20	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 15:20	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 15:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 15:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 15:20	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 15:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 15:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 15:20	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 15:20	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 15:20	1
2-Hexanone	ND		5.0		ug/L			11/19/22 15:20	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 15:20	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 15:20	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 15:20	1
Acetone	ND		10		ug/L			11/19/22 15:20	1
Benzene	ND		1.0		ug/L			11/19/22 15:20	1
Bromobenzene	ND		1.0		ug/L			11/19/22 15:20	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 15:20	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 15:20	1
Bromoform	ND		1.2		ug/L			11/19/22 15:20	1
Bromomethane	ND		2.4		ug/L			11/19/22 15:20	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 15:20	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 15:20	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 15:20	1
Chloroethane	ND		2.0		ug/L			11/19/22 15:20	1
Chloroform	ND		1.0		ug/L			11/19/22 15:20	1
Chloromethane	ND		2.0		ug/L			11/19/22 15:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 15:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 15:20	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 15:20	1
Dibromomethane	ND		1.0		ug/L			11/19/22 15:20	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/19/22 15:20	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 15:20	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 15:20	1
Naphthalene	ND		1.0		ug/L			11/19/22 15:20	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 15:20	1

Client Sample ID: MW-21A

Date Collected: 11/15/22 13:20
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-4

Matrix: Water

Method: SW846 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			11/19/22 15:20	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
Styrene	ND		1.0		ug/L			11/19/22 15:20	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 15:20	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 15:20	1
Toluene	ND		1.0		ug/L			11/19/22 15:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 15:20	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 15:20	1
Trichloroethene	ND		1.0		ug/L			11/19/22 15:20	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 15:20	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 15:20	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 15:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 15:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 127*		*11/19/22 15:20*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*11/19/22 15:20*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*11/19/22 15:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/19/22 15:20*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 20:39	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*118*		*70 - 130*	*11/22/22 11:24*	*11/22/22 20:39*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**35000**		500		ug/L		12/01/22 09:30	12/02/22 07:19	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 07:19	1
Magnesium	**14000**		200		ug/L		12/01/22 09:30	12/02/22 07:19	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 07:19	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:19	1
Sodium	**15000**		1000		ug/L		12/01/22 09:30	12/02/22 07:19	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.6**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**3.6**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**-0.58**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**35**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**14**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**15**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.073**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**8.4**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**13**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-21A

Lab Sample ID: 280-169301-4

Date Collected: 11/15/22 13:20

Matrix: Water

Date Received: 11/17/22 10:30

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E)	150				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	150				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	1.3				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	-0.58				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	160				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.2				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	190				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	1.7				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	1.2				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	0.65				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.0052				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	0.24				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.27				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	150				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	3.0				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.093				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	8.4		0.50		mg/L			12/06/22 17:12	1
Sulfate (MCAWW 300.0)	13		1.0		mg/L			12/06/22 17:12	1
Ammonia as N (MCAWW 350.1)	0.073		0.030		mg/L			12/07/22 14:47	1
Nitrate/Nitrite (MCAWW 353.2)	1.3		0.050		mg/L			11/29/22 11:55	1
Total Organic Carbon - Average (SW846 9060)	1.9		1.0		mg/L			12/02/22 16:37	1
Bicarbonate Alkalinity (SM 2320B)	150		10		mg/L			11/22/22 00:16	1
Total Dissolved Solids (SM 2540C)	190		10		mg/L			11/18/22 10:26	1

Client Sample ID: MW-15B

Lab Sample ID: 280-169301-5

Date Collected: 11/15/22 10:25

Matrix: Water

Date Received: 11/17/22 10:30

Method: SW846 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			11/19/22 15:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 15:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 15:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 15:42	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 15:42	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 15:42	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 15:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 15:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 15:42	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 15:42	1

Client Sample ID: MW-15B
Date Collected: 11/15/22 10:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-5
Matrix: Water

Method: SW846 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			11/19/22 15:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 15:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 15:42	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 15:42	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 15:42	1
2-Hexanone	ND		5.0		ug/L			11/19/22 15:42	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 15:42	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 15:42	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 15:42	1
Acetone	ND		10		ug/L			11/19/22 15:42	1
Benzene	ND		1.0		ug/L			11/19/22 15:42	1
Bromobenzene	ND		1.0		ug/L			11/19/22 15:42	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 15:42	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 15:42	1
Bromoform	ND		1.2		ug/L			11/19/22 15:42	1
Bromomethane	ND		2.4		ug/L			11/19/22 15:42	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 15:42	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 15:42	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 15:42	1
Chloroethane	ND		2.0		ug/L			11/19/22 15:42	1
Chloroform	ND		1.0		ug/L			11/19/22 15:42	1
Chloromethane	ND		2.0		ug/L			11/19/22 15:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 15:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 15:42	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 15:42	1
Dibromomethane	ND		1.0		ug/L			11/19/22 15:42	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/19/22 15:42	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 15:42	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 15:42	1
Naphthalene	ND		1.0		ug/L			11/19/22 15:42	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
N-Propylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
Styrene	ND		1.0		ug/L			11/19/22 15:42	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 15:42	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 15:42	1
Toluene	ND		1.0		ug/L			11/19/22 15:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 15:42	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 15:42	1
Trichloroethene	ND		1.0		ug/L			11/19/22 15:42	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 15:42	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 15:42	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 15:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 15:42*	*1*

Client Sample ID: MW-15B

Date Collected: 11/15/22 10:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*		*11/19/22 15:42*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*11/19/22 15:42*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*11/19/22 15:42*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/19/22 15:42*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 21:03	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*120*		*70 - 130*	*11/22/22 11:24*	*11/22/22 21:03*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**81000**		500		ug/L		12/01/22 09:30	12/02/22 07:23	1
Iron	**250**		30		ug/L		12/01/22 09:30	12/02/22 07:23	1
Magnesium	**32000**		200		ug/L		12/01/22 09:30	12/02/22 07:23	1
Manganese	**1000**		3.0		ug/L		12/01/22 09:30	12/02/22 07:23	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:23	1
Sodium	**37000**		1000		ug/L		12/01/22 09:30	12/02/22 07:23	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**8.1**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**8.3**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**1.1**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**81**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**32**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**37**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.19**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**39**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**1.4**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**350**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**350**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**1.1**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**400**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**0.93**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**370**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**4.0**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**2.6**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**1.6**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.014**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**1.1**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.029**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**350**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-15B

Date Collected: 11/15/22 10:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-5

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	7.0				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	39		0.50		mg/L			12/02/22 20:56	1
Sulfate (MCAWW 300.0)	1.4		1.0		mg/L			12/02/22 20:56	1
Ammonia as N (MCAWW 350.1)	0.19		0.030		mg/L			12/07/22 14:50	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 11:57	1
Total Organic Carbon - Average (SW846 9060)	1.4		1.0		mg/L			12/02/22 16:51	1
Bicarbonate Alkalinity (SM 2320B)	350		10		mg/L			11/22/22 00:24	1
Total Dissolved Solids (SM 2540C)	370		10		mg/L			11/18/22 10:26	1

Client Sample ID: DUP11152201

Date Collected: 11/15/22 10:30
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-6

Matrix: Water

Method: SW846 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			11/20/22 00:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 00:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 00:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 00:11	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 00:11	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 00:11	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 00:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 00:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 00:11	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 00:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 00:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 00:11	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 00:11	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:11	1
2-Hexanone	ND		5.0		ug/L			11/20/22 00:11	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:11	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 00:11	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 00:11	1
Acetone	ND		10		ug/L			11/20/22 00:11	1
Benzene	ND		1.0		ug/L			11/20/22 00:11	1
Bromobenzene	ND		1.0		ug/L			11/20/22 00:11	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 00:11	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 00:11	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: DUP11152201
Date Collected: 11/15/22 10:30
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-6
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.2		ug/L			11/20/22 00:11	1
Bromomethane	ND		2.4		ug/L			11/20/22 00:11	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 00:11	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 00:11	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 00:11	1
Chloroethane	ND		2.0		ug/L			11/20/22 00:11	1
Chloroform	ND		1.0		ug/L			11/20/22 00:11	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 00:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 00:11	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 00:11	1
Dibromomethane	ND		1.0		ug/L			11/20/22 00:11	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 00:11	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 00:11	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 00:11	1
Naphthalene	ND		1.0		ug/L			11/20/22 00:11	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
N-Propylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
Styrene	ND		1.0		ug/L			11/20/22 00:11	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 00:11	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 00:11	1
Toluene	ND		1.0		ug/L			11/20/22 00:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:11	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 00:11	1
Trichloroethene	ND		1.0		ug/L			11/20/22 00:11	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 00:11	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 00:11	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 00:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 00:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*11/20/22 00:11*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 00:11*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/20/22 00:11*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*11/20/22 00:11*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 21:28	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*123*		*70 - 130*	*11/22/22 11:24*	*11/22/22 21:28*	*1*

Client Sample ID: DUP11152201

Date Collected: 11/15/22 10:30
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-6

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	81000		500		ug/L		12/01/22 09:30	12/02/22 07:27	1
Iron	250		30		ug/L		12/01/22 09:30	12/02/22 07:27	1
Magnesium	32000		200		ug/L		12/01/22 09:30	12/02/22 07:27	1
Manganese	1000		3.0		ug/L		12/01/22 09:30	12/02/22 07:27	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:27	1
Sodium	37000		1000		ug/L		12/01/22 09:30	12/02/22 07:27	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	8.2				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	8.3				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	0.59				%			12/09/22 13:24	1
Calcium (SM 1030E)	81				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	32				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	37				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	0.072				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	42				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	1.3				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	350				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	350				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	0.59				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	400				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	0.97				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	390				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	0.25				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	4.0				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	2.6				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.6				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.0051				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	1.2				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.027				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	350				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	7.0				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.013				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	42		0.50		mg/L			12/06/22 17:31	1
Sulfate (MCAWW 300.0)	1.3		1.0		mg/L			12/06/22 17:31	1
Ammonia as N (MCAWW 350.1)	0.072		0.030		mg/L			12/06/22 16:12	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 11:59	1
Total Organic Carbon - Average (SW846 9060)	1.2		1.0		mg/L			12/02/22 17:05	1
Bicarbonate Alkalinity (SM 2320B)	350		10		mg/L			11/22/22 19:05	1
Total Dissolved Solids (SM 2540C)	390		10		mg/L			11/18/22 10:26	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: MW-14B
Date Collected: 11/15/22 12:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-7
Matrix: Water

Method: SW846 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			11/20/22 00:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 00:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 00:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 00:32	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 00:32	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 00:32	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 00:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 00:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 00:32	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 00:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 00:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 00:32	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 00:32	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:32	1
2-Hexanone	ND		5.0		ug/L			11/20/22 00:32	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:32	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 00:32	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 00:32	1
Acetone	ND		10		ug/L			11/20/22 00:32	1
Benzene	ND		1.0		ug/L			11/20/22 00:32	1
Bromobenzene	ND		1.0		ug/L			11/20/22 00:32	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 00:32	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 00:32	1
Bromoform	ND		1.2		ug/L			11/20/22 00:32	1
Bromomethane	ND		2.4		ug/L			11/20/22 00:32	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 00:32	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 00:32	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 00:32	1
Chloroethane	ND		2.0		ug/L			11/20/22 00:32	1
Chloroform	ND		1.0		ug/L			11/20/22 00:32	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 00:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 00:32	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 00:32	1
Dibromomethane	ND		1.0		ug/L			11/20/22 00:32	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 00:32	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 00:32	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 00:32	1
Naphthalene	ND		1.0		ug/L			11/20/22 00:32	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 00:32	1

Client Sample ID: MW-14B

Date Collected: 11/15/22 12:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-7

Matrix: Water

Method: SW846 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			11/20/22 00:32	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
Styrene	ND		1.0		ug/L			11/20/22 00:32	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 00:32	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 00:32	1
Toluene	ND		1.0		ug/L			11/20/22 00:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:32	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 00:32	1
Trichloroethene	ND		1.0		ug/L			11/20/22 00:32	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 00:32	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 00:32	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 00:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 00:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 127*		*11/20/22 00:32*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 00:32*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/20/22 00:32*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/20/22 00:32*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 21:52	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*121*		*70 - 130*	*11/22/22 11:24*	*11/22/22 21:52*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**51000**		500		ug/L		12/01/22 09:30	12/02/22 07:31	1
Iron	**1000**		30		ug/L		12/01/22 09:30	12/02/22 07:31	1
Magnesium	**15000**		200		ug/L		12/01/22 09:30	12/02/22 07:31	1
Manganese	**1100**		3.0		ug/L		12/01/22 09:30	12/02/22 07:31	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:31	1
Sodium	**39000**		1000		ug/L		12/01/22 09:30	12/02/22 07:31	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**5.6**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**5.5**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**-0.64**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**51**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**15**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**39**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.22**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**33**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**4.3**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-14B

Date Collected: 11/15/22 12:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-7

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E)	230				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	230				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	-0.64				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	280				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.0				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	280				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	1.0				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	2.5				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	1.2				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.7				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.016				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	0.93				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.090				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	230				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	4.6				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.054				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	33		0.50		mg/L			12/02/22 21:35	1
Sulfate (MCAWW 300.0)	4.3		1.0		mg/L			12/02/22 21:35	1
Ammonia as N (MCAWW 350.1)	0.22		0.030		mg/L			12/06/22 16:14	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 12:05	1
Total Organic Carbon - Average (SW846 9060)	1.5		1.0		mg/L			12/02/22 17:19	1
Bicarbonate Alkalinity (SM 2320B)	230		10		mg/L			11/22/22 00:38	1
Total Dissolved Solids (SM 2540C)	280		10		mg/L			11/18/22 10:26	1

Client Sample ID: MW-21B

Date Collected: 11/15/22 14:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-8

Matrix: Water

Method: SW846 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			11/20/22 00:54	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 00:54	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 00:54	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 00:54	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 00:54	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 00:54	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 00:54	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 00:54	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 00:54	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 00:54	1

Client Sample ID: MW-21B

Date Collected: 11/15/22 14:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-8

Matrix: Water

Method: SW846 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			11/20/22 00:54	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 00:54	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 00:54	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 00:54	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:54	1
2-Hexanone	ND		5.0		ug/L			11/20/22 00:54	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 00:54	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 00:54	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 00:54	1
Acetone	ND		10		ug/L			11/20/22 00:54	1
Benzene	ND		1.0		ug/L			11/20/22 00:54	1
Bromobenzene	ND		1.0		ug/L			11/20/22 00:54	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 00:54	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 00:54	1
Bromoform	ND		1.2		ug/L			11/20/22 00:54	1
Bromomethane	ND		2.4		ug/L			11/20/22 00:54	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 00:54	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 00:54	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 00:54	1
Chloroethane	ND		2.0		ug/L			11/20/22 00:54	1
Chloroform	ND		1.0		ug/L			11/20/22 00:54	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 00:54	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:54	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 00:54	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 00:54	1
Dibromomethane	ND		1.0		ug/L			11/20/22 00:54	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 00:54	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 00:54	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 00:54	1
Naphthalene	ND		1.0		ug/L			11/20/22 00:54	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
N-Propylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
Styrene	ND		1.0		ug/L			11/20/22 00:54	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 00:54	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 00:54	1
Toluene	ND		1.0		ug/L			11/20/22 00:54	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 00:54	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 00:54	1
Trichloroethene	ND		1.0		ug/L			11/20/22 00:54	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 00:54	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 00:54	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 00:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 00:54*	*1*

Client Sample ID: MW-21B

Date Collected: 11/15/22 14:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*		*11/20/22 00:54*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 00:54*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/20/22 00:54*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/20/22 00:54*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 22:17	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*121*		*70 - 130*	*11/22/22 11:24*	*11/22/22 22:17*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**44000**		500		ug/L		12/01/22 09:30	12/02/22 07:35	1
Iron	**880**		30		ug/L		12/01/22 09:30	12/02/22 07:35	1
Magnesium	**18000**		200		ug/L		12/01/22 09:30	12/02/22 07:35	1
Manganese	**1600**		3.0		ug/L		12/01/22 09:30	12/02/22 07:35	1
Potassium	**620**		500		ug/L		12/01/22 09:30	12/02/22 07:35	1
Sodium	**32000**		1000		ug/L		12/01/22 09:30	12/02/22 07:35	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**5.2**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**5.2**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**-0.53**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**44**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**18**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.62**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**32**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.44**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**15**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**240**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**240**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**-0.53**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**250**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**0.98**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**250**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.88**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**2.2**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**1.5**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.016**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**1.4**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.031**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**0.42**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**240**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-21B

Date Collected: 11/15/22 14:15
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-8

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	4.8				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.047				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	15		0.50		mg/L			12/02/22 21:55	1
Sulfate (MCAWW 300.0)	ND		1.0		mg/L			12/02/22 21:55	1
Ammonia as N (MCAWW 350.1)	0.44		0.030		mg/L			12/06/22 16:17	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 12:07	1
Total Organic Carbon - Average (SW846 9060)	2.7		1.0		mg/L			12/02/22 17:34	1
Bicarbonate Alkalinity (SM 2320B)	240		10		mg/L			11/22/22 00:45	1
Total Dissolved Solids (SM 2540C)	250		10		mg/L			11/18/22 10:26	1

Client Sample ID: MW-12A

Date Collected: 11/15/22 15:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-9

Matrix: Water

Method: SW846 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			11/20/22 01:16	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 01:16	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 01:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 01:16	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 01:16	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 01:16	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 01:16	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 01:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 01:16	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 01:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 01:16	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 01:16	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 01:16	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:16	1
2-Hexanone	ND		5.0		ug/L			11/20/22 01:16	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:16	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 01:16	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 01:16	1
Acetone	ND		10		ug/L			11/20/22 01:16	1
Benzene	ND		1.0		ug/L			11/20/22 01:16	1
Bromobenzene	ND		1.0		ug/L			11/20/22 01:16	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 01:16	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 01:16	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: MW-12A
Date Collected: 11/15/22 15:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-9
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.2		ug/L			11/20/22 01:16	1
Bromomethane	ND		2.4		ug/L			11/20/22 01:16	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 01:16	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 01:16	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 01:16	1
Chloroethane	ND		2.0		ug/L			11/20/22 01:16	1
Chloroform	ND		1.0		ug/L			11/20/22 01:16	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 01:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 01:16	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 01:16	1
Dibromomethane	ND		1.0		ug/L			11/20/22 01:16	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 01:16	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 01:16	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 01:16	1
Naphthalene	ND		1.0		ug/L			11/20/22 01:16	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
N-Propylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
Styrene	ND		1.0		ug/L			11/20/22 01:16	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 01:16	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 01:16	1
Toluene	ND		1.0		ug/L			11/20/22 01:16	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:16	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 01:16	1
Trichloroethene	ND		1.0		ug/L			11/20/22 01:16	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 01:16	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 01:16	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 01:16	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 01:16*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*11/20/22 01:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 01:16*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/20/22 01:16*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/20/22 01:16*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 22:41	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*122*		*70 - 130*	*11/22/22 11:24*	*11/22/22 22:41*	*1*

Client Sample ID: MW-12A

Date Collected: 11/15/22 15:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-9

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	38000		500		ug/L		12/01/22 09:30	12/02/22 07:39	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 07:39	1
Magnesium	15000		200		ug/L		12/01/22 09:30	12/02/22 07:39	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 07:39	1
Potassium	740		500		ug/L		12/01/22 09:30	12/02/22 07:39	1
Sodium	33000		1000		ug/L		12/01/22 09:30	12/02/22 07:39	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	4.7				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	4.6				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	-0.92				%			12/09/22 13:24	1
Calcium (SM 1030E)	38				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	15				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	0.74				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	33				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	79				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	20				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	76				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	76				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	7.1				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	-0.92				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	220				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.2				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	270				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	1.9				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	1.2				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.019				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.4				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	2.2				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.42				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	76				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	1.5				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.51				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	79		0.50		mg/L			12/06/22 17:51	1
Sulfate (MCAWW 300.0)	20		1.0		mg/L			12/06/22 17:51	1
Ammonia as N (MCAWW 350.1)	ND		0.030		mg/L			12/07/22 10:39	1
Nitrate/Nitrite (MCAWW 353.2)	7.1		0.050		mg/L			12/01/22 13:35	1
Total Organic Carbon - Average (SW846 9060)	2.7		1.0		mg/L			12/02/22 18:18	1
Bicarbonate Alkalinity (SM 2320B)	76		10		mg/L			11/22/22 00:51	1
Total Dissolved Solids (SM 2540C)	270		10		mg/L			11/18/22 10:26	1

Client Sample ID: MW-12B
Date Collected: 11/15/22 15:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-10
Matrix: Water

Method: SW846 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			11/20/22 01:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 01:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 01:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 01:37	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 01:37	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 01:37	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 01:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 01:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 01:37	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 01:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 01:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 01:37	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 01:37	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:37	1
2-Hexanone	ND		5.0		ug/L			11/20/22 01:37	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:37	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 01:37	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 01:37	1
Acetone	ND		10		ug/L			11/20/22 01:37	1
Benzene	ND		1.0		ug/L			11/20/22 01:37	1
Bromobenzene	ND		1.0		ug/L			11/20/22 01:37	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 01:37	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 01:37	1
Bromoform	ND		1.2		ug/L			11/20/22 01:37	1
Bromomethane	ND		2.4		ug/L			11/20/22 01:37	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 01:37	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 01:37	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 01:37	1
Chloroethane	ND		2.0		ug/L			11/20/22 01:37	1
Chloroform	ND		1.0		ug/L			11/20/22 01:37	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 01:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 01:37	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 01:37	1
Dibromomethane	ND		1.0		ug/L			11/20/22 01:37	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 01:37	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 01:37	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 01:37	1
Naphthalene	ND		1.0		ug/L			11/20/22 01:37	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 01:37	1

Client Sample ID: MW-12B

Date Collected: 11/15/22 15:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-10

Matrix: Water

Method: SW846 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			11/20/22 01:37	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
Styrene	ND		1.0		ug/L			11/20/22 01:37	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 01:37	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 01:37	1
Toluene	ND		1.0		ug/L			11/20/22 01:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:37	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 01:37	1
Trichloroethene	ND		1.0		ug/L			11/20/22 01:37	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 01:37	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 01:37	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 01:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 01:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*11/20/22 01:37*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*11/20/22 01:37*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/20/22 01:37*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/20/22 01:37*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 23:06	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*11/22/22 11:24*	*11/22/22 23:06*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**82000**		500		ug/L		12/01/22 09:30	12/02/22 07:43	1
Iron	**1000**		30		ug/L		12/01/22 09:30	12/02/22 07:43	1
Magnesium	**22000**		200		ug/L		12/01/22 09:30	12/02/22 07:43	1
Manganese	**1000**		3.0		ug/L		12/01/22 09:30	12/02/22 07:43	1
Potassium	**520**		500		ug/L		12/01/22 09:30	12/02/22 07:43	1
Sodium	**32000**		1000		ug/L		12/01/22 09:30	12/02/22 07:43	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**7.2**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**7.4**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**1.1**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**82**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**22**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.52**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**32**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.26**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**100**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-12B

Date Collected: 11/15/22 15:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-10

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E)	220				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	220				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	1.1				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	370				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.1				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	400				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	1.0				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	4.1				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	1.8				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.013				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.4				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.019				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	2.8				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	220				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	4.4				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.054				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	100		0.50		mg/L			12/02/22 22:34	1
Sulfate (MCAWW 300.0)	ND		1.0		mg/L			12/02/22 22:34	1
Ammonia as N (MCAWW 350.1)	0.26		0.030		mg/L			12/07/22 10:41	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			11/29/22 12:11	1
Total Organic Carbon - Average (SW846 9060)	1.7		1.0		mg/L			12/05/22 18:13	1
Bicarbonate Alkalinity (SM 2320B)	220		10		mg/L			11/22/22 00:57	1
Total Dissolved Solids (SM 2540C)	400		10		mg/L			11/18/22 10:26	1

Client Sample ID: MW-16A

Date Collected: 11/16/22 08:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-11

Matrix: Water

Method: SW846 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			11/20/22 01:59	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 01:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 01:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 01:59	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 01:59	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 01:59	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 01:59	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 01:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 01:59	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 01:59	1

Client Sample ID: MW-16A
Date Collected: 11/16/22 08:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-11
Matrix: Water

Method: SW846 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			11/20/22 01:59	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 01:59	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 01:59	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 01:59	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:59	1
2-Hexanone	ND		5.0		ug/L			11/20/22 01:59	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 01:59	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 01:59	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 01:59	1
Acetone	ND		10		ug/L			11/20/22 01:59	1
Benzene	ND		1.0		ug/L			11/20/22 01:59	1
Bromobenzene	ND		1.0		ug/L			11/20/22 01:59	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 01:59	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 01:59	1
Bromoform	ND		1.2		ug/L			11/20/22 01:59	1
Bromomethane	ND		2.4		ug/L			11/20/22 01:59	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 01:59	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 01:59	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 01:59	1
Chloroethane	ND		2.0		ug/L			11/20/22 01:59	1
Chloroform	ND		1.0		ug/L			11/20/22 01:59	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 01:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 01:59	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 01:59	1
Dibromomethane	ND		1.0		ug/L			11/20/22 01:59	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 01:59	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 01:59	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 01:59	1
Naphthalene	ND		1.0		ug/L			11/20/22 01:59	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
N-Propylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
Styrene	ND		1.0		ug/L			11/20/22 01:59	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 01:59	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 01:59	1
Toluene	ND		1.0		ug/L			11/20/22 01:59	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 01:59	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 01:59	1
Trichloroethene	ND		1.0		ug/L			11/20/22 01:59	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 01:59	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 01:59	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 01:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 01:59*	*1*

Client Sample ID: MW-16A

Date Collected: 11/16/22 08:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*		*11/20/22 01:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 01:59*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*11/20/22 01:59*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/20/22 01:59*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 23:30	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*125*		*70 - 130*	*11/22/22 11:24*	*11/22/22 23:30*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**30000**		500		ug/L		12/01/22 09:30	12/02/22 07:47	1
Iron	**44**		30		ug/L		12/01/22 09:30	12/02/22 07:47	1
Magnesium	**14000**		200		ug/L		12/01/22 09:30	12/02/22 07:47	1
Manganese	**460**		3.0		ug/L		12/01/22 09:30	12/02/22 07:47	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:47	1
Sodium	**31000**		1000		ug/L		12/01/22 09:30	12/02/22 07:47	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**4.4**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**4.0**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**-4.2**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**30**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**14**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**31**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.060**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**12**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**20**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**180**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**180**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.11**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**-4.2**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**200**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**1.1**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**210**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.044**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**1.5**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**1.2**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**1.3**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.0043**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**0.34**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.42**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**180**				mg/L			12/09/22 13:24	1

Client Sample ID: MW-16A

Date Collected: 11/16/22 08:25
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-11

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	3.6				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.0079				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.0024				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	12		0.50		mg/L			12/02/22 22:54	1
Sulfate (MCAWW 300.0)	20		1.0		mg/L			12/02/22 22:54	1
Ammonia as N (MCAWW 350.1)	0.060		0.030		mg/L			12/07/22 11:12	1
Nitrate/Nitrite (MCAWW 353.2)	0.11		0.050		mg/L			12/01/22 14:55	1
Total Organic Carbon - Average (SW846 9060)	2.1		1.0		mg/L			12/05/22 18:27	1
Bicarbonate Alkalinity (SM 2320B)	180		10		mg/L			11/22/22 01:04	1
Total Dissolved Solids (SM 2540C)	210		10		mg/L			11/18/22 10:26	1

Client Sample ID: DUP11162201

Date Collected: 11/16/22 08:30
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-12

Matrix: Water

Method: SW846 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			11/20/22 02:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/20/22 02:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/20/22 02:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/20/22 02:20	1
1,1-Dichloroethane	ND		1.0		ug/L			11/20/22 02:20	1
1,1-Dichloroethene	ND		1.0		ug/L			11/20/22 02:20	1
1,1-Dichloropropene	ND		1.0		ug/L			11/20/22 02:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/20/22 02:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,2-Dichloroethane	ND		1.0		ug/L			11/20/22 02:20	1
1,2-Dichloropropane	ND		1.0		ug/L			11/20/22 02:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
1,3-Dichloropropane	ND		1.0		ug/L			11/20/22 02:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
2,2-Dichloropropane	ND		5.0		ug/L			11/20/22 02:20	1
2-Butanone (MEK)	ND		6.0		ug/L			11/20/22 02:20	1
2-Chlorotoluene	ND		1.0		ug/L			11/20/22 02:20	1
2-Hexanone	ND		5.0		ug/L			11/20/22 02:20	1
4-Chlorotoluene	ND		1.0		ug/L			11/20/22 02:20	1
4-Isopropyltoluene	ND		1.0		ug/L			11/20/22 02:20	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/20/22 02:20	1
Acetone	ND		10		ug/L			11/20/22 02:20	1
Benzene	ND		1.0		ug/L			11/20/22 02:20	1
Bromobenzene	ND		1.0		ug/L			11/20/22 02:20	1
Bromochloromethane	ND		1.0		ug/L			11/20/22 02:20	1
Bromodichloromethane	ND		1.0		ug/L			11/20/22 02:20	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

Client Sample ID: DUP11162201
Date Collected: 11/16/22 08:30
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169301-12
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.2		ug/L			11/20/22 02:20	1
Bromomethane	ND		2.4		ug/L			11/20/22 02:20	1
Carbon disulfide	ND		2.0		ug/L			11/20/22 02:20	1
Carbon tetrachloride	ND		1.0		ug/L			11/20/22 02:20	1
Chlorobenzene	ND		1.0		ug/L			11/20/22 02:20	1
Chloroethane	ND		2.0		ug/L			11/20/22 02:20	1
Chloroform	ND		1.0		ug/L			11/20/22 02:20	1
Chloromethane	ND	*1	2.0		ug/L			11/20/22 02:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 02:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/20/22 02:20	1
Dibromochloromethane	ND		1.0		ug/L			11/20/22 02:20	1
Dibromomethane	ND		1.0		ug/L			11/20/22 02:20	1
Dichlorodifluoromethane	ND	*1	2.0		ug/L			11/20/22 02:20	1
Ethylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
Hexachlorobutadiene	ND		1.2		ug/L			11/20/22 02:20	1
Isopropylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
Methylene Chloride	ND		5.0		ug/L			11/20/22 02:20	1
Naphthalene	ND		1.0		ug/L			11/20/22 02:20	1
n-Butylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
N-Propylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
sec-Butylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
Styrene	ND		1.0		ug/L			11/20/22 02:20	1
tert-Butylbenzene	ND		1.0		ug/L			11/20/22 02:20	1
Tetrachloroethene	ND		1.0		ug/L			11/20/22 02:20	1
Toluene	ND		1.0		ug/L			11/20/22 02:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/20/22 02:20	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/20/22 02:20	1
Trichloroethene	ND		1.0		ug/L			11/20/22 02:20	1
Trichlorofluoromethane	ND		2.0		ug/L			11/20/22 02:20	1
Vinyl chloride	ND		1.0		ug/L			11/20/22 02:20	1
Xylenes (total)	ND		2.0		ug/L			11/20/22 02:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/20/22 02:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*11/20/22 02:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/20/22 02:20*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/20/22 02:20*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/20/22 02:20*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 23:55	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*123*		*70 - 130*	*11/22/22 11:24*	*11/22/22 23:55*	*1*

Client Sample ID: DUP11162201
Lab Sample ID: 280-169301-12

Date Collected: 11/16/22 08:30
Matrix: Water
Date Received: 11/17/22 10:30

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	29000		500		ug/L		12/01/22 09:30	12/02/22 07:51	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 07:51	1
Magnesium	13000		200		ug/L		12/01/22 09:30	12/02/22 07:51	1
Manganese	280		3.0		ug/L		12/01/22 09:30	12/02/22 07:51	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 07:51	1
Sodium	30000		1000		ug/L		12/01/22 09:30	12/02/22 07:51	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	4.2				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	3.8				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	-4.1				%			12/09/22 13:24	1
Calcium (SM 1030E)	29				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	13				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	30				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	0.066				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	12				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	20				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	170				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	170				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	0.071				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	-4.1				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	190				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.1				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	210				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	1.4				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	1.1				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.3				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	0.0047				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	0.34				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.42				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	170				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	3.4				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.0051				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	12		0.50		mg/L			12/02/22 23:13	1
Sulfate (MCAWW 300.0)	20		1.0		mg/L			12/02/22 23:13	1
Ammonia as N (MCAWW 350.1)	0.066		0.030		mg/L			12/07/22 11:13	1
Nitrate/Nitrite (MCAWW 353.2)	0.071		0.050		mg/L			12/01/22 14:57	1
Total Organic Carbon - Average (SW846 9060)	1.9		1.0		mg/L			12/05/22 18:42	1
Bicarbonate Alkalinity (SM 2320B)	170		10		mg/L			11/22/22 01:23	1
Total Dissolved Solids (SM 2540C)	210		10		mg/L			11/18/22 10:26	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

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)
280-169301-1	TRIP BLANK	93	95	101	100
280-169301-2	MW-16B	89	96	100	100
280-169301-3	FB11152201	94	99	98	101
280-169301-4	MW-21A	94	100	97	100
280-169301-5	MW-15B	92	102	96	101
280-169301-6	DUP11152201	91	96	101	102
280-169301-7	MW-14B	90	96	101	99
280-169301-8	MW-21B	92	96	101	100
280-169301-9	MW-12A	91	96	100	101
280-169301-10	MW-12B	91	97	100	101
280-169301-11	MW-16A	91	96	102	100
280-169301-12	DUP11162201	93	96	101	99
LCS 280-594130/1002	Lab Control Sample	91	96	96	101
LCS 280-594149/1002	Lab Control Sample	88	94	99	99
LCSD 280-594130/4	Lab Control Sample Dup	91	97	98	101
LCSD 280-594149/4	Lab Control Sample Dup	91	92	103	99
MB 280-594130/7	Method Blank	93	99	98	102
MB 280-594149/7	Method Blank	90	94	100	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)
280-169301-1	TRIP BLANK	127
280-169301-2	MW-16B	121
280-169301-3	FB11152201	123
280-169301-4	MW-21A	118
280-169301-5	MW-15B	120
280-169301-6	DUP11152201	123
280-169301-7	MW-14B	121
280-169301-8	MW-21B	121
280-169301-9	MW-12A	122
280-169301-10	MW-12B	112
280-169301-11	MW-16A	125
280-169301-12	DUP11162201	123
LCS 280-594402/2-A	Lab Control Sample	121
LCSD 280-594402/3-A	Lab Control Sample Dup	125
MB 280-594402/1-A	Method Blank	124

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-594130/7
Matrix: Water
Analysis Batch: 594130

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			11/19/22 09:53	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 09:53	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 09:53	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 09:53	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 09:53	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 09:53	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 09:53	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 09:53	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 09:53	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 09:53	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 09:53	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 09:53	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 09:53	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 09:53	1
2-Hexanone	ND		5.0		ug/L			11/19/22 09:53	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 09:53	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 09:53	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/19/22 09:53	1
Acetone	ND		10		ug/L			11/19/22 09:53	1
Benzene	ND		1.0		ug/L			11/19/22 09:53	1
Bromobenzene	ND		1.0		ug/L			11/19/22 09:53	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 09:53	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 09:53	1
Bromoform	ND		1.2		ug/L			11/19/22 09:53	1
Bromomethane	ND		2.4		ug/L			11/19/22 09:53	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 09:53	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 09:53	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 09:53	1
Chloroethane	ND		2.0		ug/L			11/19/22 09:53	1
Chloroform	ND		1.0		ug/L			11/19/22 09:53	1
Chloromethane	ND		2.0		ug/L			11/19/22 09:53	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 09:53	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 09:53	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 09:53	1
Dibromomethane	ND		1.0		ug/L			11/19/22 09:53	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/19/22 09:53	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 09:53	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 09:53	1
Naphthalene	ND		1.0		ug/L			11/19/22 09:53	1

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

Lab Sample ID: MB 280-594130/7
Matrix: Water
Analysis Batch: 594130

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			11/19/22 09:53	1
N-Propylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
Styrene	ND		1.0		ug/L			11/19/22 09:53	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 09:53	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 09:53	1
Toluene	ND		1.0		ug/L			11/19/22 09:53	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 09:53	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 09:53	1
Trichloroethene	ND		1.0		ug/L			11/19/22 09:53	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 09:53	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 09:53	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 09:53	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 09:53*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 127*		*11/19/22 09:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*11/19/22 09:53*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/19/22 09:53*	*1*
Toluene-d8 (Surr)	*102*		*80 - 125*		*11/19/22 09:53*	*1*

Lab Sample ID: LCS 280-594130/1002
Matrix: Water
Analysis Batch: 594130

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	38.5		ug/L		77	74 - 121
1,1,1-Trichloroethane	50.0	39.0		ug/L		78	62 - 132
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/L		88	72 - 122
1,1,2-Trichloroethane	50.0	44.5		ug/L		89	72 - 128
1,1-Dichloroethane	50.0	41.4		ug/L		83	66 - 130
1,1-Dichloroethene	50.0	41.0		ug/L		82	62 - 130
1,1-Dichloropropene	50.0	41.9		ug/L		84	64 - 133
1,2,3-Trichlorobenzene	50.0	48.5		ug/L		97	70 - 127
1,2,3-Trichloropropane	50.0	47.0		ug/L		94	74 - 123
1,2,4-Trichlorobenzene	50.0	47.8		ug/L		96	73 - 124
1,2,4-Trimethylbenzene	50.0	45.4		ug/L		91	74 - 124
1,2-Dichlorobenzene	50.0	45.1		ug/L		90	77 - 121
1,2-Dichloroethane	50.0	39.5		ug/L		79	61 - 130
1,2-Dichloropropane	50.0	42.9		ug/L		86	68 - 127
1,3,5-Trimethylbenzene	50.0	45.5		ug/L		91	73 - 127
1,3-Dichlorobenzene	50.0	45.3		ug/L		91	76 - 121
1,3-Dichloropropane	50.0	46.0		ug/L		92	80 - 118
1,4-Dichlorobenzene	50.0	45.2		ug/L		90	76 - 119
2,2-Dichloropropane	50.0	39.1		ug/L		78	57 - 140
2-Butanone (MEK)	200	140		ug/L		70	53 - 135

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

Lab Sample ID: LCS 280-594130/1002
Matrix: Water
Analysis Batch: 594130

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	50.0	45.6		ug/L		91	75 - 123
2-Hexanone	200	159		ug/L		79	58 - 134
4-Chlorotoluene	50.0	45.5		ug/L		91	74 - 124
4-Isopropyltoluene	50.0	46.0		ug/L		92	74 - 127
4-Methyl-2-pentanone	200	156		ug/L		78	56 - 135
Acetone	200	149		ug/L		74	50 - 137
Benzene	50.0	42.8		ug/L		86	69 - 126
Bromobenzene	50.0	43.4		ug/L		87	75 - 122
Bromochloromethane	50.0	45.5		ug/L		91	71 - 130
Bromodichloromethane	50.0	38.9		ug/L		78	67 - 126
Bromoform	50.0	31.9		ug/L		64	57 - 125
Bromomethane	50.0	32.1		ug/L		64	25 - 163
Carbon disulfide	50.0	39.4		ug/L		79	56 - 128
Carbon tetrachloride	50.0	35.2		ug/L		70	60 - 133
Chlorobenzene	50.0	46.3		ug/L		93	78 - 118
Chloroethane	50.0	44.6		ug/L		89	52 - 144
Chloroform	50.0	42.7		ug/L		85	68 - 128
Chloromethane	50.0	44.1		ug/L		88	43 - 142
cis-1,2-Dichloroethene	50.0	44.6		ug/L		89	69 - 126
cis-1,3-Dichloropropene	50.0	43.3		ug/L		87	75 - 120
Dibromochloromethane	50.0	38.7		ug/L		77	71 - 122
Dibromomethane	50.0	46.3		ug/L		93	68 - 129
Dichlorodifluoromethane	50.0	47.3		ug/L		95	26 - 152
Ethylbenzene	50.0	45.1		ug/L		90	76 - 121
Hexachlorobutadiene	50.0	47.2		ug/L		94	69 - 133
Isopropylbenzene	50.0	44.5		ug/L		89	70 - 127
Methylene Chloride	50.0	42.6		ug/L		85	64 - 128
Naphthalene	50.0	50.4		ug/L		101	63 - 129
n-Butylbenzene	50.0	47.9		ug/L		96	69 - 130
N-Propylbenzene	50.0	45.8		ug/L		92	73 - 127
sec-Butylbenzene	50.0	45.2		ug/L		90	72 - 127
Styrene	50.0	46.2		ug/L		92	79 - 120
tert-Butylbenzene	50.0	45.5		ug/L		91	72 - 126
Tetrachloroethene	50.0	41.6		ug/L		83	72 - 127
Toluene	50.0	44.2		ug/L		88	68 - 127
trans-1,2-Dichloroethene	50.0	43.0		ug/L		86	66 - 129
trans-1,3-Dichloropropene	50.0	40.8		ug/L		82	66 - 127
Trichloroethene	50.0	42.9		ug/L		86	70 - 125
Trichlorofluoromethane	50.0	50.2		ug/L		100	57 - 144
Vinyl chloride	50.0	51.4		ug/L		103	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*
Dibromofluoromethane (Surr)	*96*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

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

Lab Sample ID: LCSD 280-594130/4
Matrix: Water
Analysis Batch: 594130

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	38.6		ug/L		77	74 - 121	0	20
1,1,1-Trichloroethane			50.0	39.2		ug/L		78	62 - 132	1	20
1,1,2,2-Tetrachloroethane			50.0	40.3		ug/L		81	72 - 122	9	20
1,1,2-Trichloroethane			50.0	42.8		ug/L		86	72 - 128	4	20
1,1-Dichloroethane			50.0	41.0		ug/L		82	66 - 130	1	20
1,1-Dichloroethene			50.0	41.2		ug/L		82	62 - 130	0	21
1,1-Dichloropropene			50.0	41.9		ug/L		84	64 - 133	0	20
1,2,3-Trichlorobenzene			50.0	44.6		ug/L		89	70 - 127	8	20
1,2,3-Trichloropropane			50.0	41.9		ug/L		84	74 - 123	11	20
1,2,4-Trichlorobenzene			50.0	44.2		ug/L		88	73 - 124	8	20
1,2,4-Trimethylbenzene			50.0	44.0		ug/L		88	74 - 124	3	20
1,2-Dichlorobenzene			50.0	43.9		ug/L		88	77 - 121	3	20
1,2-Dichloroethane			50.0	38.3		ug/L		77	61 - 130	3	20
1,2-Dichloropropane			50.0	41.4		ug/L		83	68 - 127	3	20
1,3,5-Trimethylbenzene			50.0	44.3		ug/L		89	73 - 127	3	20
1,3-Dichlorobenzene			50.0	44.3		ug/L		89	76 - 121	2	20
1,3-Dichloropropane			50.0	42.9		ug/L		86	80 - 118	7	20
1,4-Dichlorobenzene			50.0	43.7		ug/L		87	76 - 119	3	20
2,2-Dichloropropane			50.0	39.9		ug/L		80	57 - 140	2	22
2-Butanone (MEK)			200	119		ug/L		59	53 - 135	16	20
2-Chlorotoluene			50.0	44.9		ug/L		90	75 - 123	2	20
2-Hexanone			200	131		ug/L		66	58 - 134	19	21
4-Chlorotoluene			50.0	44.1		ug/L		88	74 - 124	3	20
4-Isopropyltoluene			50.0	45.9		ug/L		92	74 - 127	0	20
4-Methyl-2-pentanone			200	134		ug/L		67	56 - 135	15	20
Acetone			200	124		ug/L		62	50 - 137	18	21
Benzene			50.0	42.2		ug/L		84	69 - 126	1	20
Bromobenzene			50.0	42.4		ug/L		85	75 - 122	2	20
Bromochloromethane			50.0	44.7		ug/L		89	71 - 130	2	20
Bromodichloromethane			50.0	38.9		ug/L		78	67 - 126	0	20
Bromoform			50.0	31.5		ug/L		63	57 - 125	1	20
Bromomethane			50.0	43.0		ug/L		86	25 - 163	29	40
Carbon disulfide			50.0	40.1		ug/L		80	56 - 128	2	20
Carbon tetrachloride			50.0	35.8		ug/L		72	60 - 133	2	20
Chlorobenzene			50.0	44.5		ug/L		89	78 - 118	4	20
Chloroethane			50.0	43.9		ug/L		88	52 - 144	2	30
Chloroform			50.0	41.3		ug/L		83	68 - 128	3	20
Chloromethane			50.0	43.3		ug/L		87	43 - 142	2	20
cis-1,2-Dichloroethene			50.0	43.6		ug/L		87	69 - 126	2	20
cis-1,3-Dichloropropene			50.0	42.1		ug/L		84	75 - 120	3	20
Dibromochloromethane			50.0	37.8		ug/L		76	71 - 122	2	20
Dibromomethane			50.0	43.5		ug/L		87	68 - 129	6	20
Dichlorodifluoromethane			50.0	47.4		ug/L		95	26 - 152	0	21
Ethylbenzene			50.0	44.5		ug/L		89	76 - 121	1	20
Hexachlorobutadiene			50.0	46.5		ug/L		93	69 - 133	2	20
Isopropylbenzene			50.0	43.3		ug/L		87	70 - 127	3	20
Methylene Chloride			50.0	41.3		ug/L		83	64 - 128	3	20
Naphthalene			50.0	43.8		ug/L		88	63 - 129	14	21

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

Lab Sample ID: LCSD 280-594130/4
Matrix: Water
Analysis Batch: 594130

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			50.0	47.0		ug/L		94	69 - 130	2	20
N-Propylbenzene			50.0	45.0		ug/L		90	73 - 127	2	20
sec-Butylbenzene			50.0	45.4		ug/L		91	72 - 127	1	20
Styrene			50.0	44.7		ug/L		89	79 - 120	4	20
tert-Butylbenzene			50.0	44.6		ug/L		89	72 - 126	2	20
Tetrachloroethene			50.0	41.7		ug/L		83	72 - 127	0	20
Toluene			50.0	43.5		ug/L		87	68 - 127	2	20
trans-1,2-Dichloroethene			50.0	42.8		ug/L		86	66 - 129	1	20
trans-1,3-Dichloropropene			50.0	39.8		ug/L		80	66 - 127	2	20
Trichloroethene			50.0	42.5		ug/L		85	70 - 125	1	20
Trichlorofluoromethane			50.0	49.0		ug/L		98	57 - 144	3	28
Vinyl chloride			50.0	50.2		ug/L		100	53 - 141	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*
Dibromofluoromethane (Surr)	*98*		*77 - 120*
Toluene-d8 (Surr)	*101*		*80 - 125*

Lab Sample ID: MB 280-594149/7
Matrix: Water
Analysis Batch: 594149

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			11/19/22 20:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/19/22 20:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/19/22 20:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/19/22 20:11	1
1,1-Dichloroethane	ND		1.0		ug/L			11/19/22 20:11	1
1,1-Dichloroethene	ND		1.0		ug/L			11/19/22 20:11	1
1,1-Dichloropropene	ND		1.0		ug/L			11/19/22 20:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/19/22 20:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,2-Dichloroethane	ND		1.0		ug/L			11/19/22 20:11	1
1,2-Dichloropropane	ND		1.0		ug/L			11/19/22 20:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
1,3-Dichloropropane	ND		1.0		ug/L			11/19/22 20:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
2,2-Dichloropropane	ND		5.0		ug/L			11/19/22 20:11	1
2-Butanone (MEK)	ND		6.0		ug/L			11/19/22 20:11	1
2-Chlorotoluene	ND		1.0		ug/L			11/19/22 20:11	1
2-Hexanone	ND		5.0		ug/L			11/19/22 20:11	1
4-Chlorotoluene	ND		1.0		ug/L			11/19/22 20:11	1
4-Isopropyltoluene	ND		1.0		ug/L			11/19/22 20:11	1

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

Lab Sample ID: MB 280-594149/7
Matrix: Water
Analysis Batch: 594149

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			11/19/22 20:11	1
Acetone	ND		10		ug/L			11/19/22 20:11	1
Benzene	ND		1.0		ug/L			11/19/22 20:11	1
Bromobenzene	ND		1.0		ug/L			11/19/22 20:11	1
Bromochloromethane	ND		1.0		ug/L			11/19/22 20:11	1
Bromodichloromethane	ND		1.0		ug/L			11/19/22 20:11	1
Bromoform	ND		1.2		ug/L			11/19/22 20:11	1
Bromomethane	ND		2.4		ug/L			11/19/22 20:11	1
Carbon disulfide	ND		2.0		ug/L			11/19/22 20:11	1
Carbon tetrachloride	ND		1.0		ug/L			11/19/22 20:11	1
Chlorobenzene	ND		1.0		ug/L			11/19/22 20:11	1
Chloroethane	ND		2.0		ug/L			11/19/22 20:11	1
Chloroform	ND		1.0		ug/L			11/19/22 20:11	1
Chloromethane	ND		2.0		ug/L			11/19/22 20:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 20:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/19/22 20:11	1
Dibromochloromethane	ND		1.0		ug/L			11/19/22 20:11	1
Dibromomethane	ND		1.0		ug/L			11/19/22 20:11	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/19/22 20:11	1
Ethylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
Hexachlorobutadiene	ND		1.2		ug/L			11/19/22 20:11	1
Isopropylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
Methylene Chloride	ND		5.0		ug/L			11/19/22 20:11	1
Naphthalene	ND		1.0		ug/L			11/19/22 20:11	1
n-Butylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
N-Propylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
sec-Butylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
Styrene	ND		1.0		ug/L			11/19/22 20:11	1
tert-Butylbenzene	ND		1.0		ug/L			11/19/22 20:11	1
Tetrachloroethene	ND		1.0		ug/L			11/19/22 20:11	1
Toluene	ND		1.0		ug/L			11/19/22 20:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/19/22 20:11	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/19/22 20:11	1
Trichloroethene	ND		1.0		ug/L			11/19/22 20:11	1
Trichlorofluoromethane	ND		2.0		ug/L			11/19/22 20:11	1
Vinyl chloride	ND		1.0		ug/L			11/19/22 20:11	1
Xylenes (total)	ND		2.0		ug/L			11/19/22 20:11	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/19/22 20:11*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 127*		*11/19/22 20:11*	*1*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*		*11/19/22 20:11*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/19/22 20:11*	*1*
Toluene-d8 (Surr)	*100*		*80 - 125*		*11/19/22 20:11*	*1*

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

Lab Sample ID: LCS 280-594149/1002
Matrix: Water
Analysis Batch: 594149

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	74 - 121
1,1,1-Trichloroethane	25.0	24.0		ug/L		96	62 - 132
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	72 - 122
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	72 - 128
1,1-Dichloroethane	25.0	24.7		ug/L		99	66 - 130
1,1-Dichloroethene	25.0	26.8		ug/L		107	62 - 130
1,1-Dichloropropene	25.0	26.7		ug/L		107	64 - 133
1,2,3-Trichlorobenzene	25.0	29.9		ug/L		120	70 - 127
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	74 - 123
1,2,4-Trichlorobenzene	25.0	28.4		ug/L		114	73 - 124
1,2,4-Trimethylbenzene	25.0	25.6		ug/L		102	74 - 124
1,2-Dichlorobenzene	25.0	26.1		ug/L		104	77 - 121
1,2-Dichloroethane	25.0	22.4		ug/L		90	61 - 130
1,2-Dichloropropane	25.0	24.9		ug/L		100	68 - 127
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	73 - 127
1,3-Dichlorobenzene	25.0	26.2		ug/L		105	76 - 121
1,3-Dichloropropane	25.0	25.5		ug/L		102	80 - 118
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	76 - 119
2,2-Dichloropropane	25.0	21.0		ug/L		84	57 - 140
2-Butanone (MEK)	100	77.8		ug/L		78	53 - 135
2-Chlorotoluene	25.0	27.1		ug/L		108	75 - 123
2-Hexanone	100	83.6		ug/L		84	58 - 134
4-Chlorotoluene	25.0	26.6		ug/L		106	74 - 124
4-Isopropyltoluene	25.0	27.0		ug/L		108	74 - 127
4-Methyl-2-pentanone	100	85.0		ug/L		85	56 - 135
Acetone	100	81.7		ug/L		82	50 - 137
Benzene	25.0	26.0		ug/L		104	69 - 126
Bromobenzene	25.0	25.5		ug/L		102	75 - 122
Bromochloromethane	25.0	27.2		ug/L		109	71 - 130
Bromodichloromethane	25.0	23.0		ug/L		92	67 - 126
Bromoform	25.0	17.6		ug/L		70	57 - 125
Bromomethane	25.0	19.6		ug/L		78	25 - 163
Carbon disulfide	25.0	25.8		ug/L		103	56 - 128
Carbon tetrachloride	25.0	22.1		ug/L		88	60 - 133
Chlorobenzene	25.0	27.2		ug/L		109	78 - 118
Chloroethane	25.0	25.8		ug/L		103	52 - 144
Chloroform	25.0	25.2		ug/L		101	68 - 128
Chloromethane	25.0	25.6		ug/L		102	43 - 142
cis-1,2-Dichloroethene	25.0	25.9		ug/L		103	69 - 126
cis-1,3-Dichloropropene	25.0	23.2		ug/L		93	75 - 120
Dibromochloromethane	25.0	21.3		ug/L		85	71 - 122
Dibromomethane	25.0	26.9		ug/L		108	68 - 129
Dichlorodifluoromethane	25.0	28.2		ug/L		113	26 - 152
Ethylbenzene	25.0	26.7		ug/L		107	76 - 121
Hexachlorobutadiene	25.0	28.3		ug/L		113	69 - 133
Isopropylbenzene	25.0	25.5		ug/L		102	70 - 127
Methylene Chloride	25.0	24.6		ug/L		98	64 - 128
Naphthalene	25.0	29.5		ug/L		118	63 - 129

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

Lab Sample ID: LCS 280-594149/1002
Matrix: Water
Analysis Batch: 594149

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	26.9		ug/L		108	69 - 130		
N-Propylbenzene			25.0	27.2		ug/L		109	73 - 127		
sec-Butylbenzene			25.0	27.5		ug/L		110	72 - 127		
Styrene			25.0	25.9		ug/L		104	79 - 120		
tert-Butylbenzene			25.0	26.8		ug/L		107	72 - 126		
Tetrachloroethene			25.0	26.7		ug/L		107	72 - 127		
Toluene			25.0	26.4		ug/L		105	68 - 127		
trans-1,2-Dichloroethene			25.0	26.7		ug/L		107	66 - 129		
trans-1,3-Dichloropropene			25.0	22.4		ug/L		90	66 - 127		
Trichloroethene			25.0	27.0		ug/L		108	70 - 125		
Trichlorofluoromethane			25.0	28.9		ug/L		115	57 - 144		
Vinyl chloride			25.0	30.4		ug/L		121	53 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 127*
4-Bromofluorobenzene (Surr)	*94*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Lab Sample ID: LCSD 280-594149/4
Matrix: Water
Analysis Batch: 594149

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	21.9		ug/L		88	74 - 121	1	20
1,1,1-Trichloroethane			25.0	24.2		ug/L		97	62 - 132	1	20
1,1,2,2-Tetrachloroethane			25.0	22.5		ug/L		90	72 - 122	3	20
1,1,2-Trichloroethane			25.0	24.9		ug/L		100	72 - 128	1	20
1,1-Dichloroethane			25.0	24.7		ug/L		99	66 - 130	0	20
1,1-Dichloroethene			25.0	26.1		ug/L		104	62 - 130	3	21
1,1-Dichloropropene			25.0	26.0		ug/L		104	64 - 133	3	20
1,2,3-Trichlorobenzene			25.0	28.8		ug/L		115	70 - 127	4	20
1,2,3-Trichloropropane			25.0	24.2		ug/L		97	74 - 123	8	20
1,2,4-Trichlorobenzene			25.0	27.5		ug/L		110	73 - 124	3	20
1,2,4-Trimethylbenzene			25.0	24.1		ug/L		97	74 - 124	6	20
1,2-Dichlorobenzene			25.0	24.9		ug/L		100	77 - 121	5	20
1,2-Dichloroethane			25.0	21.6		ug/L		87	61 - 130	3	20
1,2-Dichloropropane			25.0	24.1		ug/L		96	68 - 127	3	20
1,3,5-Trimethylbenzene			25.0	24.5		ug/L		98	73 - 127	7	20
1,3-Dichlorobenzene			25.0	24.5		ug/L		98	76 - 121	7	20
1,3-Dichloropropane			25.0	24.8		ug/L		99	80 - 118	3	20
1,4-Dichlorobenzene			25.0	24.7		ug/L		99	76 - 119	5	20
2,2-Dichloropropane			25.0	20.7		ug/L		83	57 - 140	1	22
2-Butanone (MEK)			100	78.2		ug/L		78	53 - 135	0	20
2-Chlorotoluene			25.0	25.7		ug/L		103	75 - 123	5	20
2-Hexanone			100	82.9		ug/L		83	58 - 134	1	21
4-Chlorotoluene			25.0	25.5		ug/L		102	74 - 124	4	20
4-Isopropyltoluene			25.0	25.6		ug/L		102	74 - 127	5	20

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

Lab Sample ID: LCSD 280-594149/4
Matrix: Water
Analysis Batch: 594149

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	83.3		ug/L		83	56 - 135	2	20
Acetone			100	84.3		ug/L		84	50 - 137	3	21
Benzene			25.0	25.1		ug/L		101	69 - 126	3	20
Bromobenzene			25.0	23.9		ug/L		95	75 - 122	7	20
Bromochloromethane			25.0	27.4		ug/L		109	71 - 130	1	20
Bromodichloromethane			25.0	22.5		ug/L		90	67 - 126	2	20
Bromoform			25.0	18.4		ug/L		74	57 - 125	4	20
Bromomethane			25.0	21.9		ug/L		88	25 - 163	11	40
Carbon disulfide			25.0	25.2		ug/L		101	56 - 128	2	20
Carbon tetrachloride			25.0	22.7		ug/L		91	60 - 133	3	20
Chlorobenzene			25.0	26.3		ug/L		105	78 - 118	3	20
Chloroethane			25.0	20.5		ug/L		82	52 - 144	23	30
Chloroform			25.0	24.7		ug/L		99	68 - 128	2	20
Chloromethane			25.0	20.5	*1	ug/L		82	43 - 142	22	20
cis-1,2-Dichloroethene			25.0	26.0		ug/L		104	69 - 126	0	20
cis-1,3-Dichloropropene			25.0	22.9		ug/L		92	75 - 120	1	20
Dibromochloromethane			25.0	21.2		ug/L		85	71 - 122	0	20
Dibromomethane			25.0	26.3		ug/L		105	68 - 129	2	20
Dichlorodifluoromethane			25.0	21.8	*1	ug/L		87	26 - 152	26	21
Ethylbenzene			25.0	25.7		ug/L		103	76 - 121	4	20
Hexachlorobutadiene			25.0	27.6		ug/L		110	69 - 133	3	20
Isopropylbenzene			25.0	24.5		ug/L		98	70 - 127	4	20
Methylene Chloride			25.0	24.3		ug/L		97	64 - 128	1	20
Naphthalene			25.0	28.4		ug/L		114	63 - 129	4	21
n-Butylbenzene			25.0	24.9		ug/L		99	69 - 130	8	20
N-Propylbenzene			25.0	25.4		ug/L		101	73 - 127	7	20
sec-Butylbenzene			25.0	25.9		ug/L		104	72 - 127	6	20
Styrene			25.0	25.5		ug/L		102	79 - 120	2	20
tert-Butylbenzene			25.0	25.5		ug/L		102	72 - 126	5	20
Tetrachloroethene			25.0	25.4		ug/L		101	72 - 127	5	20
Toluene			25.0	25.6		ug/L		103	68 - 127	3	20
trans-1,2-Dichloroethene			25.0	26.5		ug/L		106	66 - 129	1	20
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	66 - 127	1	20
Trichloroethene			25.0	25.7		ug/L		103	70 - 125	5	20
Trichlorofluoromethane			25.0	22.8		ug/L		91	57 - 144	23	28
Vinyl chloride			25.0	23.8		ug/L		95	53 - 141	24	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*103*		*77 - 120*
Toluene-d8 (Surr)	*99*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-594402/1-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/22/22 11:24	11/22/22 15:18	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*124*		*70 - 130*	*11/22/22 11:24*	*11/22/22 15:18*	*1*

Lab Sample ID: LCS 280-594402/2-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.250	0.257		ug/L		103	60 - 140		
1,2-Dibromoethane			0.250	0.229		ug/L		92	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*121*		*70 - 130*

Lab Sample ID: LCSD 280-594402/3-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.273		ug/L		109	60 - 140	6	10
1,2-Dibromoethane			0.250	0.239		ug/L		95	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*125*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-594870/1-A
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 594870

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		12/01/22 09:30	12/02/22 05:46	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 05:46	1
Magnesium	ND		200		ug/L		12/01/22 09:30	12/02/22 05:46	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 05:46	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 05:46	1
Sodium	ND		1000		ug/L		12/01/22 09:30	12/02/22 05:46	1

Lab Sample ID: LCS 280-594870/2-A
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 594870

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 280-594870/2-A
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 594870

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10500		ug/L		105	89 - 115
Magnesium	50000	51200		ug/L		102	90 - 113
Manganese	1000	1040		ug/L		104	90 - 110
Potassium	50000	49300		ug/L		99	89 - 114
Sodium	50000	48400		ug/L		97	90 - 115

Lab Sample ID: 280-169296-B-9-H MS
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 594870

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	200000		50000	254000	4	ug/L		100	48 - 153
Iron	3800		10000	14200		ug/L		104	52 - 155
Magnesium	56000		50000	107000		ug/L		102	62 - 146
Manganese	230		1000	1260		ug/L		103	79 - 121
Potassium	4200		50000	56400		ug/L		104	76 - 132
Sodium	340000		50000	394000	4	ug/L		110	70 - 203

Lab Sample ID: 280-169296-B-9-I MSD
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 594870

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	200000		50000	248000	4	ug/L		90	48 - 153	2	20
Iron	3800		10000	14100		ug/L		102	52 - 155	1	20
Magnesium	56000		50000	105000		ug/L		98	62 - 146	2	20
Manganese	230		1000	1240		ug/L		101	79 - 121	1	20
Potassium	4200		50000	55700		ug/L		103	76 - 132	1	20
Sodium	340000		50000	386000	4	ug/L		93	70 - 203	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-651985/4
Matrix: Water
Analysis Batch: 651985

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			12/02/22 17:01	1
Sulfate	ND		1.0		mg/L			12/02/22 17:01	1

Lab Sample ID: LCS 480-651985/5
Matrix: Water
Analysis Batch: 651985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.7		mg/L		99	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-169302-D-2 MS
Matrix: Water
Analysis Batch: 651985

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	170		50.1	215	E	mg/L		82	81 - 120
Sulfate	4.9		50.0	55.4		mg/L		101	80 - 120

Lab Sample ID: MB 480-652317/4
Matrix: Water
Analysis Batch: 652317

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			12/06/22 16:32	1
Sulfate	ND		1.0		mg/L			12/06/22 16:32	1

Lab Sample ID: LCS 480-652317/5
Matrix: Water
Analysis Batch: 652317

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.8		mg/L		99	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

Lab Sample ID: 480-204086-G-2 MSD
Matrix: Water
Analysis Batch: 652317

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	200		251	430		mg/L		91	81 - 120	7	15
Sulfate	31		250	271		mg/L		96	80 - 120	13	15

Lab Sample ID: 480-204259-L-6 MS
Matrix: Water
Analysis Batch: 652317

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	1.4		50.1	48.3		mg/L		93	81 - 120
Sulfate	15		50.0	62.4		mg/L		94	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-595775/140
Matrix: Water
Analysis Batch: 595775

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			12/06/22 15:24	1

Lab Sample ID: LCS 280-595775/139
Matrix: Water
Analysis Batch: 595775

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		102	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-169495-B-8 MS
Matrix: Water
Analysis Batch: 595775

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	1.08		mg/L		108	90 - 110

Lab Sample ID: 280-169495-B-8 MSD
Matrix: Water
Analysis Batch: 595775

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	0	10

Lab Sample ID: MB 280-596038/19
Matrix: Water
Analysis Batch: 596038

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			12/07/22 09:56	1

Lab Sample ID: MB 280-596038/98
Matrix: Water
Analysis Batch: 596038

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			12/07/22 13:27	1

Lab Sample ID: LCS 280-596038/17
Matrix: Water
Analysis Batch: 596038

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: LCS 280-596038/97
Matrix: Water
Analysis Batch: 596038

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	2.59		mg/L		104	90 - 110

Lab Sample ID: LCSD 280-596038/18
Matrix: Water
Analysis Batch: 596038

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	0	10

Lab Sample ID: 280-169301-10 MS
Matrix: Water
Analysis Batch: 596038

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	0.26		1.00	1.31		mg/L		105	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-169301-10 MSD
Matrix: Water
Analysis Batch: 596038

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	0.26		1.00	1.32		mg/L		105	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-594952/22
Matrix: Water
Analysis Batch: 594952

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			11/29/22 11:21	1

Lab Sample ID: LCS 280-594952/21
Matrix: Water
Analysis Batch: 594952

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: 280-169301-6 MS
Matrix: Water
Analysis Batch: 594952

Client Sample ID: DUP11152201
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	3.95		mg/L		99	90 - 110

Lab Sample ID: 280-169301-6 MSD
Matrix: Water
Analysis Batch: 594952

Client Sample ID: DUP11152201
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	3.84		mg/L		96	90 - 110	3	10

Lab Sample ID: MB 280-595276/23
Matrix: Water
Analysis Batch: 595276

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			12/01/22 13:17	1

Lab Sample ID: LCS 280-595276/21
Matrix: Water
Analysis Batch: 595276

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	5.10		mg/L		102	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCSD 280-595276/22
Matrix: Water
Analysis Batch: 595276

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	5.27		mg/L		105	90 - 110	3	10

Lab Sample ID: 280-169310-A-3 MS
Matrix: Water
Analysis Batch: 595276

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: 280-169310-A-3 MSD
Matrix: Water
Analysis Batch: 595276

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	3.81		mg/L		95	90 - 110	6	10

Lab Sample ID: 580-120347-I-2 MS
Matrix: Water
Analysis Batch: 595276

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	3.91		mg/L		98	90 - 110		

Lab Sample ID: 580-120347-I-2 MSD
Matrix: Water
Analysis Batch: 595276

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	3.93		mg/L		98	90 - 110	1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-595506/4
Matrix: Water
Analysis Batch: 595506

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			12/02/22 15:11	1

Lab Sample ID: LCS 280-595506/3
Matrix: Water
Analysis Batch: 595506

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	26.9		mg/L		107	88 - 112		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCSD 280-595506/48
Matrix: Water
Analysis Batch: 595506

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 Organic Carbon - Average			25.0	26.2		mg/L		105	88 - 112	1	15

Lab Sample ID: 280-169301-2 MS
Matrix: Water
Analysis Batch: 595506

Client Sample ID: MW-16B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	1.7		25.0	29.0		mg/L		109	88 - 112

Lab Sample ID: 280-169301-2 MSD
Matrix: Water
Analysis Batch: 595506

Client Sample ID: MW-16B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.7		25.0	28.9		mg/L		109	88 - 112	0	15

Lab Sample ID: MB 280-595659/4
Matrix: Water
Analysis Batch: 595659

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			12/05/22 16:31	1

Lab Sample ID: LCS 280-595659/3
Matrix: Water
Analysis Batch: 595659

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	26.6		mg/L		106	88 - 112

Lab Sample ID: LCSD 280-595659/37
Matrix: Water
Analysis Batch: 595659

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 Organic Carbon - Average			25.0	25.6		mg/L		103	88 - 112	0	15

Lab Sample ID: 280-168993-B-4 MS
Matrix: Water
Analysis Batch: 595659

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	3.0		25.0	30.1		mg/L		108	88 - 112

Lab Sample ID: 280-168993-B-4 MSD
Matrix: Water
Analysis Batch: 595659

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	3.0		25.0	30.2		mg/L		109	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-596205/1
Matrix: Water
Analysis Batch: 596205

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			12/09/22 13:24	1
Magnesium	0.000				meq/L			12/09/22 13:24	1
Potassium	0.000				meq/L			12/09/22 13:24	1
Sodium	0.000				meq/L			12/09/22 13:24	1
Ammonia as N	0.000				meq/L			12/09/22 13:24	1
Chloride	0.000				meq/L			12/09/22 13:24	1
Sulfate	0.000				meq/L			12/09/22 13:24	1
Alkalinity	0.000				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity	0.000				meq/L			12/09/22 13:24	1
Nitrate/Nitrite	0.000				meq/L			12/09/22 13:24	1
Iron	0.000				meq/L			12/09/22 13:24	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-594347/110
Matrix: Water
Analysis Batch: 594347

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			11/21/22 23:59	1

Lab Sample ID: MB 280-594347/84
Matrix: Water
Analysis Batch: 594347

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			11/21/22 21:15	1

Lab Sample ID: 280-169301-3 DU
Matrix: Water
Analysis Batch: 594347

Client Sample ID: FB11152201
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	ND			ND		mg/L				NC	20

Lab Sample ID: MB 280-594522/58
Matrix: Water
Analysis Batch: 594522

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			11/22/22 18:58	1

Lab Sample ID: 280-169301-6 DU
Matrix: Water
Analysis Batch: 594522

Client Sample ID: DUP11152201
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	350			351		mg/L				0.1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-594006/1
Matrix: Water
Analysis Batch: 594006

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			11/18/22 10:17	1

Lab Sample ID: LCS 280-594006/2
Matrix: Water
Analysis Batch: 594006

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			502	467		mg/L		93	88 - 114		

Lab Sample ID: LCSD 280-594006/3
Matrix: Water
Analysis Batch: 594006

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			502	472		mg/L		94	88 - 114	1	20

Lab Sample ID: 280-169317-A-5 DU
Matrix: Water
Analysis Batch: 594006

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	620			626		mg/L				0.3	10

Lab Sample ID: MB 280-594012/1
Matrix: Water
Analysis Batch: 594012

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			11/18/22 10:26	1

Lab Sample ID: LCS 280-594012/2
Matrix: Water
Analysis Batch: 594012

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			502	476		mg/L		95	88 - 114		

Lab Sample ID: 280-169301-3 DU
Matrix: Water
Analysis Batch: 594012

Client Sample ID: FB11152201
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

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

GC/MS VOA

Analysis Batch: 594130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-3	FB11152201	Total/NA	Water	8260B	
280-169301-4	MW-21A	Total/NA	Water	8260B	
280-169301-5	MW-15B	Total/NA	Water	8260B	
MB 280-594130/7	Method Blank	Total/NA	Water	8260B	
LCS 280-594130/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-594130/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 594149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-1	TRIP BLANK	Total/NA	Water	8260B	
280-169301-2	MW-16B	Total/NA	Water	8260B	
280-169301-6	DUP11152201	Total/NA	Water	8260B	
280-169301-7	MW-14B	Total/NA	Water	8260B	
280-169301-8	MW-21B	Total/NA	Water	8260B	
280-169301-9	MW-12A	Total/NA	Water	8260B	
280-169301-10	MW-12B	Total/NA	Water	8260B	
280-169301-11	MW-16A	Total/NA	Water	8260B	
280-169301-12	DUP11162201	Total/NA	Water	8260B	
MB 280-594149/7	Method Blank	Total/NA	Water	8260B	
LCS 280-594149/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-594149/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 594402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-1	TRIP BLANK	Total/NA	Water	8011	
280-169301-2	MW-16B	Total/NA	Water	8011	
280-169301-3	FB11152201	Total/NA	Water	8011	
280-169301-4	MW-21A	Total/NA	Water	8011	
280-169301-5	MW-15B	Total/NA	Water	8011	
280-169301-6	DUP11152201	Total/NA	Water	8011	
280-169301-7	MW-14B	Total/NA	Water	8011	
280-169301-8	MW-21B	Total/NA	Water	8011	
280-169301-9	MW-12A	Total/NA	Water	8011	
280-169301-10	MW-12B	Total/NA	Water	8011	
280-169301-11	MW-16A	Total/NA	Water	8011	
280-169301-12	DUP11162201	Total/NA	Water	8011	
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 594425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-1	TRIP BLANK	Total/NA	Water	8011	594402
280-169301-2	MW-16B	Total/NA	Water	8011	594402
280-169301-3	FB11152201	Total/NA	Water	8011	594402
280-169301-4	MW-21A	Total/NA	Water	8011	594402
280-169301-5	MW-15B	Total/NA	Water	8011	594402
280-169301-6	DUP11152201	Total/NA	Water	8011	594402
280-169301-7	MW-14B	Total/NA	Water	8011	594402

GC Semi VOA (Continued)

Analysis Batch: 594425 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-8	MW-21B	Total/NA	Water	8011	594402
280-169301-9	MW-12A	Total/NA	Water	8011	594402
280-169301-10	MW-12B	Total/NA	Water	8011	594402
280-169301-11	MW-16A	Total/NA	Water	8011	594402
280-169301-12	DUP11162201	Total/NA	Water	8011	594402
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	594402
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	594402
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	594402

Metals

Prep Batch: 594870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Dissolved	Water	3005A	
280-169301-3	FB11152201	Dissolved	Water	3005A	
280-169301-4	MW-21A	Dissolved	Water	3005A	
280-169301-5	MW-15B	Dissolved	Water	3005A	
280-169301-6	DUP11152201	Dissolved	Water	3005A	
280-169301-7	MW-14B	Dissolved	Water	3005A	
280-169301-8	MW-21B	Dissolved	Water	3005A	
280-169301-9	MW-12A	Dissolved	Water	3005A	
280-169301-10	MW-12B	Dissolved	Water	3005A	
280-169301-11	MW-16A	Dissolved	Water	3005A	
280-169301-12	DUP11162201	Dissolved	Water	3005A	
MB 280-594870/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-594870/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-169296-B-9-H MS	Matrix Spike	Total Recoverable	Water	3005A	
280-169296-B-9-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 595413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Dissolved	Water	6010B	594870
280-169301-3	FB11152201	Dissolved	Water	6010B	594870
280-169301-4	MW-21A	Dissolved	Water	6010B	594870
280-169301-5	MW-15B	Dissolved	Water	6010B	594870
280-169301-6	DUP11152201	Dissolved	Water	6010B	594870
280-169301-7	MW-14B	Dissolved	Water	6010B	594870
280-169301-8	MW-21B	Dissolved	Water	6010B	594870
280-169301-9	MW-12A	Dissolved	Water	6010B	594870
280-169301-10	MW-12B	Dissolved	Water	6010B	594870
280-169301-11	MW-16A	Dissolved	Water	6010B	594870
280-169301-12	DUP11162201	Dissolved	Water	6010B	594870
MB 280-594870/1-A	Method Blank	Total Recoverable	Water	6010B	594870
LCS 280-594870/2-A	Lab Control Sample	Total Recoverable	Water	6010B	594870
280-169296-B-9-H MS	Matrix Spike	Total Recoverable	Water	6010B	594870
280-169296-B-9-I MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	594870

General Chemistry

Analysis Batch: 594006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 594006 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-594006/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594006/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-594006/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
280-169317-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 594012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-3	FB11152201	Total/NA	Water	SM 2540C	
280-169301-4	MW-21A	Total/NA	Water	SM 2540C	
280-169301-5	MW-15B	Total/NA	Water	SM 2540C	
280-169301-6	DUP11152201	Total/NA	Water	SM 2540C	
280-169301-7	MW-14B	Total/NA	Water	SM 2540C	
280-169301-8	MW-21B	Total/NA	Water	SM 2540C	
280-169301-9	MW-12A	Total/NA	Water	SM 2540C	
280-169301-10	MW-12B	Total/NA	Water	SM 2540C	
280-169301-11	MW-16A	Total/NA	Water	SM 2540C	
280-169301-12	DUP11162201	Total/NA	Water	SM 2540C	
MB 280-594012/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594012/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-169301-3 DU	FB11152201	Total/NA	Water	SM 2540C	

Analysis Batch: 594347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	SM 2320B	
280-169301-3	FB11152201	Total/NA	Water	SM 2320B	
280-169301-4	MW-21A	Total/NA	Water	SM 2320B	
280-169301-5	MW-15B	Total/NA	Water	SM 2320B	
280-169301-7	MW-14B	Total/NA	Water	SM 2320B	
280-169301-8	MW-21B	Total/NA	Water	SM 2320B	
280-169301-9	MW-12A	Total/NA	Water	SM 2320B	
280-169301-10	MW-12B	Total/NA	Water	SM 2320B	
280-169301-11	MW-16A	Total/NA	Water	SM 2320B	
280-169301-12	DUP11162201	Total/NA	Water	SM 2320B	
MB 280-594347/110	Method Blank	Total/NA	Water	SM 2320B	
MB 280-594347/84	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-594347/109	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-594347/83	Lab Control Sample	Total/NA	Water	SM 2320B	
280-169301-3 DU	FB11152201	Total/NA	Water	SM 2320B	

Analysis Batch: 594522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-6	DUP11152201	Total/NA	Water	SM 2320B	
MB 280-594522/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-594522/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-169301-6 DU	DUP11152201	Total/NA	Water	SM 2320B	

Analysis Batch: 594952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-3	FB11152201	Total/NA	Water	353.2	
280-169301-4	MW-21A	Total/NA	Water	353.2	
280-169301-5	MW-15B	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 594952 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-6	DUP11152201	Total/NA	Water	353.2	
280-169301-7	MW-14B	Total/NA	Water	353.2	
280-169301-8	MW-21B	Total/NA	Water	353.2	
280-169301-10	MW-12B	Total/NA	Water	353.2	
MB 280-594952/22	Method Blank	Total/NA	Water	353.2	
LCS 280-594952/21	Lab Control Sample	Total/NA	Water	353.2	
280-169301-6 MS	DUP11152201	Total/NA	Water	353.2	
280-169301-6 MSD	DUP11152201	Total/NA	Water	353.2	

Analysis Batch: 595276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	353.2	
280-169301-9	MW-12A	Total/NA	Water	353.2	
280-169301-11	MW-16A	Total/NA	Water	353.2	
280-169301-12	DUP11162201	Total/NA	Water	353.2	
MB 280-595276/23	Method Blank	Total/NA	Water	353.2	
LCS 280-595276/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-595276/22	Lab Control Sample Dup	Total/NA	Water	353.2	
280-169310-A-3 MS	Matrix Spike	Total/NA	Water	353.2	
280-169310-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
580-120347-I-2 MS	Matrix Spike	Total/NA	Water	353.2	
580-120347-I-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 595506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	9060	
280-169301-3	FB11152201	Total/NA	Water	9060	
280-169301-4	MW-21A	Total/NA	Water	9060	
280-169301-5	MW-15B	Total/NA	Water	9060	
280-169301-6	DUP11152201	Total/NA	Water	9060	
280-169301-7	MW-14B	Total/NA	Water	9060	
280-169301-8	MW-21B	Total/NA	Water	9060	
280-169301-9	MW-12A	Total/NA	Water	9060	
MB 280-595506/4	Method Blank	Total/NA	Water	9060	
LCS 280-595506/3	Lab Control Sample	Total/NA	Water	9060	
LCSD 280-595506/48	Lab Control Sample Dup	Total/NA	Water	9060	
280-169301-2 MS	MW-16B	Total/NA	Water	9060	
280-169301-2 MSD	MW-16B	Total/NA	Water	9060	

Analysis Batch: 595659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-10	MW-12B	Total/NA	Water	9060	
280-169301-11	MW-16A	Total/NA	Water	9060	
280-169301-12	DUP11162201	Total/NA	Water	9060	
MB 280-595659/4	Method Blank	Total/NA	Water	9060	
LCS 280-595659/3	Lab Control Sample	Total/NA	Water	9060	
LCSD 280-595659/37	Lab Control Sample Dup	Total/NA	Water	9060	
280-168993-B-4 MS	Matrix Spike	Total/NA	Water	9060	
280-168993-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

General Chemistry

Analysis Batch: 595775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	350.1	
280-169301-6	DUP11152201	Total/NA	Water	350.1	
280-169301-7	MW-14B	Total/NA	Water	350.1	
280-169301-8	MW-21B	Total/NA	Water	350.1	
MB 280-595775/140	Method Blank	Total/NA	Water	350.1	
LCS 280-595775/139	Lab Control Sample	Total/NA	Water	350.1	
280-169495-B-8 MS	Matrix Spike	Total/NA	Water	350.1	
280-169495-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 596038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-3	FB11152201	Total/NA	Water	350.1	
280-169301-4	MW-21A	Total/NA	Water	350.1	
280-169301-5	MW-15B	Total/NA	Water	350.1	
280-169301-9	MW-12A	Total/NA	Water	350.1	
280-169301-10	MW-12B	Total/NA	Water	350.1	
280-169301-11	MW-16A	Total/NA	Water	350.1	
280-169301-12	DUP11162201	Total/NA	Water	350.1	
MB 280-596038/19	Method Blank	Total/NA	Water	350.1	
MB 280-596038/98	Method Blank	Total/NA	Water	350.1	
LCS 280-596038/17	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-596038/97	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-596038/18	Lab Control Sample Dup	Total/NA	Water	350.1	
280-169301-10 MS	MW-12B	Total/NA	Water	350.1	
280-169301-10 MSD	MW-12B	Total/NA	Water	350.1	

Analysis Batch: 596205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	SM 1030E	
280-169301-2	MW-16B	Total/NA	Water	SM 1030E (meq)	
280-169301-3	FB11152201	Total/NA	Water	SM 1030E	
280-169301-3	FB11152201	Total/NA	Water	SM 1030E (meq)	
280-169301-4	MW-21A	Total/NA	Water	SM 1030E	
280-169301-4	MW-21A	Total/NA	Water	SM 1030E (meq)	
280-169301-5	MW-15B	Total/NA	Water	SM 1030E	
280-169301-5	MW-15B	Total/NA	Water	SM 1030E (meq)	
280-169301-6	DUP11152201	Total/NA	Water	SM 1030E	
280-169301-6	DUP11152201	Total/NA	Water	SM 1030E (meq)	
280-169301-7	MW-14B	Total/NA	Water	SM 1030E	
280-169301-7	MW-14B	Total/NA	Water	SM 1030E (meq)	
280-169301-8	MW-21B	Total/NA	Water	SM 1030E	
280-169301-8	MW-21B	Total/NA	Water	SM 1030E (meq)	
280-169301-9	MW-12A	Total/NA	Water	SM 1030E	
280-169301-9	MW-12A	Total/NA	Water	SM 1030E (meq)	
280-169301-10	MW-12B	Total/NA	Water	SM 1030E	
280-169301-10	MW-12B	Total/NA	Water	SM 1030E (meq)	
280-169301-11	MW-16A	Total/NA	Water	SM 1030E	
280-169301-11	MW-16A	Total/NA	Water	SM 1030E (meq)	
280-169301-12	DUP11162201	Total/NA	Water	SM 1030E	
280-169301-12	DUP11162201	Total/NA	Water	SM 1030E (meq)	
MB 280-596205/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169301-1

General Chemistry

Analysis Batch: 651985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-2	MW-16B	Total/NA	Water	300.0	
280-169301-3	FB11152201	Total/NA	Water	300.0	
280-169301-5	MW-15B	Total/NA	Water	300.0	
280-169301-7	MW-14B	Total/NA	Water	300.0	
280-169301-8	MW-21B	Total/NA	Water	300.0	
280-169301-10	MW-12B	Total/NA	Water	300.0	
280-169301-11	MW-16A	Total/NA	Water	300.0	
280-169301-12	DUP11162201	Total/NA	Water	300.0	
MB 480-651985/4	Method Blank	Total/NA	Water	300.0	
LCS 480-651985/5	Lab Control Sample	Total/NA	Water	300.0	
280-169302-D-2 MS	Matrix Spike	Total/NA	Water	300.0	

Analysis Batch: 652317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169301-4	MW-21A	Total/NA	Water	300.0	
280-169301-6	DUP11152201	Total/NA	Water	300.0	
280-169301-9	MW-12A	Total/NA	Water	300.0	
MB 480-652317/4	Method Blank	Total/NA	Water	300.0	
LCS 480-652317/5	Lab Control Sample	Total/NA	Water	300.0	
480-204086-G-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
480-204259-L-6 MS	Matrix Spike	Total/NA	Water	300.0	

Lab Chronicle

Client: Waste Management
Job ID: 280-169301-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-169301-1
Date Collected: 11/15/22 07:00
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/19/22 20:35	MD	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 19:01	ECM	EET DEN

Client Sample ID: MW-16B
Lab Sample ID: 280-169301-2
Date Collected: 11/15/22 09:10
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/19/22 23:49	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 19:26	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 06:54	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 18:39	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	595775	12/06/22 16:01	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 13:33	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 15:39	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/21/22 23:32	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594006	11/18/22 10:18	ASP	EET DEN

Client Sample ID: FB11152201
Lab Sample ID: 280-169301-3
Date Collected: 11/15/22 09:20
Matrix: Water
Date Received: 11/17/22 10:30

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	594130	11/19/22 12:27	CKL	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 19:50	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:15	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 18:58	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 14:44	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 11:41	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 16:23	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:05	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-21A

Lab Sample ID: 280-169301-4

Date Collected: 11/15/22 13:20

Matrix: Water

Date Received: 11/17/22 10:30

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	594130	11/19/22 15:20	CKL	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 20:39	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:19	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	652317	12/06/22 17:12	RJS	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 14:47	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 11:55	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 16:37	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:16	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-15B

Lab Sample ID: 280-169301-5

Date Collected: 11/15/22 10:25

Matrix: Water

Date Received: 11/17/22 10:30

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	594130	11/19/22 15:42	CKL	EET DEN
Total/NA	Prep	8011			35.7 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 21:03	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:23	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 20:56	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 14:50	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 11:57	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 16:51	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:24	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: DUP11152201

Lab Sample ID: 280-169301-6

Date Collected: 11/15/22 10:30

Matrix: Water

Date Received: 11/17/22 10:30

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	594149	11/20/22 00:11	MD	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 21:28	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:27	KRP	EET DEN

Client Sample ID: DUP11152201
Lab Sample ID: 280-169301-6

Date Collected: 11/15/22 10:30
Matrix: Water
Date Received: 11/17/22 10:30

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		1	1 mL	1 mL	652317	12/06/22 17:31	RJS	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	595775	12/06/22 16:12	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 11:59	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 17:05	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594522	11/22/22 19:05	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-14B
Lab Sample ID: 280-169301-7

Date Collected: 11/15/22 12:15
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/20/22 00:32	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 21:52	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:31	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 21:35	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	595775	12/06/22 16:14	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 12:05	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 17:19	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:38	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-21B
Lab Sample ID: 280-169301-8

Date Collected: 11/15/22 14:15
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/20/22 00:54	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 22:17	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:35	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 21:55	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	595775	12/06/22 16:17	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 12:07	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 17:34	ABW	EET DEN

Client Sample ID: MW-21B

Lab Sample ID: 280-169301-8

Date Collected: 11/15/22 14:15

Matrix: Water

Date Received: 11/17/22 10:30

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			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:45	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-12A

Lab Sample ID: 280-169301-9

Date Collected: 11/15/22 15:25

Matrix: Water

Date Received: 11/17/22 10:30

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	594149	11/20/22 01:16	MD	EET DEN
Total/NA	Prep	8011			35.8 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 22:41	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:39	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	652317	12/06/22 17:51	RJS	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 10:39	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 13:35	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595506	12/02/22 18:18	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:51	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: MW-12B

Lab Sample ID: 280-169301-10

Date Collected: 11/15/22 15:50

Matrix: Water

Date Received: 11/17/22 10:30

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	594149	11/20/22 01:37	MD	EET DEN
Total/NA	Prep	8011			35.7 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 23:06	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:43	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 22:34	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 10:41	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	594952	11/29/22 12:11	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595659	12/05/22 18:13	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 00:57	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-169301-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-16A
Lab Sample ID: 280-169301-11
Date Collected: 11/16/22 08:25
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/20/22 01:59	MD	EET DEN
Total/NA	Prep	8011			35.4 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 23:30	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:47	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 22:54	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 11:12	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 14:55	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595659	12/05/22 18:27	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 01:04	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Client Sample ID: DUP11162201
Lab Sample ID: 280-169301-12
Date Collected: 11/16/22 08:30
Matrix: Water
Date Received: 11/17/22 10:30

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	594149	11/20/22 02:20	MD	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 23:55	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594870	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 07:51	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 23:13	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 11:13	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 14:57	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595659	12/05/22 18:42	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/22/22 01:23	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594012	11/18/22 10:26	ASP	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: E. TAYlor	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: 503 502 7627	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 2
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Compliance Wells - Apr Oct			
Site: Oregon	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540/350.1- TDS/Alk	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	300.0- Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB01	11/15/22	0700	G	W						X	X			4	
MW-16B	11/15/22	0910	G	W	X		X	X	X	X	X	X	X	3	
FB 11152201	11/15/22	0720	G	W	X		X	X	X	X	X	X	X	3	
MW-21A	11/15/22	1320	G	W	X		X	X	X	X	X	X	X	3	
MW-15B	11/15/22	1025	G	W	X		X	X	X	X	X	X	X	3	
DUP 11152201	11/15/22	1030	G	W	X		X	X	X	X	X	X	X	3	
MW-14B	11/15/22	1215	G	W	X		X	X	X	X	X	X	X	3	
MW-21B	11/15/22	1415	G	W	X		X	X	X	X	X	X	X	3	
MW-12A	11/15/22	1525	G	W	X		X	X	X	X	X	X	X	3	
MW-12B	11/15/22	1550	G	W	X		X	X	X	X	X	X	X	3	

280-169301 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 - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/16/2022 1630	SCS	Jacob Scott	11/17/22 1030	ETA 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: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.8, 1.7, 0.4 CF 0.0 IR12

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: E. TAYLOR	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: 503 502 7622	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 2 of 2
Company: Waste Management	PWSID:	Analysis Requested		Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Compliance Wells - Apr Oct			
Site: Oregon	SSOW#:			

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, Y - Trizma, 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)	2540/350.1- TDS/Alk	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	300.0- Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
MW-16A	11/16/22	0829	G	W	X		X	X	X	X	X	X	X	11	
Dup 11162201	11/16/22	1230	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
		11/16/22 @ 1630			11/17/22 1030	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.

Ver: 01/16/2019

1/9/2023

FedEx Express
Expanded Billable Stamp
Use only for shipments within the U.S. Saturday delivery available.

1 From See optional release signature below.
ORDER: 00863049

DECLARED VALUE $100
PACKAGE WEIGHT
(__) ___-_____

2 To Shipment will not be accepted if address below is altered.
SAMPLE RECEIVING
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

8172 4918 8932

REF:

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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Next business morning by 10:30 a.m. Not available to all locations. Please consult the current FedEx Service Guide for specific commitments.
NONREDEEMABLE
Please see back for declared value information and important terms and conditions.
1229964
Shipments tendered on Friday are delivered on Saturday to most locations.

280-169301 Waybill

FedEx Express
Expanded Billable Stamp
Use only for shipments within the U.S. Saturday delivery available.

1 From See optional release signature below.
ORDER: 00863049

DECLARED VALUE $100
PACKAGE WEIGHT
(__) ___-_____

2 To Shipment will not be accepted if address below is altered.
SAMPLE RECEIVING
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

8172 4918 8900

REF:

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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current
for specific commitments.
NONREDEEMABLE
Please see back for declared value information and important terms and conditions.
SATURDAY DELIVERY
Shipments tendered on Friday are delivered on Saturday to most locations.

00009410
ORDER: 00863049
EUROFINS TESTAMERICA
ARVADA,CO

Peel here and attach label to package.

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

FedEx Priority Overnight®

Next business morning by 10:30

1229965

1 From See optional release signature below.

ORDER: 00863049

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___._____

NONREDEEMABLE

Please see back for declared value information and important terms and conditions.

2 To Shipment will not be accepted if address below is altered.

SAMPLE RECEIVING
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

0 4

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

8172 4918 8921

REF:

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

Base Charges

Total Charges

Employee Number

Other

There is an artificial watermark on this document. Hold at an angle to view.

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M-10091 Rev. 12/17

Form ID 0667

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-637048.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-169301-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2022			
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, Y - Trizma, 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-16B (280-169301-2)	11/15/22	09:10 Pacific		Water			X	1	
FB11152201 (280-169301-3)	11/15/22	09:20 Pacific		Water			X	1	
MW-21A (280-169301-4)	11/15/22	13:20 Pacific		Water			X	1	
MW-15B (280-169301-5)	11/15/22	10:25 Pacific		Water			X	1	
DUP11152201 (280-169301-6)	11/15/22	10:30 Pacific		Water			X	1	
MW-14B (280-169301-7)	11/15/22	12:15 Pacific		Water			X	1	
MW-21B (280-169301-8)	11/15/22	14:15 Pacific		Water			X	1	
MW-12A (280-169301-9)	11/15/22	15:25 Pacific		Water			X	1	
MW-12B (280-169301-10)	11/15/22	15:50 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: 11/21/22 13:40	Company EAGEN	Received by:	Date/Time: 11/23/22 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: 2.7 # 1 ICE				

Ver: 06/08/2021

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-637048.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 2 of 2
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-169301-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2022			
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, 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, Y - Trizma, 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-16A (280-169301-11)	11/16/22	08:25 Pacific		Water			X	1	
DUP11162201 (280-169301-12)	11/16/22	08:30 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	[signature]	11/21/22 13:40	ETADEN	See pg 1		
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:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-169301-1

Login Number: 169301
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: 280-169301-1

Login Number: 169301
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/23/22 11:35 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Compliance Wells - Apr Oct

JOB NUMBER

280-171058-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

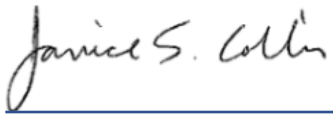
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-171058-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

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.
B	Compound was found in the blank and sample.

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: 280-171058-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-171058-1

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.

RECEIPT

The samples were received on 01/06/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.1 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB01 (280-171058-1), MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 01/10/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

1,2-DIBROMOETHANE, 1,2-DIBROMO-3-CHLOROPROPANE, AND 1,2,3-TRICHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TB01 (280-171058-1), MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared on 01/09/2023 and 01/12/2023 and analyzed on 01/10/2023 and 01/12/2023.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 280-598842 and analytical batch 280-598473 recovered outside control limits for the following analytes: 1,2-Dibromoethane on the back column. Both LCS/LCSD recovered within control.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS

Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 01/18/2023 and 01/23/2023 and analyzed on 01/19/2023 and 01/23/2023.

The method blank for analytical batch 280-599852 contained Iron greater than the reporting limit (RL), and were not reanalyzed because all associated samples were 10x the concentration in the MB. The data have been qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Job ID: 280-171058-1 (Continued)

Laboratory: Eurofins Denver (Continued)

Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 01/10/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 01/11/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 01/11/2023 and 01/16/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 01/20/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 01/19/2023 and 01/20/2023.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-599911 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL ORGANIC CARBON
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 01/23/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for Cation Anion Balance in accordance with epa methodologies. The samples were analyzed on 01/24/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3), MW-15A (280-171058-4) and FB1052301 (280-171058-5) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 01/24/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FIELD SAMPLING
Samples MW-14A (280-171058-2), DUP105231 (280-171058-3) and MW-15A (280-171058-4) were analyzed for Field Sampling in accordance with NA. The samples were analyzed on 01/05/2023.

Job ID: 280-171058-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171058-1

Client Sample ID: TB01 — Lab Sample ID: 280-171058-1

No Detections.

Client Sample ID: MW-14A — Lab Sample ID: 280-171058-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	33000		500		ug/L	1		6010B	Dissolved
Magnesium	13000		200		ug/L	1		6010B	Dissolved
Sodium	9900		1000		ug/L	1		6010B	Dissolved
Chloride	6.0		0.50		mg/L	1		300.0	Total/NA
Sulfate	14		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	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	3.0				meq/L	1		SM 1030E	Total/NA
Total Cations	3.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	2.0				%	1		SM 1030E	Total/NA
Calcium	33				mg/L	1		SM 1030E	Total/NA
Magnesium	13				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	9.9				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	6.0				mg/L	1		SM 1030E	Total/NA
Sulfate	14				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	120				mg/L	1		SM 1030E	Total/NA
Alkalinity	120				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.3				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	2.0				%	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	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.1				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	0.17				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.29				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	120				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.4				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	120		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	180		10		mg/L	1		SM 2540C	Total/NA
Field pH	5.90				SU	1		Field Sampling	Total/NA
Field Conductivity	308.6				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	4.83				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	260.9				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP105231 — Lab Sample ID: 280-171058-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	33000		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP105231 (Continued)

Lab Sample ID: 280-171058-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	13000		200		ug/L	1		6010B	Dissolved
Sodium	9800		1000		ug/L	1		6010B	Dissolved
Chloride	6.0		0.50		mg/L	1		300.0	Total/NA
Sulfate	14		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	2.4		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.1		1.0		mg/L	1		9060	Total/NA
Total Anions	3.2				meq/L	1		SM 1030E	Total/NA
Total Cations	3.1				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.4				%	1		SM 1030E	Total/NA
Calcium	33				mg/L	1		SM 1030E	Total/NA
Magnesium	13				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	9.8				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.00				mg/L	1		SM 1030E	Total/NA
Chloride	6.0				mg/L	1		SM 1030E	Total/NA
Sulfate	14				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	2.4				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.4				%	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	1.6				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	1.1				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	0.17				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.29				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	0.17				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	5.90				SU	1		Field Sampling	Total/NA
Field Conductivity	308.6				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.5				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	4.83				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	260.9				millivolts	1		Field Sampling	Total/NA

Client Sample ID: MW-15A

Lab Sample ID: 280-171058-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	11000		500		ug/L	1		6010B	Dissolved
Iron	8900	B	30		ug/L	1		6010B	Dissolved
Magnesium	4800		200		ug/L	1		6010B	Dissolved
Manganese	54		3.0		ug/L	1		6010B	Dissolved
Potassium	760		500		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-15A (Continued)

Lab Sample ID: 280-171058-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	19000		1000		ug/L	1		6010B	Dissolved
Chloride	3.8		0.50		mg/L	1		300.0	Total/NA
Sulfate	27		1.0		mg/L	1		300.0	Total/NA
Nitrate/Nitrite	0.18		0.050		mg/L	1		353.2	Total/NA
Total Organic Carbon - Average	1.8		1.0		mg/L	1		9060	Total/NA
Total Anions	1.5				meq/L	1		SM 1030E	Total/NA
Total Cations	2.3				meq/L	1		SM 1030E	Total/NA
Percent Difference	22				%	1		SM 1030E	Total/NA
Calcium	11				mg/L	1		SM 1030E	Total/NA
Magnesium	4.8				mg/L	1		SM 1030E	Total/NA
Potassium	0.76				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	3.8				mg/L	1		SM 1030E	Total/NA
Sulfate	27				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	39				mg/L	1		SM 1030E	Total/NA
Alkalinity	39				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	0.18				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	22				%	1		SM 1030E	Total/NA
Calculated TDS	72				mg/L	1		SM 1030E	Total/NA
TDS Ratio	5.3				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	380				mg/L	1		SM 1030E	Total/NA
Iron	8.9				mg/L	1		SM 1030E	Total/NA
Calcium	0.55				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	0.39				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	0.019				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	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.56				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	39				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	0.78				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.013				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.48				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	39		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	380		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.07				SU	1		Field Sampling	Total/NA
Field Conductivity	167.1				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.4				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	8.08				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	262.5				millivolts	1		Field Sampling	Total/NA

Client Sample ID: FB1052301

Lab Sample ID: 280-171058-5

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

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB1052301 (Continued)

Lab Sample ID: 280-171058-5

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
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: 280-171058-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-171058-1	TB01	Water	01/05/23 08:00	01/06/23 09:20
280-171058-2	MW-14A	Water	01/05/23 11:50	01/06/23 09:20
280-171058-3	DUP105231	Water	01/05/23 11:55	01/06/23 09:20
280-171058-4	MW-15A	Water	01/05/23 13:20	01/06/23 09:20
280-171058-5	FB1052301	Water	01/05/23 13:25	01/06/23 09:20

Method Summary

Client: Waste Management
Job ID: 280-171058-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	EPA	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171058-1

Client Sample ID: TB01
Date Collected: 01/05/23 08:00
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-1
Matrix: Water

Method: SW846 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			01/10/23 11:08	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 11:08	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 11:08	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 11:08	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 11:08	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 11:08	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 11:08	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 11:08	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 11:08	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 11:08	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 11:08	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 11:08	1
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 11:08	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:08	1
2-Hexanone	ND		5.0		ug/L			01/10/23 11:08	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:08	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 11:08	1
4-Methyl-2-pentanone	ND		5.0		ug/L			01/10/23 11:08	1
Acetone	ND		10		ug/L			01/10/23 11:08	1
Benzene	ND		1.0		ug/L			01/10/23 11:08	1
Bromobenzene	ND		1.0		ug/L			01/10/23 11:08	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 11:08	1
Bromodichloromethane	ND		1.0		ug/L			01/10/23 11:08	1
Bromoform	ND		1.2		ug/L			01/10/23 11:08	1
Bromomethane	ND		2.4		ug/L			01/10/23 11:08	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 11:08	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 11:08	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 11:08	1
Chloroethane	ND		2.0		ug/L			01/10/23 11:08	1
Chloroform	ND		1.0		ug/L			01/10/23 11:08	1
Chloromethane	ND		2.0		ug/L			01/10/23 11:08	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:08	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 11:08	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 11:08	1
Dibromomethane	ND		1.0		ug/L			01/10/23 11:08	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 11:08	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 11:08	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 11:08	1
Naphthalene	ND		1.0		ug/L			01/10/23 11:08	1
n-Butylbenzene	ND		1.0		ug/L			01/10/23 11:08	1

Client Sample ID: TB01

Lab Sample ID: 280-171058-1

Date Collected: 01/05/23 08:00

Matrix: Water

Date Received: 01/06/23 09:20

Method: SW846 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			01/10/23 11:08	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
Styrene	ND		1.0		ug/L			01/10/23 11:08	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 11:08	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 11:08	1
Toluene	ND		1.0		ug/L			01/10/23 11:08	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:08	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 11:08	1
Trichloroethene	ND		1.0		ug/L			01/10/23 11:08	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 11:08	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 11:08	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 11:08	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*15*	*T J*	*ug/L*		*1.59*	*N/A*		*01/10/23 11:08*	*1*
Unknown	*5.8*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 11:08*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*01/10/23 11:08*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*01/10/23 11:08*	*1*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*01/10/23 11:08*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*01/10/23 11:08*	*1*

Method: SW846 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		01/09/23 10:23	01/10/23 03:42	1
1,2-Dibromoethane	ND		0.050		ug/L		01/09/23 10:23	01/10/23 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*112*		*70 - 130*	*01/09/23 10:23*	*01/10/23 03:42*	*1*

Client Sample ID: MW-14A

Lab Sample ID: 280-171058-2

Date Collected: 01/05/23 11:50

Matrix: Water

Date Received: 01/06/23 09:20

Method: SW846 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			01/10/23 11:52	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 11:52	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 11:52	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 11:52	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 11:52	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 11:52	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 11:52	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 11:52	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 11:52	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 11:52	1

Client Sample ID: MW-14A
Date Collected: 01/05/23 11:50
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-2
Matrix: Water

Method: SW846 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			01/10/23 11:52	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 11:52	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 11:52	1
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 11:52	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:52	1
2-Hexanone	ND		5.0		ug/L			01/10/23 11:52	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:52	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 11:52	1
4-Methyl-2-pentanone	ND		5.0		ug/L			01/10/23 11:52	1
Acetone	ND		10		ug/L			01/10/23 11:52	1
Benzene	ND		1.0		ug/L			01/10/23 11:52	1
Bromobenzene	ND		1.0		ug/L			01/10/23 11:52	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 11:52	1
Bromodichloromethane	ND		1.0		ug/L			01/10/23 11:52	1
Bromoform	ND		1.2		ug/L			01/10/23 11:52	1
Bromomethane	ND		2.4		ug/L			01/10/23 11:52	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 11:52	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 11:52	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 11:52	1
Chloroethane	ND		2.0		ug/L			01/10/23 11:52	1
Chloroform	ND		1.0		ug/L			01/10/23 11:52	1
Chloromethane	ND		2.0		ug/L			01/10/23 11:52	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:52	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 11:52	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 11:52	1
Dibromomethane	ND		1.0		ug/L			01/10/23 11:52	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 11:52	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 11:52	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 11:52	1
Naphthalene	ND		1.0		ug/L			01/10/23 11:52	1
n-Butylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
N-Propylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
Styrene	ND		1.0		ug/L			01/10/23 11:52	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 11:52	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 11:52	1
Toluene	ND		1.0		ug/L			01/10/23 11:52	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:52	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 11:52	1
Trichloroethene	ND		1.0		ug/L			01/10/23 11:52	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 11:52	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 11:52	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 11:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*31*	*T J*	*ug/L*		*1.62*	*N/A*		*01/10/23 11:52*	*1*

Client Sample ID: MW-14A

Date Collected: 01/05/23 11:50
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	*5.1*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 11:52*	*1*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*01/10/23 11:52*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*01/10/23 11:52*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*01/10/23 11:52*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*01/10/23 11:52*	*1*

Method: SW846 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		01/09/23 10:23	01/10/23 04:07	1
1,2-Dibromoethane	ND		0.050		ug/L		01/09/23 10:23	01/10/23 04:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	*114*		*70 - 130*	*01/09/23 10:23*	*01/10/23 04:07*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**33000**		500		ug/L		01/18/23 08:28	01/19/23 01:34	1
Iron	ND		30		ug/L		01/18/23 08:28	01/19/23 01:34	1
Magnesium	**13000**		200		ug/L		01/18/23 08:28	01/19/23 01:34	1
Manganese	ND		3.0		ug/L		01/18/23 08:28	01/19/23 01:34	1
Potassium	ND		500		ug/L		01/18/23 08:28	01/19/23 01:34	1
Sodium	**9900**		1000		ug/L		01/18/23 08:28	01/19/23 01:34	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.0**				meq/L			01/24/23 15:30	1
Total Cations (SM 1030E)	**3.1**				meq/L			01/24/23 15:30	1
Percent Difference (SM 1030E)	**2.0**				%			01/24/23 15:30	1
Calcium (SM 1030E)	**33**				mg/L			01/24/23 15:30	1
Magnesium (SM 1030E)	**13**				mg/L			01/24/23 15:30	1
Potassium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Sodium (SM 1030E)	**9.9**				mg/L			01/24/23 15:30	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Chloride (SM 1030E)	**6.0**				mg/L			01/24/23 15:30	1
Sulfate (SM 1030E)	**14**				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E)	**120**				mg/L			01/24/23 15:30	1
Alkalinity (SM 1030E)	**120**				mg/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E)	**2.3**				mg/L			01/24/23 15:30	1
Anion/Cation Balance (SM 1030E)	**2.0**				%			01/24/23 15:30	1
Calculated TDS (SM 1030E)	**140**				mg/L			01/24/23 15:30	1
TDS Ratio (SM 1030E)	**1.3**				NONE			01/24/23 15:30	1
Total Dissolved Solids (SM 1030E)	**180**				mg/L			01/24/23 15:30	1
Iron (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Calcium (SM 1030E (meq))	**1.6**				meq/L			01/24/23 15:30	1
Magnesium (SM 1030E (meq))	**1.1**				meq/L			01/24/23 15:30	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Sodium (SM 1030E (meq))	**0.43**				meq/L			01/24/23 15:30	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1

Client Sample ID: MW-14A

Date Collected: 01/05/23 11:50
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (SM 1030E (meq))	0.17				meq/L			01/24/23 15:30	1
Sulfate (SM 1030E (meq))	0.29				meq/L			01/24/23 15:30	1
Alkalinity (SM 1030E (meq))	120				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E (meq))	2.4				meq/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E (meq))	0.16				meq/L			01/24/23 15:30	1
Iron (SM 1030E (meq))	0.00				meq/L			01/24/23 15:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.0		0.50		mg/L			01/11/23 18:23	1
Sulfate (EPA 300.0)	14		1.0		mg/L			01/11/23 18:23	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			01/20/23 12:08	1
Nitrate/Nitrite (EPA 353.2)	2.3		0.050		mg/L			01/19/23 13:57	1
Total Organic Carbon - Average (SW846 9060)	1.1		1.0		mg/L			01/23/23 18:33	1
Bicarbonate Alkalinity (SM 2320B)	120		10		mg/L			01/10/23 15:38	1
Total Dissolved Solids (SM 2540C)	180		10		mg/L			01/11/23 14:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.90				SU			01/05/23 12:50	1
Field Conductivity	308.6				umhos/cm			01/05/23 12:50	1
Field Temperature	10.5				Degrees C			01/05/23 12:50	1
Field Dissolved Oxygen	4.83				mg/L			01/05/23 12:50	1
Field EH/ORP	260.9				millivolts			01/05/23 12:50	1

Client Sample ID: DUP105231

Date Collected: 01/05/23 11:55
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-3

Matrix: Water

Method: SW846 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			01/10/23 12:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 12:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 12:14	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 12:14	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 12:14	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 12:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 12:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 12:14	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 12:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 12:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 12:14	1

Client Sample ID: DUP105231
Date Collected: 01/05/23 11:55
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 12:14	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 12:14	1
2-Hexanone	ND		5.0		ug/L			01/10/23 12:14	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 12:14	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 12:14	1
4-Methyl-2-pentanone	ND		5.0		ug/L			01/10/23 12:14	1
Acetone	ND		10		ug/L			01/10/23 12:14	1
Benzene	ND		1.0		ug/L			01/10/23 12:14	1
Bromobenzene	ND		1.0		ug/L			01/10/23 12:14	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 12:14	1
Bromodichloromethane	ND		1.0		ug/L			01/10/23 12:14	1
Bromoform	ND		1.2		ug/L			01/10/23 12:14	1
Bromomethane	ND		2.4		ug/L			01/10/23 12:14	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 12:14	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 12:14	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 12:14	1
Chloroethane	ND		2.0		ug/L			01/10/23 12:14	1
Chloroform	ND		1.0		ug/L			01/10/23 12:14	1
Chloromethane	ND		2.0		ug/L			01/10/23 12:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 12:14	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 12:14	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 12:14	1
Dibromomethane	ND		1.0		ug/L			01/10/23 12:14	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 12:14	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 12:14	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 12:14	1
Naphthalene	ND		1.0		ug/L			01/10/23 12:14	1
n-Butylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
N-Propylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
Styrene	ND		1.0		ug/L			01/10/23 12:14	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 12:14	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 12:14	1
Toluene	ND		1.0		ug/L			01/10/23 12:14	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 12:14	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 12:14	1
Trichloroethene	ND		1.0		ug/L			01/10/23 12:14	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 12:14	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 12:14	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 12:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*31*	*T J*	*ug/L*		*1.62*	*N/A*		*01/10/23 12:14*	*1*
Unknown	*6.2*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 12:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*01/10/23 12:14*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*01/10/23 12:14*	*1*

Client Sample ID: DUP105231

Date Collected: 01/05/23 11:55
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*01/10/23 12:14*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*01/10/23 12:14*	*1*

Method: SW846 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		01/09/23 10:23	01/10/23 04:31	1
1,2-Dibromoethane	ND		0.050		ug/L		01/09/23 10:23	01/10/23 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*118*		*70 - 130*	*01/09/23 10:23*	*01/10/23 04:31*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**33000**		500		ug/L		01/18/23 08:28	01/19/23 01:39	1
Iron	ND		30		ug/L		01/18/23 08:28	01/19/23 01:39	1
Magnesium	**13000**		200		ug/L		01/18/23 08:28	01/19/23 01:39	1
Manganese	ND		3.0		ug/L		01/18/23 08:28	01/19/23 01:39	1
Potassium	ND		500		ug/L		01/18/23 08:28	01/19/23 01:39	1
Sodium	**9800**		1000		ug/L		01/18/23 08:28	01/19/23 01:39	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.2**				meq/L			01/24/23 15:30	1
Total Cations (SM 1030E)	**3.1**				meq/L			01/24/23 15:30	1
Percent Difference (SM 1030E)	**-1.4**				%			01/24/23 15:30	1
Calcium (SM 1030E)	**33**				mg/L			01/24/23 15:30	1
Magnesium (SM 1030E)	**13**				mg/L			01/24/23 15:30	1
Potassium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Sodium (SM 1030E)	**9.8**				mg/L			01/24/23 15:30	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Chloride (SM 1030E)	**6.0**				mg/L			01/24/23 15:30	1
Sulfate (SM 1030E)	**14**				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E)	**130**				mg/L			01/24/23 15:30	1
Alkalinity (SM 1030E)	**130**				mg/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E)	**2.4**				mg/L			01/24/23 15:30	1
Anion/Cation Balance (SM 1030E)	**-1.4**				%			01/24/23 15:30	1
Calculated TDS (SM 1030E)	**140**				mg/L			01/24/23 15:30	1
TDS Ratio (SM 1030E)	**1.3**				NONE			01/24/23 15:30	1
Total Dissolved Solids (SM 1030E)	**180**				mg/L			01/24/23 15:30	1
Iron (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Calcium (SM 1030E (meq))	**1.6**				meq/L			01/24/23 15:30	1
Magnesium (SM 1030E (meq))	**1.1**				meq/L			01/24/23 15:30	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Sodium (SM 1030E (meq))	**0.43**				meq/L			01/24/23 15:30	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Chloride (SM 1030E (meq))	**0.17**				meq/L			01/24/23 15:30	1
Sulfate (SM 1030E (meq))	**0.29**				meq/L			01/24/23 15:30	1
Alkalinity (SM 1030E (meq))	**130**				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E (meq))	**2.6**				meq/L			01/24/23 15:30	1

Client Sample ID: DUP105231
Lab Sample ID: 280-171058-3

Date Collected: 01/05/23 11:55
Matrix: Water
Date Received: 01/06/23 09:20

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite (SM 1030E (meq))	0.17				meq/L			01/24/23 15:30	1
Iron (SM 1030E (meq))	0.00				meq/L			01/24/23 15:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	6.0		0.50		mg/L			01/11/23 18:43	1
Sulfate (EPA 300.0)	14		1.0		mg/L			01/11/23 18:43	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			01/20/23 13:39	1
Nitrate/Nitrite (EPA 353.2)	2.4		0.050		mg/L			01/20/23 14:46	1
Total Organic Carbon - Average (SW846 9060)	1.1		1.0		mg/L			01/23/23 18:48	1
Bicarbonate Alkalinity (SM 2320B)	130		10		mg/L			01/10/23 15:50	1
Total Dissolved Solids (SM 2540C)	180		10		mg/L			01/11/23 14:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.90				SU			01/05/23 12:55	1
Field Conductivity	308.6				umhos/cm			01/05/23 12:55	1
Field Temperature	10.5				Degrees C			01/05/23 12:55	1
Field Dissolved Oxygen	4.83				mg/L			01/05/23 12:55	1
Field EH/ORP	260.9				millivolts			01/05/23 12:55	1

Client Sample ID: MW-15A
Lab Sample ID: 280-171058-4

Date Collected: 01/05/23 13:20
Matrix: Water
Date Received: 01/06/23 09:20

Method: SW846 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			01/10/23 12:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 12:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 12:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 12:36	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 12:36	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 12:36	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 12:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 12:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 12:36	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 12:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 12:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 12:36	1
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 12:36	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 12:36	1
2-Hexanone	ND		5.0		ug/L			01/10/23 12:36	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 12:36	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 12:36	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171058-1

Client Sample ID: MW-15A
Date Collected: 01/05/23 13:20
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-4
Matrix: Water

Method: SW846 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			01/10/23 12:36	1
Acetone	ND		10		ug/L			01/10/23 12:36	1
Benzene	ND		1.0		ug/L			01/10/23 12:36	1
Bromobenzene	ND		1.0		ug/L			01/10/23 12:36	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 12:36	1
Bromodichloromethane	ND		1.0		ug/L			01/10/23 12:36	1
Bromoform	ND		1.2		ug/L			01/10/23 12:36	1
Bromomethane	ND		2.4		ug/L			01/10/23 12:36	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 12:36	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 12:36	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 12:36	1
Chloroethane	ND		2.0		ug/L			01/10/23 12:36	1
Chloroform	ND		1.0		ug/L			01/10/23 12:36	1
Chloromethane	ND		2.0		ug/L			01/10/23 12:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 12:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 12:36	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 12:36	1
Dibromomethane	ND		1.0		ug/L			01/10/23 12:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 12:36	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 12:36	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 12:36	1
Naphthalene	ND		1.0		ug/L			01/10/23 12:36	1
n-Butylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
N-Propylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
Styrene	ND		1.0		ug/L			01/10/23 12:36	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 12:36	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 12:36	1
Toluene	ND		1.0		ug/L			01/10/23 12:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 12:36	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 12:36	1
Trichloroethene	ND		1.0		ug/L			01/10/23 12:36	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 12:36	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 12:36	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 12:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*21*	*T J*	*ug/L*		*1.62*	*N/A*		*01/10/23 12:36*	*1*
Unknown	*6.2*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 12:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*01/10/23 12:36*	*1*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*		*01/10/23 12:36*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*01/10/23 12:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*01/10/23 12:36*	*1*

Client Sample ID: MW-15A

Date Collected: 01/05/23 13:20
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-4

Matrix: Water

Method: SW846 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		01/12/23 12:56	01/12/23 18:03	1
1,2-Dibromoethane	ND		0.050		ug/L		01/12/23 12:56	01/12/23 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*103*		*70 - 130*	*01/12/23 12:56*	*01/12/23 18:03*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	11000		500		ug/L		01/18/23 08:28	01/19/23 02:57	1
Iron	8900	B	30		ug/L		01/18/23 08:28	01/19/23 02:57	1
Magnesium	4800		200		ug/L		01/18/23 08:28	01/19/23 02:57	1
Manganese	54		3.0		ug/L		01/18/23 08:28	01/19/23 02:57	1
Potassium	760		500		ug/L		01/18/23 08:28	01/19/23 02:57	1
Sodium	19000		1000		ug/L		01/18/23 08:28	01/19/23 02:57	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	1.5				meq/L			01/24/23 15:30	1
Total Cations (SM 1030E)	2.3				meq/L			01/24/23 15:30	1
Percent Difference (SM 1030E)	22				%			01/24/23 15:30	1
Calcium (SM 1030E)	11				mg/L			01/24/23 15:30	1
Magnesium (SM 1030E)	4.8				mg/L			01/24/23 15:30	1
Potassium (SM 1030E)	0.76				mg/L			01/24/23 15:30	1
Sodium (SM 1030E)	19				mg/L			01/24/23 15:30	1
Ammonia as N (SM 1030E)	0.00				mg/L			01/24/23 15:30	1
Chloride (SM 1030E)	3.8				mg/L			01/24/23 15:30	1
Sulfate (SM 1030E)	27				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E)	39				mg/L			01/24/23 15:30	1
Alkalinity (SM 1030E)	39				mg/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E)	0.18				mg/L			01/24/23 15:30	1
Anion/Cation Balance (SM 1030E)	22				%			01/24/23 15:30	1
Calculated TDS (SM 1030E)	72				mg/L			01/24/23 15:30	1
TDS Ratio (SM 1030E)	5.3				NONE			01/24/23 15:30	1
Total Dissolved Solids (SM 1030E)	380				mg/L			01/24/23 15:30	1
Iron (SM 1030E)	8.9				mg/L			01/24/23 15:30	1
Calcium (SM 1030E (meq))	0.55				meq/L			01/24/23 15:30	1
Magnesium (SM 1030E (meq))	0.39				meq/L			01/24/23 15:30	1
Potassium (SM 1030E (meq))	0.019				meq/L			01/24/23 15:30	1
Sodium (SM 1030E (meq))	0.83				meq/L			01/24/23 15:30	1
Ammonia as N (SM 1030E (meq))	0.00				meq/L			01/24/23 15:30	1
Chloride (SM 1030E (meq))	0.11				meq/L			01/24/23 15:30	1
Sulfate (SM 1030E (meq))	0.56				meq/L			01/24/23 15:30	1
Alkalinity (SM 1030E (meq))	39				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E (meq))	0.78				meq/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E (meq))	0.013				meq/L			01/24/23 15:30	1
Iron (SM 1030E (meq))	0.48				meq/L			01/24/23 15:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3.8		0.50		mg/L			01/16/23 20:11	1
Sulfate (EPA 300.0)	27		1.0		mg/L			01/11/23 19:03	1

Client Sample ID: MW-15A

Lab Sample ID: 280-171058-4

Date Collected: 01/05/23 13:20

Matrix: Water

Date Received: 01/06/23 09:20

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			01/20/23 14:36	1
Nitrate/Nitrite (EPA 353.2)	**0.18**		0.050		mg/L			01/19/23 14:01	1
Total Organic Carbon - Average (SW846 9060)	**1.8**		1.0		mg/L			01/23/23 19:32	1
Bicarbonate Alkalinity (SM 2320B)	**39**		10		mg/L			01/10/23 15:55	1
Total Dissolved Solids (SM 2540C)	**380**		10		mg/L			01/11/23 14:13	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.07**				SU			01/05/23 14:20	1
Field Conductivity	**167.1**				umhos/cm			01/05/23 14:20	1
Field Temperature	**13.4**				Degrees C			01/05/23 14:20	1
Field Dissolved Oxygen	**8.08**				mg/L			01/05/23 14:20	1
Field EH/ORP	**262.5**				millivolts			01/05/23 14:20	1

Client Sample ID: FB1052301

Lab Sample ID: 280-171058-5

Date Collected: 01/05/23 13:25

Matrix: Water

Date Received: 01/06/23 09:20

Method: SW846 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			01/10/23 11:30	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 11:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 11:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 11:30	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 11:30	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 11:30	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 11:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 11:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 11:30	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 11:30	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 11:30	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 11:30	1
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 11:30	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:30	1
2-Hexanone	ND		5.0		ug/L			01/10/23 11:30	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 11:30	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 11:30	1
4-Methyl-2-pentanone	ND		5.0		ug/L			01/10/23 11:30	1
Acetone	ND		10		ug/L			01/10/23 11:30	1
Benzene	ND		1.0		ug/L			01/10/23 11:30	1
Bromobenzene	ND		1.0		ug/L			01/10/23 11:30	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 11:30	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171058-1

Client Sample ID: FB1052301
Date Collected: 01/05/23 13:25
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-5
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0		ug/L			01/10/23 11:30	1
Bromoform	ND		1.2		ug/L			01/10/23 11:30	1
Bromomethane	ND		2.4		ug/L			01/10/23 11:30	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 11:30	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 11:30	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 11:30	1
Chloroethane	ND		2.0		ug/L			01/10/23 11:30	1
Chloroform	ND		1.0		ug/L			01/10/23 11:30	1
Chloromethane	ND		2.0		ug/L			01/10/23 11:30	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 11:30	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 11:30	1
Dibromomethane	ND		1.0		ug/L			01/10/23 11:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 11:30	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 11:30	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 11:30	1
Naphthalene	ND		1.0		ug/L			01/10/23 11:30	1
n-Butylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
N-Propylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
Styrene	ND		1.0		ug/L			01/10/23 11:30	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 11:30	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 11:30	1
Toluene	ND		1.0		ug/L			01/10/23 11:30	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 11:30	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 11:30	1
Trichloroethene	ND		1.0		ug/L			01/10/23 11:30	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 11:30	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 11:30	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 11:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*14*	*T J*	*ug/L*		*1.59*	*N/A*		*01/10/23 11:30*	*1*
Unknown	*6.1*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 11:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*01/10/23 11:30*	*1*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*		*01/10/23 11:30*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*01/10/23 11:30*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*01/10/23 11:30*	*1*

Method: SW846 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		01/12/23 12:56	01/12/23 18:28	1
1,2-Dibromoethane	ND		0.050		ug/L		01/12/23 12:56	01/12/23 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*121*		*70 - 130*	*01/12/23 12:56*	*01/12/23 18:28*	*1*

Client Sample ID: FB1052301

Date Collected: 01/05/23 13:25
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-5

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		01/18/23 08:28	01/19/23 01:43	1
Iron	ND		30		ug/L		01/23/23 08:50	01/23/23 18:03	1
Magnesium	ND		200		ug/L		01/18/23 08:28	01/19/23 01:43	1
Manganese	ND		3.0		ug/L		01/18/23 08:28	01/19/23 01:43	1
Potassium	ND		500		ug/L		01/18/23 08:28	01/19/23 01:43	1
Sodium	ND		1000		ug/L		01/18/23 08:28	01/19/23 01:43	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.00**				meq/L			01/24/23 15:30	1
Total Cations (SM 1030E)	**0.00**				meq/L			01/24/23 15:30	1
Percent Difference (SM 1030E)	**NC**				%			01/24/23 15:30	1
Calcium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Magnesium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Potassium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Sodium (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Chloride (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Sulfate (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Alkalinity (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Anion/Cation Balance (SM 1030E)	**NC**				%			01/24/23 15:30	1
Calculated TDS (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
TDS Ratio (SM 1030E)	**NC**				NONE			01/24/23 15:30	1
Total Dissolved Solids (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Iron (SM 1030E)	**0.00**				mg/L			01/24/23 15:30	1
Calcium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Magnesium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Alkalinity (SM 1030E (meq))	**0.00**				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1
Iron (SM 1030E (meq))	**0.00**				meq/L			01/24/23 15:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			01/11/23 21:00	1
Sulfate (EPA 300.0)	ND		1.0		mg/L			01/11/23 21:00	1
Ammonia as N (EPA 350.1)	ND		0.030		mg/L			01/20/23 15:26	1
Nitrate/Nitrite (EPA 353.2)	ND		0.050		mg/L			01/19/23 14:03	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			01/23/23 17:46	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			01/10/23 16:00	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			01/11/23 14:13	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171058-1

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)
280-171058-1	TB01	100	99	100	99
280-171058-2	MW-14A	99	101	98	97
280-171058-3	DUP105231	98	99	98	99
280-171058-4	MW-15A	100	100	99	97
280-171058-5	FB1052301	100	99	99	99
LCS 280-598935/13	Lab Control Sample	97	100	99	100
LCSD 280-598935/4	Lab Control Sample Dup	97	99	99	98
MB 280-598935/7	Method Blank	98	98	99	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)
280-171058-1	TB01	112
280-171058-2	MW-14A	114
280-171058-3	DUP105231	118
280-171058-4	MW-15A	103
280-171058-5	FB1052301	121
LCS 280-598842/2-A	Lab Control Sample	112
LCS 280-599266/2-A	Lab Control Sample	105
LCSD 280-598842/3-A	Lab Control Sample Dup	112
LCSD 280-599266/3-A	Lab Control Sample Dup	116
MB 280-598842/1-A	Method Blank	109
MB 280-599266/1-A	Method Blank	108

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-598935/7
Matrix: Water
Analysis Batch: 598935

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,1-Dichloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,1-Dichloroethene	ND		1.0		ug/L			01/10/23 10:29	1
1,1-Dichloropropene	ND		1.0		ug/L			01/10/23 10:29	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/10/23 10:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,2-Dichloroethane	ND		1.0		ug/L			01/10/23 10:29	1
1,2-Dichloropropane	ND		1.0		ug/L			01/10/23 10:29	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
1,3-Dichloropropane	ND		1.0		ug/L			01/10/23 10:29	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
2,2-Dichloropropane	ND		5.0		ug/L			01/10/23 10:29	1
2-Butanone (MEK)	ND		6.0		ug/L			01/10/23 10:29	1
2-Chlorotoluene	ND		1.0		ug/L			01/10/23 10:29	1
2-Hexanone	ND		5.0		ug/L			01/10/23 10:29	1
4-Chlorotoluene	ND		1.0		ug/L			01/10/23 10:29	1
4-Isopropyltoluene	ND		1.0		ug/L			01/10/23 10:29	1
4-Methyl-2-pentanone	ND		5.0		ug/L			01/10/23 10:29	1
Acetone	ND		10		ug/L			01/10/23 10:29	1
Benzene	ND		1.0		ug/L			01/10/23 10:29	1
Bromobenzene	ND		1.0		ug/L			01/10/23 10:29	1
Bromochloromethane	ND		1.0		ug/L			01/10/23 10:29	1
Bromodichloromethane	ND		1.0		ug/L			01/10/23 10:29	1
Bromoform	ND		1.2		ug/L			01/10/23 10:29	1
Bromomethane	ND		2.4		ug/L			01/10/23 10:29	1
Carbon disulfide	ND		2.0		ug/L			01/10/23 10:29	1
Carbon tetrachloride	ND		1.0		ug/L			01/10/23 10:29	1
Chlorobenzene	ND		1.0		ug/L			01/10/23 10:29	1
Chloroethane	ND		2.0		ug/L			01/10/23 10:29	1
Chloroform	ND		1.0		ug/L			01/10/23 10:29	1
Chloromethane	ND		2.0		ug/L			01/10/23 10:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 10:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/10/23 10:29	1
Dibromochloromethane	ND		1.0		ug/L			01/10/23 10:29	1
Dibromomethane	ND		1.0		ug/L			01/10/23 10:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			01/10/23 10:29	1
Ethylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
Hexachlorobutadiene	ND		1.2		ug/L			01/10/23 10:29	1
Isopropylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
Methylene Chloride	ND		5.0		ug/L			01/10/23 10:29	1
Naphthalene	ND		1.0		ug/L			01/10/23 10:29	1

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

Lab Sample ID: MB 280-598935/7
Matrix: Water
Analysis Batch: 598935

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			01/10/23 10:29	1
N-Propylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
sec-Butylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
Styrene	ND		1.0		ug/L			01/10/23 10:29	1
tert-Butylbenzene	ND		1.0		ug/L			01/10/23 10:29	1
Tetrachloroethene	ND		1.0		ug/L			01/10/23 10:29	1
Toluene	ND		1.0		ug/L			01/10/23 10:29	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/10/23 10:29	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			01/10/23 10:29	1
Trichloroethene	ND		1.0		ug/L			01/10/23 10:29	1
Trichlorofluoromethane	ND		2.0		ug/L			01/10/23 10:29	1
Vinyl chloride	ND		1.0		ug/L			01/10/23 10:29	1
Xylenes (total)	ND		2.0		ug/L			01/10/23 10:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*14.4*	*T J*	*ug/L*		*1.59*	*N/A*		*01/10/23 10:29*	*1*
Unknown	*6.30*	*T J*	*ug/L*		*2.40*	*N/A*		*01/10/23 10:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*01/10/23 10:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*78 - 120*		*01/10/23 10:29*	*1*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*01/10/23 10:29*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*01/10/23 10:29*	*1*

Lab Sample ID: LCS 280-598935/13
Matrix: Water
Analysis Batch: 598935

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	50.0		ug/L		100	74 - 121
1,1,1-Trichloroethane	50.0	46.3		ug/L		93	62 - 132
1,1,2,2-Tetrachloroethane	50.0	43.4		ug/L		87	72 - 122
1,1,2-Trichloroethane	50.0	45.9		ug/L		92	72 - 128
1,1-Dichloroethane	50.0	46.2		ug/L		92	66 - 130
1,1-Dichloroethene	50.0	46.7		ug/L		93	62 - 130
1,1-Dichloropropene	50.0	48.5		ug/L		97	64 - 133
1,2,3-Trichlorobenzene	50.0	53.0		ug/L		106	70 - 127
1,2,3-Trichloropropane	50.0	42.3		ug/L		85	74 - 123
1,2,4-Trichlorobenzene	50.0	51.7		ug/L		103	73 - 124
1,2,4-Trimethylbenzene	50.0	42.9		ug/L		86	74 - 124
1,2-Dichlorobenzene	50.0	45.6		ug/L		91	77 - 121
1,2-Dichloroethane	50.0	43.7		ug/L		87	61 - 130
1,2-Dichloropropane	50.0	48.0		ug/L		96	68 - 127
1,3,5-Trimethylbenzene	50.0	43.3		ug/L		87	73 - 127
1,3-Dichlorobenzene	50.0	46.5		ug/L		93	76 - 121
1,3-Dichloropropane	50.0	45.1		ug/L		90	80 - 118
1,4-Dichlorobenzene	50.0	45.8		ug/L		92	76 - 119
2,2-Dichloropropane	50.0	50.0		ug/L		100	57 - 140

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

Lab Sample ID: LCS 280-598935/13
Matrix: Water
Analysis Batch: 598935

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	200	190		ug/L		95	53 - 135
2-Chlorotoluene	50.0	45.9		ug/L		92	75 - 123
2-Hexanone	200	178		ug/L		89	58 - 134
4-Chlorotoluene	50.0	45.9		ug/L		92	74 - 124
4-Isopropyltoluene	50.0	46.3		ug/L		93	74 - 127
4-Methyl-2-pentanone	200	180		ug/L		90	56 - 135
Acetone	200	187		ug/L		94	50 - 137
Benzene	50.0	45.6		ug/L		91	69 - 126
Bromobenzene	50.0	47.1		ug/L		94	75 - 122
Bromochloromethane	50.0	44.1		ug/L		88	71 - 130
Bromodichloromethane	50.0	47.8		ug/L		96	67 - 126
Bromoform	50.0	47.7		ug/L		95	57 - 125
Bromomethane	50.0	58.8		ug/L		118	25 - 163
Carbon disulfide	50.0	46.6		ug/L		93	56 - 128
Carbon tetrachloride	50.0	53.9		ug/L		108	60 - 133
Chlorobenzene	50.0	46.4		ug/L		93	78 - 118
Chloroethane	50.0	48.3		ug/L		97	52 - 144
Chloroform	50.0	46.1		ug/L		92	68 - 128
Chloromethane	50.0	59.6		ug/L		119	43 - 142
cis-1,2-Dichloroethene	50.0	47.4		ug/L		95	69 - 126
cis-1,3-Dichloropropene	50.0	44.5		ug/L		89	75 - 120
Dibromochloromethane	50.0	47.5		ug/L		95	71 - 122
Dibromomethane	50.0	44.7		ug/L		89	68 - 129
Dichlorodifluoromethane	50.0	55.4		ug/L		111	26 - 152
Ethylbenzene	50.0	44.3		ug/L		89	76 - 121
Hexachlorobutadiene	50.0	52.8		ug/L		106	69 - 133
Isopropylbenzene	50.0	43.2		ug/L		86	70 - 127
Methylene Chloride	50.0	44.8		ug/L		90	64 - 128
Naphthalene	50.0	46.4		ug/L		93	63 - 129
n-Butylbenzene	50.0	44.2		ug/L		88	69 - 130
N-Propylbenzene	50.0	45.8		ug/L		92	73 - 127
sec-Butylbenzene	50.0	49.4		ug/L		99	72 - 127
Styrene	50.0	45.4		ug/L		91	79 - 120
tert-Butylbenzene	50.0	45.5		ug/L		91	72 - 126
Tetrachloroethene	50.0	51.9		ug/L		104	72 - 127
Toluene	50.0	46.1		ug/L		92	68 - 127
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	66 - 129
trans-1,3-Dichloropropene	50.0	47.1		ug/L		94	66 - 127
Trichloroethene	50.0	43.9		ug/L		88	70 - 125
Trichlorofluoromethane	50.0	54.9		ug/L		110	57 - 144
Vinyl chloride	50.0	50.5		ug/L		101	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*100*		*80 - 125*

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

Lab Sample ID: LCSD 280-598935/4
Matrix: Water
Analysis Batch: 598935

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	49.6		ug/L		99	74 - 121	1	20
1,1,1-Trichloroethane			50.0	45.8		ug/L		92	62 - 132	1	20
1,1,2,2-Tetrachloroethane			50.0	44.1		ug/L		88	72 - 122	2	20
1,1,2-Trichloroethane			50.0	46.9		ug/L		94	72 - 128	2	20
1,1-Dichloroethane			50.0	46.5		ug/L		93	66 - 130	1	20
1,1-Dichloroethene			50.0	46.1		ug/L		92	62 - 130	1	21
1,1-Dichloropropene			50.0	46.4		ug/L		93	64 - 133	4	20
1,2,3-Trichlorobenzene			50.0	55.4		ug/L		111	70 - 127	5	20
1,2,3-Trichloropropane			50.0	41.7		ug/L		83	74 - 123	1	20
1,2,4-Trichlorobenzene			50.0	52.6		ug/L		105	73 - 124	2	20
1,2,4-Trimethylbenzene			50.0	43.7		ug/L		87	74 - 124	2	20
1,2-Dichlorobenzene			50.0	45.6		ug/L		91	77 - 121	0	20
1,2-Dichloroethane			50.0	44.8		ug/L		90	61 - 130	2	20
1,2-Dichloropropane			50.0	47.7		ug/L		95	68 - 127	1	20
1,3,5-Trimethylbenzene			50.0	43.7		ug/L		87	73 - 127	1	20
1,3-Dichlorobenzene			50.0	46.9		ug/L		94	76 - 121	1	20
1,3-Dichloropropane			50.0	44.9		ug/L		90	80 - 118	0	20
1,4-Dichlorobenzene			50.0	45.8		ug/L		92	76 - 119	0	20
2,2-Dichloropropane			50.0	48.9		ug/L		98	57 - 140	2	22
2-Butanone (MEK)			200	190		ug/L		95	53 - 135	0	20
2-Chlorotoluene			50.0	46.1		ug/L		92	75 - 123	1	20
2-Hexanone			200	176		ug/L		88	58 - 134	1	21
4-Chlorotoluene			50.0	45.8		ug/L		92	74 - 124	0	20
4-Isopropyltoluene			50.0	46.1		ug/L		92	74 - 127	1	20
4-Methyl-2-pentanone			200	183		ug/L		92	56 - 135	2	20
Acetone			200	186		ug/L		93	50 - 137	1	21
Benzene			50.0	45.6		ug/L		91	69 - 126	0	20
Bromobenzene			50.0	47.6		ug/L		95	75 - 122	1	20
Bromochloromethane			50.0	45.9		ug/L		92	71 - 130	4	20
Bromodichloromethane			50.0	47.6		ug/L		95	67 - 126	1	20
Bromoform			50.0	47.3		ug/L		95	57 - 125	1	20
Bromomethane			50.0	61.5		ug/L		123	25 - 163	5	40
Carbon disulfide			50.0	45.0		ug/L		90	56 - 128	3	20
Carbon tetrachloride			50.0	53.5		ug/L		107	60 - 133	1	20
Chlorobenzene			50.0	45.6		ug/L		91	78 - 118	2	20
Chloroethane			50.0	49.2		ug/L		98	52 - 144	2	30
Chloroform			50.0	45.6		ug/L		91	68 - 128	1	20
Chloromethane			50.0	58.7		ug/L		117	43 - 142	1	20
cis-1,2-Dichloroethene			50.0	46.3		ug/L		93	69 - 126	2	20
cis-1,3-Dichloropropene			50.0	44.5		ug/L		89	75 - 120	0	20
Dibromochloromethane			50.0	46.7		ug/L		93	71 - 122	2	20
Dibromomethane			50.0	45.7		ug/L		91	68 - 129	2	20
Dichlorodifluoromethane			50.0	53.2		ug/L		106	26 - 152	4	21
Ethylbenzene			50.0	42.9		ug/L		86	76 - 121	3	20
Hexachlorobutadiene			50.0	54.3		ug/L		109	69 - 133	3	20
Isopropylbenzene			50.0	42.5		ug/L		85	70 - 127	2	20
Methylene Chloride			50.0	44.7		ug/L		89	64 - 128	0	20
Naphthalene			50.0	47.8		ug/L		96	63 - 129	3	21

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

Lab Sample ID: LCSD 280-598935/4
Matrix: Water
Analysis Batch: 598935

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			50.0	44.6		ug/L		89	69 - 130	1	20
N-Propylbenzene			50.0	46.2		ug/L		92	73 - 127	1	20
sec-Butylbenzene			50.0	49.7		ug/L		99	72 - 127	1	20
Styrene			50.0	44.9		ug/L		90	79 - 120	1	20
tert-Butylbenzene			50.0	45.0		ug/L		90	72 - 126	1	20
Tetrachloroethene			50.0	48.3		ug/L		97	72 - 127	7	20
Toluene			50.0	45.7		ug/L		91	68 - 127	1	20
trans-1,2-Dichloroethene			50.0	46.1		ug/L		92	66 - 129	2	20
trans-1,3-Dichloropropene			50.0	47.6		ug/L		95	66 - 127	1	20
Trichloroethene			50.0	42.0		ug/L		84	70 - 125	4	20
Trichlorofluoromethane			50.0	51.6		ug/L		103	57 - 144	6	28
Vinyl chloride			50.0	49.8		ug/L		100	53 - 141	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*
4-Bromofluorobenzene (Surr)	*99*		*78 - 120*
Dibromofluoromethane (Surr)	*99*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-598842/1-A
Matrix: Water
Analysis Batch: 598473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 598842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		01/09/23 10:23	01/10/23 00:04	1
1,2-Dibromoethane	ND		0.050		ug/L		01/09/23 10:23	01/10/23 00:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*109*		*70 - 130*	*01/09/23 10:23*	*01/10/23 00:04*	*1*

Lab Sample ID: LCS 280-598842/2-A
Matrix: Water
Analysis Batch: 598473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 598842

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.246		ug/L		99	60 - 140
1,2-Dibromoethane			0.250	0.264		ug/L		105	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-598842/3-A
Matrix: Water
Analysis Batch: 598473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 598842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.256		ug/L		102	60 - 140	4	10
1,2-Dibromoethane			0.250	0.270		ug/L		108	60 - 140	2	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*112*		*70 - 130*

Lab Sample ID: MB 280-599266/1-A
Matrix: Water
Analysis Batch: 599275

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 599266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		01/12/23 12:56	01/12/23 16:49	1
1,2-Dibromoethane	ND		0.050		ug/L		01/12/23 12:56	01/12/23 16:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*108*		*70 - 130*	*01/12/23 12:56*	*01/12/23 16:49*	*1*

Lab Sample ID: LCS 280-599266/2-A
Matrix: Water
Analysis Batch: 599275

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 599266

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.239		ug/L		95	60 - 140
1,2-Dibromoethane			0.250	0.259		ug/L		104	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*105*		*70 - 130*

Lab Sample ID: LCSD 280-599266/3-A
Matrix: Water
Analysis Batch: 599275

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 599266

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.252		ug/L		101	60 - 140	5	10
1,2-Dibromoethane			0.250	0.257		ug/L		103	60 - 140	1	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*116*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-599610/1-A
Matrix: Water
Analysis Batch: 599852

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 599610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		01/18/23 08:28	01/19/23 00:37	1
Iron	123		30		ug/L		01/18/23 08:28	01/19/23 00:37	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 280-599610/1-A
Matrix: Water
Analysis Batch: 599852

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 599610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		200		ug/L		01/18/23 08:28	01/19/23 00:37	1
Manganese	ND		3.0		ug/L		01/18/23 08:28	01/19/23 00:37	1
Potassium	ND		500		ug/L		01/18/23 08:28	01/19/23 00:37	1
Sodium	ND		1000		ug/L		01/18/23 08:28	01/19/23 00:37	1

Lab Sample ID: LCS 280-599610/2-A
Matrix: Water
Analysis Batch: 599852

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 599610

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	51700		ug/L		103	90 - 111		
Iron			10000	10500		ug/L		105	89 - 115		
Magnesium			50000	51900		ug/L		104	90 - 113		
Manganese			1000	1010		ug/L		101	90 - 110		
Potassium			50000	49500		ug/L		99	89 - 114		
Sodium			50000	48300		ug/L		97	90 - 115		

Lab Sample ID: MB 280-600011/1-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		30		ug/L		01/23/23 08:50	01/23/23 16:32	1

Lab Sample ID: LCS 280-600011/2-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Iron			10000	10400		ug/L		104	89 - 115		

Lab Sample ID: LCSD 280-600011/3-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron			10000	10200		ug/L		102	89 - 115	2	20

Lab Sample ID: 280-171266-A-3-B MS
Matrix: Water
Analysis Batch: 599852

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 599610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	170000		50000	209000		ug/L		85	48 - 153		
Iron	3200	B	10000	13300		ug/L		101	52 - 155		
Magnesium	26000		50000	74700		ug/L		98	62 - 146		
Manganese	63		1000	1030		ug/L		97	79 - 121		
Potassium	7600		50000	56700		ug/L		98	76 - 132		
Sodium	220000		50000	268000	4	ug/L		87	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-171266-A-3-C MSD
Matrix: Water
Analysis Batch: 599852

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 599610

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	170000		50000	217000		ug/L		100	48 - 153	3	20
Iron	3200	B	10000	13700		ug/L		105	52 - 155	3	20
Magnesium	26000		50000	77200		ug/L		103	62 - 146	3	20
Manganese	63		1000	1060		ug/L		100	79 - 121	3	20
Potassium	7600		50000	58100		ug/L		101	76 - 132	2	20
Sodium	220000		50000	278000	4	ug/L		107	70 - 203	4	20

Lab Sample ID: 280-170988-A-1-F MS
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	ND		10000	10200		ug/L		102	52 - 155

Lab Sample ID: 280-170988-A-1-G MSD
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	ND		10000	10000		ug/L		100	52 - 155	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-655693/4
Matrix: Water
Analysis Batch: 655693

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			01/11/23 17:05	1
Sulfate	ND		1.0		mg/L			01/11/23 17:05	1

Lab Sample ID: LCS 480-655693/5
Matrix: Water
Analysis Batch: 655693

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.4		mg/L		101	90 - 110
Sulfate	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 480-205184-J-2 MS
Matrix: Water
Analysis Batch: 655693

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	52		251	293		mg/L		96	81 - 120
Sulfate	680		250	888		mg/L		85	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-205184-J-2 MSD
Matrix: Water
Analysis Batch: 655693

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	52		251	293		mg/L		97	81 - 120	0	15
Sulfate	680		250	889		mg/L		85	80 - 120	0	15

Lab Sample ID: MB 480-656128/4
Matrix: Water
Analysis Batch: 656128

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			01/16/23 19:32	1
Sulfate	ND		1.0		mg/L			01/16/23 19:32	1

Lab Sample ID: LCS 480-656128/5
Matrix: Water
Analysis Batch: 656128

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	50.7		mg/L		101	90 - 110
Sulfate	50.0	51.3		mg/L		103	90 - 110

Lab Sample ID: 480-205442-C-3 MS
Matrix: Water
Analysis Batch: 656128

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	3.0		100	97.0		mg/L		94	81 - 120
Sulfate	32		100	125		mg/L		94	80 - 120

Lab Sample ID: 480-205442-C-3 MSD
Matrix: Water
Analysis Batch: 656128

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	3.0		100	99.3		mg/L		96	81 - 120	2	15
Sulfate	32		100	128		mg/L		96	80 - 120	2	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-600049/18
Matrix: Water
Analysis Batch: 600049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			01/20/23 12:06	1

Lab Sample ID: MB 280-600049/52
Matrix: Water
Analysis Batch: 600049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			01/20/23 13:36	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 280-600049/92
Matrix: Water
Analysis Batch: 600049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			01/20/23 15:23	1

Lab Sample ID: LCS 280-600049/17
Matrix: Water
Analysis Batch: 600049

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

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

Lab Sample ID: LCS 280-600049/51
Matrix: Water
Analysis Batch: 600049

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: LCS 280-600049/91
Matrix: Water
Analysis Batch: 600049

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		102	90 - 110

Lab Sample ID: 280-171058-2 MS
Matrix: Water
Analysis Batch: 600049

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	1.03		mg/L		103	90 - 110

Lab Sample ID: 280-171058-2 MSD
Matrix: Water
Analysis Batch: 600049

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	1.03		mg/L		103	90 - 110	0	10

Lab Sample ID: 280-171058-3 MS
Matrix: Water
Analysis Batch: 600049

Client Sample ID: DUP105231
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	1.05		mg/L		105	90 - 110

Lab Sample ID: 280-171058-3 MSD
Matrix: Water
Analysis Batch: 600049

Client Sample ID: DUP105231
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	1.07		mg/L		107	90 - 110	2	10

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-171058-4 MS
Matrix: Water
Analysis Batch: 600049

Client Sample ID: MW-15A
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	1.08		mg/L		108	90 - 110

Lab Sample ID: 280-171058-4 MSD
Matrix: Water
Analysis Batch: 600049

Client Sample ID: MW-15A
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	1.09		mg/L		109	90 - 110	0	10

Lab Sample ID: 280-171058-5 MS
Matrix: Water
Analysis Batch: 600049

Client Sample ID: FB1052301
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	1.09		mg/L		109	90 - 110

Lab Sample ID: 280-171058-5 MSD
Matrix: Water
Analysis Batch: 600049

Client Sample ID: FB1052301
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	1.07		mg/L		107	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-599911/60
Matrix: Water
Analysis Batch: 599911

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			01/19/23 12:59	1

Lab Sample ID: LCS 280-599911/59
Matrix: Water
Analysis Batch: 599911

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	4.89		mg/L		98	90 - 110

Lab Sample ID: 280-171287-A-9 MS
Matrix: Water
Analysis Batch: 599911

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	0.34	F1	4.00	0.734	F1	mg/L		10	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-171287-A-9 MSD
Matrix: Water
Analysis Batch: 599911

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	0.34	F1	4.00	0.770	F1	mg/L		11	90 - 110	5	10

Lab Sample ID: MB 280-600046/22
Matrix: Water
Analysis Batch: 600046

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			01/20/23 14:38	1

Lab Sample ID: LCS 280-600046/21
Matrix: Water
Analysis Batch: 600046

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: 280-171197-C-1 MS
Matrix: Water
Analysis Batch: 600046

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	3.95		mg/L		99	90 - 110

Lab Sample ID: 280-171197-C-1 MSD
Matrix: Water
Analysis Batch: 600046

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	3.96		mg/L		99	90 - 110	0	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-600262/4
Matrix: Water
Analysis Batch: 600262

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			01/23/23 17:17	1

Lab Sample ID: LCS 280-600262/3
Matrix: Water
Analysis Batch: 600262

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

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 280-171058-5 MS
Matrix: Water
Analysis Batch: 600262

Client Sample ID: FB1052301
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		104	88 - 112		

Lab Sample ID: 280-171058-5 MSD
Matrix: Water
Analysis Batch: 600262

Client Sample ID: FB1052301
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	26.2		mg/L		105	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-600277/1
Matrix: Water
Analysis Batch: 600277

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			01/24/23 15:30	1
Magnesium	0.000				meq/L			01/24/23 15:30	1
Potassium	0.000				meq/L			01/24/23 15:30	1
Sodium	0.000				meq/L			01/24/23 15:30	1
Ammonia as N	0.000				meq/L			01/24/23 15:30	1
Chloride	0.000				meq/L			01/24/23 15:30	1
Sulfate	0.000				meq/L			01/24/23 15:30	1
Alkalinity	0.000				mg/L			01/24/23 15:30	1
Bicarbonate Alkalinity	0.000				meq/L			01/24/23 15:30	1
Nitrate/Nitrite	0.000				meq/L			01/24/23 15:30	1
Iron	0.000				meq/L			01/24/23 15:30	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-599059/32
Matrix: Water
Analysis Batch: 599059

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			01/10/23 15:32	1

Lab Sample ID: 280-171058-2 DU
Matrix: Water
Analysis Batch: 599059

Client Sample ID: MW-14A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	120			123		mg/L				3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-599151/1
Matrix: Water
Analysis Batch: 599151

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			01/11/23 14:12	1

Lab Sample ID: LCS 280-599151/2
Matrix: Water
Analysis Batch: 599151

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	477		mg/L		95	88 - 114		

Lab Sample ID: LCSD 280-599151/3
Matrix: Water
Analysis Batch: 599151

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	4	20

Lab Sample ID: 160-48484-B-2 DU
Matrix: Water
Analysis Batch: 599151

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	200			209		mg/L				3	10

GC/MS VOA

Analysis Batch: 598935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-1	TB01	Total/NA	Water	8260B	
280-171058-2	MW-14A	Total/NA	Water	8260B	
280-171058-3	DUP105231	Total/NA	Water	8260B	
280-171058-4	MW-15A	Total/NA	Water	8260B	
280-171058-5	FB1052301	Total/NA	Water	8260B	
MB 280-598935/7	Method Blank	Total/NA	Water	8260B	
LCS 280-598935/13	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-598935/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Analysis Batch: 598473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-1	TB01	Total/NA	Water	8011	598842
280-171058-2	MW-14A	Total/NA	Water	8011	598842
280-171058-3	DUP105231	Total/NA	Water	8011	598842
MB 280-598842/1-A	Method Blank	Total/NA	Water	8011	598842
LCS 280-598842/2-A	Lab Control Sample	Total/NA	Water	8011	598842
LCSD 280-598842/3-A	Lab Control Sample Dup	Total/NA	Water	8011	598842

Prep Batch: 598842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-1	TB01	Total/NA	Water	8011	
280-171058-2	MW-14A	Total/NA	Water	8011	
280-171058-3	DUP105231	Total/NA	Water	8011	
MB 280-598842/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-598842/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-598842/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Prep Batch: 599266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-4	MW-15A	Total/NA	Water	8011	
280-171058-5	FB1052301	Total/NA	Water	8011	
MB 280-599266/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-599266/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-599266/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 599275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-4	MW-15A	Total/NA	Water	8011	599266
280-171058-5	FB1052301	Total/NA	Water	8011	599266
MB 280-599266/1-A	Method Blank	Total/NA	Water	8011	599266
LCS 280-599266/2-A	Lab Control Sample	Total/NA	Water	8011	599266
LCSD 280-599266/3-A	Lab Control Sample Dup	Total/NA	Water	8011	599266

Metals

Prep Batch: 599610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Dissolved	Water	3005A	
280-171058-3	DUP105231	Dissolved	Water	3005A	
280-171058-4	MW-15A	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 599610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-5	FB1052301	Dissolved	Water	3005A	
MB 280-599610/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-599610/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-171266-A-3-B MS	Matrix Spike	Dissolved	Water	3005A	
280-171266-A-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 599852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Dissolved	Water	6010B	599610
280-171058-3	DUP105231	Dissolved	Water	6010B	599610
280-171058-4	MW-15A	Dissolved	Water	6010B	599610
280-171058-5	FB1052301	Dissolved	Water	6010B	599610
MB 280-599610/1-A	Method Blank	Total Recoverable	Water	6010B	599610
LCS 280-599610/2-A	Lab Control Sample	Total Recoverable	Water	6010B	599610
280-171266-A-3-B MS	Matrix Spike	Dissolved	Water	6010B	599610
280-171266-A-3-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	599610

Prep Batch: 600011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-5	FB1052301	Dissolved	Water	3005A	
MB 280-600011/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-600011/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 280-600011/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
280-170988-A-1-F MS	Matrix Spike	Dissolved	Water	3005A	
280-170988-A-1-G MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 600205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-5	FB1052301	Dissolved	Water	6010B	600011
MB 280-600011/1-A	Method Blank	Total Recoverable	Water	6010B	600011
LCS 280-600011/2-A	Lab Control Sample	Total Recoverable	Water	6010B	600011
LCSD 280-600011/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	600011
280-170988-A-1-F MS	Matrix Spike	Dissolved	Water	6010B	600011
280-170988-A-1-G MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	600011

General Chemistry

Analysis Batch: 599059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	SM 2320B	
280-171058-3	DUP105231	Total/NA	Water	SM 2320B	
280-171058-4	MW-15A	Total/NA	Water	SM 2320B	
280-171058-5	FB1052301	Total/NA	Water	SM 2320B	
MB 280-599059/32	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-599059/31	Lab Control Sample	Total/NA	Water	SM 2320B	
280-171058-2 DU	MW-14A	Total/NA	Water	SM 2320B	

Analysis Batch: 599151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	SM 2540C	
280-171058-3	DUP105231	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 599151 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-4	MW-15A	Total/NA	Water	SM 2540C	
280-171058-5	FB1052301	Total/NA	Water	SM 2540C	
MB 280-599151/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-599151/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-599151/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
160-48484-B-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 599911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	353.2	
280-171058-4	MW-15A	Total/NA	Water	353.2	
280-171058-5	FB1052301	Total/NA	Water	353.2	
MB 280-599911/60	Method Blank	Total/NA	Water	353.2	
LCS 280-599911/59	Lab Control Sample	Total/NA	Water	353.2	
280-171287-A-9 MS	Matrix Spike	Total/NA	Water	353.2	
280-171287-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 600046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-3	DUP105231	Total/NA	Water	353.2	
MB 280-600046/22	Method Blank	Total/NA	Water	353.2	
LCS 280-600046/21	Lab Control Sample	Total/NA	Water	353.2	
280-171197-C-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-171197-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 600049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	350.1	
280-171058-3	DUP105231	Total/NA	Water	350.1	
280-171058-4	MW-15A	Total/NA	Water	350.1	
280-171058-5	FB1052301	Total/NA	Water	350.1	
MB 280-600049/18	Method Blank	Total/NA	Water	350.1	
MB 280-600049/52	Method Blank	Total/NA	Water	350.1	
MB 280-600049/92	Method Blank	Total/NA	Water	350.1	
LCS 280-600049/17	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-600049/51	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-600049/91	Lab Control Sample	Total/NA	Water	350.1	
280-171058-2 MS	MW-14A	Total/NA	Water	350.1	
280-171058-2 MSD	MW-14A	Total/NA	Water	350.1	
280-171058-3 MS	DUP105231	Total/NA	Water	350.1	
280-171058-3 MSD	DUP105231	Total/NA	Water	350.1	
280-171058-4 MS	MW-15A	Total/NA	Water	350.1	
280-171058-4 MSD	MW-15A	Total/NA	Water	350.1	
280-171058-5 MS	FB1052301	Total/NA	Water	350.1	
280-171058-5 MSD	FB1052301	Total/NA	Water	350.1	

Analysis Batch: 600262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	9060	
280-171058-3	DUP105231	Total/NA	Water	9060	
280-171058-4	MW-15A	Total/NA	Water	9060	

General Chemistry (Continued)

Analysis Batch: 600262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-5	FB1052301	Total/NA	Water	9060	
MB 280-600262/4	Method Blank	Total/NA	Water	9060	
LCS 280-600262/3	Lab Control Sample	Total/NA	Water	9060	
280-171058-5 MS	FB1052301	Total/NA	Water	9060	
280-171058-5 MSD	FB1052301	Total/NA	Water	9060	

Analysis Batch: 600277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	SM 1030E	
280-171058-2	MW-14A	Total/NA	Water	SM 1030E (meq)	
280-171058-3	DUP105231	Total/NA	Water	SM 1030E	
280-171058-3	DUP105231	Total/NA	Water	SM 1030E (meq)	
280-171058-4	MW-15A	Total/NA	Water	SM 1030E	
280-171058-4	MW-15A	Total/NA	Water	SM 1030E (meq)	
280-171058-5	FB1052301	Total/NA	Water	SM 1030E	
280-171058-5	FB1052301	Total/NA	Water	SM 1030E (meq)	
MB 280-600277/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 655693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	300.0	
280-171058-3	DUP105231	Total/NA	Water	300.0	
280-171058-4	MW-15A	Total/NA	Water	300.0	
280-171058-5	FB1052301	Total/NA	Water	300.0	
MB 480-655693/4	Method Blank	Total/NA	Water	300.0	
LCS 480-655693/5	Lab Control Sample	Total/NA	Water	300.0	
480-205184-J-2 MS	Matrix Spike	Total/NA	Water	300.0	
480-205184-J-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 656128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-4	MW-15A	Total/NA	Water	300.0	
MB 480-656128/4	Method Blank	Total/NA	Water	300.0	
LCS 480-656128/5	Lab Control Sample	Total/NA	Water	300.0	
480-205442-C-3 MS	Matrix Spike	Total/NA	Water	300.0	
480-205442-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 599943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171058-2	MW-14A	Total/NA	Water	Field Sampling	
280-171058-3	DUP105231	Total/NA	Water	Field Sampling	
280-171058-4	MW-15A	Total/NA	Water	Field Sampling	

Client Sample ID: TB01
Date Collected: 01/05/23 08:00
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-1
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	598935	01/10/23 11:08	CKL	EET DEN
Total/NA	Prep	8011			34.8 mL	35 mL	598842	01/09/23 10:23	ECM	EET DEN
Total/NA	Analysis	8011		1			598473	01/10/23 03:42	ECM	EET DEN

Client Sample ID: MW-14A
Date Collected: 01/05/23 11:50
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-2
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	598935	01/10/23 11:52	CKL	EET DEN
Total/NA	Prep	8011			35.3 mL	35 mL	598842	01/09/23 10:23	ECM	EET DEN
Total/NA	Analysis	8011		1			598473	01/10/23 04:07	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	599610	01/18/23 08:28	KMS	EET DEN
Dissolved	Analysis	6010B		1			599852	01/19/23 01:34	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	655693	01/11/23 18:23	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	600049	01/20/23 12:08	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	599911	01/19/23 13:57	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	600262	01/23/23 18:33	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			599059	01/10/23 15:38	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599151	01/11/23 14:13	MCR	EET DEN
Total/NA	Analysis	Field Sampling		1			599943	01/05/23 12:50	TJ	EET DEN

Client Sample ID: DUP105231
Date Collected: 01/05/23 11:55
Date Received: 01/06/23 09:20

Lab Sample ID: 280-171058-3
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	598935	01/10/23 12:14	CKL	EET DEN
Total/NA	Prep	8011			35.6 mL	35 mL	598842	01/09/23 10:23	ECM	EET DEN
Total/NA	Analysis	8011		1			598473	01/10/23 04:31	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	599610	01/18/23 08:28	KMS	EET DEN
Dissolved	Analysis	6010B		1			599852	01/19/23 01:39	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	655693	01/11/23 18:43	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	600049	01/20/23 13:39	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	600046	01/20/23 14:46	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	600262	01/23/23 18:48	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			599059	01/10/23 15:50	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599151	01/11/23 14:13	MCR	EET DEN
Total/NA	Analysis	Field Sampling		1			599943	01/05/23 12:55	TJ	EET DEN

Client Sample ID: MW-15A

Lab Sample ID: 280-171058-4

Date Collected: 01/05/23 13:20

Matrix: Water

Date Received: 01/06/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	598935	01/10/23 12:36	CKL	EET DEN
Total/NA	Prep	8011			34.8 mL	35 mL	599266	01/12/23 12:56	SMQ	EET DEN
Total/NA	Analysis	8011		1			599275	01/12/23 18:03	SMQ	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	599610	01/18/23 08:28	KMS	EET DEN
Dissolved	Analysis	6010B		1			599852	01/19/23 02:57	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	655693	01/11/23 19:03	IMZ	EET BUF
Total/NA	Analysis	300.0		1	1 mL	1 mL	656128	01/16/23 20:11	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	600049	01/20/23 14:36	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	599911	01/19/23 14:01	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	600262	01/23/23 19:32	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			599059	01/10/23 15:55	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599151	01/11/23 14:13	MCR	EET DEN
Total/NA	Analysis	Field Sampling		1			599943	01/05/23 14:20	TJ	EET DEN

Client Sample ID: FB1052301

Lab Sample ID: 280-171058-5

Date Collected: 01/05/23 13:25

Matrix: Water

Date Received: 01/06/23 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	598935	01/10/23 11:30	CKL	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	599266	01/12/23 12:56	SMQ	EET DEN
Total/NA	Analysis	8011		1			599275	01/12/23 18:28	SMQ	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	599610	01/18/23 08:28	KMS	EET DEN
Dissolved	Analysis	6010B		1			599852	01/19/23 01:43	KRP	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600205	01/23/23 18:03	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	655693	01/11/23 21:00	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	600049	01/20/23 15:26	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	599911	01/19/23 14:03	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	600262	01/23/23 17:46	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			600277	01/24/23 15:30	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			599059	01/10/23 16:00	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599151	01/11/23 14:13	MCR	EET DEN

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: EDAN TAYLOR	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: (503) 502 7027	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Compliance Wells - Apr Oct			
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 - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; 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)	2540/350.1- TDS/Alk	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	300.0- Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB01	1/5/23	0800	G	W						X	X			2	4
MW-14A	1/5/23	1150	G	W	X		X	X	X	X	X	X	X	11	
Dup 125231	1/5/23	1155	G	W	X		X	X	X	X	X	X	X	11	
MW-15A	1/5/23	1320	G	W	X		X	X	X	X	X	X	X	11	
FB10523 01	1/5/23	1325	G	W	X		X	X	X	X	X	X	X	11	

280-171058 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
EDAN TAYLOR	1/5/23 @ 1600	S&S		1/6/23 0900	ET/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: 4.1 | 1.1 | CF0.0

Ver: 01/16/2019

3/3/2023

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) 53.	°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)
1/5/23	11:06	23.60	.	7.55	.	16.05	X 1	2.61
/ /	:	.	.	.	.		X 3	7.83

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	1/5/23	11:50	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	11:50	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	11:50	F	2	(250), 500, (1L)	None	YES	NO	NA	
Yellow Glass	1/5/23	11:50	F	2	(250), 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	11:50	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: 11:06 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(1110)	0.00	5.77	257.3	317.7	10.4	7.55	4.86	clear / colorless
1	FC(1171)	2.65	5.84	257.6	318.1	10.4	7.49	5.13	C/C
2	FC(1133)	5.30	5.90	260.8	316.7	10.5	7.51	4.79	C/C
3	FC(1147)	7.85	5.90	260.9	310.4	10.5	7.51	4.82	C/C
4	FC(1149)	7.90	5.90	260.9	308.6	10.5	7.51	4.83	C/C
5		.	.			.	.	.	
6		.	.			.	.	.	

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

C/C: clear / colorless TSS Standard Purge (11/9/20 psi) w 600 mL/min

SAMPLER: EDAN TAYLOR
(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:** Dup 105231

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: (053) . °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)
1/5/23	:	.	.	.	.	.	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	1/5/23	11 : 55	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	11 : 55	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	11 : 55	F	2	(250) 500, (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	11 : 55	F	2	(250), 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	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 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-14A

SAMPLER: Eden Taylor (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:**	°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)
1/5/23	12:40	24.00	.	8.17	.	15.83	X 1	2.58
/ /	:	.	.	.	.		X 3	7.74

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	1/5/23	13:20	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	13:20	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	13:20	F	2	(250), 500, (1L)	None	YES	NO	NA	
Yellow Glass	1/5/23	13:20	F	2	(250), 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:20	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: : 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	6.13	263.3	179.6	13.6	8.16	9.39	Cl/B Cloudy
1	F(1251)	2.60	6.12	265.2	174.5	13.2	14.93	9.05	cloudy / tan
2	F(1302)	5.30	6.07	263.1	171.2	13.4	15.41	8.01	slight cloudy / tan
3	F(1314)	7.80	6.07	262.9	167.8	13.4	16.48	8.05	(cloudy / tan)
4	F(1316)	8.10	6.07	262.6	167.4	13.4	16.71	8.06	Cloudy / tan
5	F(1318)	8.35	6.07	262.4	167.1	13.4	17.32	8.08	Cloudy / tan
6			.			.	.	.	

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

Standard Purge Method (11/4/25 psi) ~1L/min

SAMPLER: E. Taylor (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:** FB 105230

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	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1/5/23	:	.	.	.	.	.	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	1/5/23	13:25	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	13:25	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	13:25	F	2	(250) 500 (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	13:25	F	2	250 (500) 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:25	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) (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]

Taken near MW-15A using lab-supplied DI water

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE)

503-
eurofins
Environment Test
TestAmerica
2061919
ACTWGT: 57.00 LB
CAD: SSFE2341
DIMS: 27x13x12 IN
TO SAMPLE RECEIVING
EUROFINS DENVER
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
(US)
REF:
INV:
PO:
DEPT:
FedEx
Express
FRI - 06 JAN 10:30A
PRIORITY OVERNIGHT
TRK# 0667 8172 5305 0413
XA LAAA
80002
CO-US DEN

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) 53.	° 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)
1/5/23	11:06	23.60	.	7.55	.	16.05	X 1	2.41
/ /	:	.	.	.	.		X 3	7.83

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	1/5/23	11:50	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	11:50	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	11:50	F	2	(250), 500, (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	11:50	F	2	(250), 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	11:50	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) (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: 11:06 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(1110)	0.00	5.77	257.3	317.7	10.4	7.55	4.86	clear / colorless
1	F(1121)	2.65	5.84	257.6	318.1	10.4	7.49	5.13	C/C
2	F(1133)	5.30	5.90	260.2	316.7	10.5	7.51	4.79	C/C
3	F(1147)	7.85	5.90	260.9	310.4	10.5	7.51	4.82	C/C
4	F(1149)	7.90	5.90	260.9	308.6	10.5	7.51	4.83	C/C
5		.	.			.	.	.	
6			.			.	.	.	

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

C/C: clear / colorless Standard Purge (11/4/20 psi) w 600 mL/min

SAMPLER: EDAN TAYLOR
(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:** Dup 105231
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)
1/5/23	:	.	.	.	.	.	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	1/5/23	11 : 55	F	3	40 ml HCl	YES	NO		
VOA Glass	1/5/23	11 : 55	F	3	40 ml $Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
White Poly	1/5/23	11 : 55	F	2	(250), 500, (1L) None	YES	NO	NA	
Yellow Glass	1/5/23	11 : 55	F	2	(250), 500, 1L H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500 HNO_3	YES	NO		
Red Diss. Poly	1/5/23	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 — 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-14A

SAMPLER: Eden Taylor (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:**	°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)
1/5/23	12:40	24.00	.	8.17	.	15.83	X 1	2.58
/ /	:	.	.	.	.		X 3	7.74

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	1/5/23	13:20	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	13:20	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	13:20	F	2	(250), 500, 1L	None	YES	NO	NA	
Yellow Glass	1/5/23	13:20	F	2	(250), 500, 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:20	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: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	ORP	E Cond (µS)	°F Temp	DTW	Diss O_2 (mg/l)	Water Quality
0	F(1240)	0.00	6.13	263.3	179.0	13.6	8.16	9.39	Clr Cloudy
1	F(1251)	2.60	6.12	265.2	174.5	13.2	14.93	9.05	cloudy / tan
2	F(1302)	5.30	6.09	263.1	171.2	13.4	15.41	8.91	Slt Cloudy / tan
3	F(1314)	7.80	6.07	262.9	167.8	13.4	16.48	8.95	cloudy tan
4	F(1316)	8.10	6.07	262.9	167.4	13.4	16.71	8.96	Cloudy / tan
5	F(1318)	8.35	6.07	262.4	167.1	13.4	17.32	8.98	Cloudy / tan
6			.			.	.	.	

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

Standard Purge Method (11/9/25 psi) ~1L/min

SAMPLER: E. Taylor (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:** FB 105230

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)
1/5/23	:	.	.	.	.	.	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	1/5/23	13:25	F	3	40 ml	HCl	YES	NO		
VOA Glass	1/5/23	13:25	F	3	40 ml	$Na_2S_2O_3$	YES	NO		
Amber Glass	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
White Poly	1/5/23	13:25	F	2	(250), 500, (1L)	None	YES	NO	NA	
Yellow Glass	1/5/23	13:25	F	2	250, (500), 1L	H_2SO_4	YES	NO		
Red Total Poly	/ /	:			125, 250, 500	HNO_3	YES	NO		
Red Diss. Poly	1/5/23	13:25	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) (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		0.00	.			.	.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6			.			.	.	.	

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

Taken near MW-16A using lab-supplied DI water

SAMPLER: E. TAYLOR (PRINTED NAME) (SIGNATURE)

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-641889.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-171058-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 1/26/2023			
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, Y - Trizma, 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 (280-171058-2)	1/5/23	11:50 Pacific		Water			X	1	
DUP105231 (280-171058-3)	1/5/23	11:55 Pacific		Water			X	1	
MW-15A (280-171058-4)	1/5/23	13:20 Pacific		Water			X	1	
FB1052301 (280-171058-5)	1/5/23	13:25 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 compliance 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: 1-9-23 15:[illegible]	Company: ETNE	Received by: [signature] Date/Time: 1/10/23 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: 2.4# ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-171058-1

Login Number: 171058
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: 280-171058-1

Login Number: 171058
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 01/10/23 01:07 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	2.4 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

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Compliance Wells - Apr Oct

JOB NUMBER

280-171441-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

Job Notes

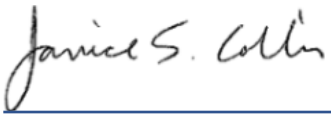
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-171441-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.
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: 280-171441-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-171441-1

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.

RECEIPT
The samples were received on 01/17/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.2 C.

DISSOLVED METALS
Samples FB0113231 (280-171441-1), MW-12A (280-171441-2) and DUP0113231 (280-171441-3) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 01/23/2023 and analyzed on 01/23/2023 and 01/26/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples FB0113231 (280-171441-1), MW-12A (280-171441-2) and DUP0113231 (280-171441-3) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 01/19/2023.

Total Dissolved Solids exceeded the RPD limit for the duplicate of sample 280-171270-6.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples FB0113231 (280-171441-1), MW-12A (280-171441-2) and DUP0113231 (280-171441-3) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 02/01/2023 and 02/06/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FIELD SAMPLING
Samples MW-12A (280-171441-2) and DUP0113231 (280-171441-3) were analyzed for Field Sampling in accordance with NA. The samples were analyzed on 01/13/2023.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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

Job ID: 280-171441-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171441-1

Client Sample ID: FB0113231 — Lab Sample ID: 280-171441-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	1300		1000		ug/L	1		6010B	Dissolved

Client Sample ID: MW-12A — Lab Sample ID: 280-171441-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	11000		200		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	50		0.50		mg/L	1		300.0	Total/NA
Total Dissolved Solids	220		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.17				SU	1		Field Sampling	Total/NA
Field Conductivity	374.4				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	4.25				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	182.8				millivolts	1		Field Sampling	Total/NA

Client Sample ID: DUP0113231 — Lab Sample ID: 280-171441-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	10000		200		ug/L	1		6010B	Dissolved
Sodium	29000		1000		ug/L	1		6010B	Dissolved
Chloride	52		0.50		mg/L	1		300.0	Total/NA
Total Dissolved Solids	220		10		mg/L	1		SM 2540C	Total/NA
Field pH	6.17				SU	1		Field Sampling	Total/NA
Field Conductivity	374.4				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.1				Degrees C	1		Field Sampling	Total/NA
Field Dissolved Oxygen	4.25				mg/L	1		Field Sampling	Total/NA
Field EH/ORP	182.8				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: 280-171441-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-171441-1	FB0113231	Water	01/13/23 12:50	01/17/23 09:15
280-171441-2	MW-12A	Water	01/13/23 13:45	01/17/23 09:15
280-171441-3	DUP0113231	Water	01/13/23 13:50	01/17/23 09:15

Method Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-171441-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	EPA	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
Field Sampling	Field Sampling	EPA	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

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:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: FB0113231

Lab Sample ID: 280-171441-1

Date Collected: 01/13/23 12:50

Matrix: Water

Date Received: 01/17/23 09:15

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		200		ug/L		01/23/23 08:50	01/23/23 18:24	1
Sodium	**1300**		1000		ug/L		01/23/23 08:50	01/26/23 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		0.50		mg/L			02/01/23 17:57	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			01/19/23 14:30	1

Client Sample ID: MW-12A

Lab Sample ID: 280-171441-2

Date Collected: 01/13/23 13:45

Matrix: Water

Date Received: 01/17/23 09:15

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**11000**		200		ug/L		01/23/23 08:50	01/26/23 19:09	1
Sodium	**29000**		1000		ug/L		01/23/23 08:50	01/26/23 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**50**		0.50		mg/L			02/06/23 18:03	1
Total Dissolved Solids (SM 2540C)	**220**		10		mg/L			01/19/23 14:30	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.17**				SU			01/13/23 14:45	1
Field Conductivity	**374.4**				umhos/cm			01/13/23 14:45	1
Field Temperature	**11.1**				Degrees C			01/13/23 14:45	1
Field Dissolved Oxygen	**4.25**				mg/L			01/13/23 14:45	1
Field EH/ORP	**182.8**				millivolts			01/13/23 14:45	1

Client Sample ID: DUP0113231

Lab Sample ID: 280-171441-3

Date Collected: 01/13/23 13:50

Matrix: Water

Date Received: 01/17/23 09:15

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**10000**		200		ug/L		01/23/23 08:50	01/23/23 18:32	1
Sodium	**29000**		1000		ug/L		01/23/23 08:50	01/26/23 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	**52**		0.50		mg/L			02/01/23 19:22	1
Total Dissolved Solids (SM 2540C)	**220**		10		mg/L			01/19/23 14:30	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**6.17**				SU			01/13/23 14:50	1
Field Conductivity	**374.4**				umhos/cm			01/13/23 14:50	1
Field Temperature	**11.1**				Degrees C			01/13/23 14:50	1
Field Dissolved Oxygen	**4.25**				mg/L			01/13/23 14:50	1
Field EH/ORP	**182.8**				millivolts			01/13/23 14:50	1

Method: 6010B - Metals (ICP)

Lab Sample ID: 160-48458-A-3-H MS
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25000		50000	76900		ug/L		103	62 - 146

Lab Sample ID: 160-48458-A-3-H MS
Matrix: Water
Analysis Batch: 600367

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	6300		50000	56700		ug/L		101	70 - 203

Lab Sample ID: 160-48458-A-3-I MSD
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	25000		50000	75800		ug/L		101	62 - 146	2	20

Lab Sample ID: 160-48458-A-3-I MSD
Matrix: Water
Analysis Batch: 600367

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 600011

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	6300		50000	55500		ug/L		98	70 - 203	2	20

Lab Sample ID: MB 280-600011/1-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		200		ug/L		01/23/23 08:50	01/23/23 16:32	1

Lab Sample ID: MB 280-600011/1-A
Matrix: Water
Analysis Batch: 600367

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		1000		ug/L		01/23/23 08:50	01/24/23 20:27	1

Lab Sample ID: LCS 280-600011/2-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	50000	50600		ug/L		101	90 - 113

Lab Sample ID: LCS 280-600011/2-A
Matrix: Water
Analysis Batch: 600367

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	50000	49400		ug/L		99	90 - 115

Method: 6010B - Metals (ICP)

Lab Sample ID: LCSD 280-600011/3-A
Matrix: Water
Analysis Batch: 600205

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	50000	51100		ug/L		102	90 - 113	1	20

Lab Sample ID: LCSD 280-600011/3-A
Matrix: Water
Analysis Batch: 600367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 600011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	50000	49800		ug/L		100	90 - 115	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-657590/4
Matrix: Water
Analysis Batch: 657590

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			02/01/23 16:32	1

Lab Sample ID: LCS 480-657590/5
Matrix: Water
Analysis Batch: 657590

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.1		mg/L		98	90 - 110

Lab Sample ID: 480-205701-N-1 MS
Matrix: Water
Analysis Batch: 657590

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	1.2		50.1	49.4		mg/L		96	81 - 120

Lab Sample ID: MB 480-657973/4
Matrix: Water
Analysis Batch: 657973

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			02/06/23 17:25	1

Lab Sample ID: LCS 480-657973/5
Matrix: Water
Analysis Batch: 657973

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	48.8		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-205798-J-2 MS
Matrix: Water
Analysis Batch: 657973

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	56		251	290		mg/L		94	81 - 120		

Lab Sample ID: 480-205798-J-2 MSD
Matrix: Water
Analysis Batch: 657973

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	56		251	290		mg/L		93	81 - 120	0	15

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-599908/1
Matrix: Water
Analysis Batch: 599908

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			01/19/23 14:30	1

Lab Sample ID: LCS 280-599908/2
Matrix: Water
Analysis Batch: 599908

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	482		mg/L		96	88 - 114		

Lab Sample ID: 280-171270-F-6 DU
Matrix: Water
Analysis Batch: 599908

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	34000	E		4970	E F3	mg/L				149	10

Metals

Prep Batch: 600011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-1	FB0113231	Dissolved	Water	3005A	
280-171441-2	MW-12A	Dissolved	Water	3005A	
280-171441-3	DUP0113231	Dissolved	Water	3005A	
MB 280-600011/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-600011/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 280-600011/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
160-48458-A-3-H MS	Matrix Spike	Total/NA	Water	3005A	
160-48458-A-3-I MSD	Matrix Spike Duplicate	Total/NA	Water	3005A	

Analysis Batch: 600205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-1	FB0113231	Dissolved	Water	6010B	600011
280-171441-3	DUP0113231	Dissolved	Water	6010B	600011
MB 280-600011/1-A	Method Blank	Total Recoverable	Water	6010B	600011
LCS 280-600011/2-A	Lab Control Sample	Total Recoverable	Water	6010B	600011
LCSD 280-600011/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	600011
160-48458-A-3-H MS	Matrix Spike	Total/NA	Water	6010B	600011
160-48458-A-3-I MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	600011

Analysis Batch: 600367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-600011/1-A	Method Blank	Total Recoverable	Water	6010B	600011
LCS 280-600011/2-A	Lab Control Sample	Total Recoverable	Water	6010B	600011
LCSD 280-600011/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	600011
160-48458-A-3-H MS	Matrix Spike	Total/NA	Water	6010B	600011
160-48458-A-3-I MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	600011

Analysis Batch: 600586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-1	FB0113231	Dissolved	Water	6010B	600011
280-171441-2	MW-12A	Dissolved	Water	6010B	600011
280-171441-3	DUP0113231	Dissolved	Water	6010B	600011

General Chemistry

Analysis Batch: 599908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-1	FB0113231	Total/NA	Water	SM 2540C	
280-171441-2	MW-12A	Total/NA	Water	SM 2540C	
280-171441-3	DUP0113231	Total/NA	Water	SM 2540C	
MB 280-599908/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-599908/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-171270-F-6 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 657590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-1	FB0113231	Total/NA	Water	300.0	
280-171441-3	DUP0113231	Total/NA	Water	300.0	
MB 480-657590/4	Method Blank	Total/NA	Water	300.0	
LCS 480-657590/5	Lab Control Sample	Total/NA	Water	300.0	
480-205701-N-1 MS	Matrix Spike	Total/NA	Water	300.0	

QC Association Summary

Client: Waste Management
Job ID: 280-171441-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

General Chemistry

Analysis Batch: 657973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-2	MW-12A	Total/NA	Water	300.0	
MB 480-657973/4	Method Blank	Total/NA	Water	300.0	
LCS 480-657973/5	Lab Control Sample	Total/NA	Water	300.0	
480-205798-J-2 MS	Matrix Spike	Total/NA	Water	300.0	
480-205798-J-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 599703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-171441-2	MW-12A	Total/NA	Water	Field Sampling	
280-171441-3	DUP0113231	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Waste Management
Job ID: 280-171441-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: FB0113231
Lab Sample ID: 280-171441-1
Date Collected: 01/13/23 12:50
Matrix: Water
Date Received: 01/17/23 09:15

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	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600586	01/26/23 18:49	KRP	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600205	01/23/23 18:24	KRP	EET DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	657590	02/01/23 17:57	IMZ	EET BUF
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599908	01/19/23 14:30	MCR	EET DEN

Client Sample ID: MW-12A
Lab Sample ID: 280-171441-2
Date Collected: 01/13/23 13:45
Matrix: Water
Date Received: 01/17/23 09:15

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	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600586	01/26/23 19:09	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	657973	02/06/23 18:03	IMZ	EET BUF
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599908	01/19/23 14:30	MCR	EET DEN
Total/NA	Analysis	Field Sampling		1			599703	01/13/23 14:45	TJ	EET DEN

Client Sample ID: DUP0113231
Lab Sample ID: 280-171441-3
Date Collected: 01/13/23 13:50
Matrix: Water
Date Received: 01/17/23 09:15

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	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600586	01/26/23 19:14	KRP	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	600011	01/23/23 08:50	MSM	EET DEN
Dissolved	Analysis	6010B		1			600205	01/23/23 18:32	KRP	EET DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	657590	02/01/23 19:22	IMZ	EET BUF
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	599908	01/19/23 14:30	MCR	EET DEN
Total/NA	Analysis	Field Sampling		1			599703	01/13/23 14:50	TJ	EET DEN

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: B. Rupuzo	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: (503) 718-4568	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page:
Company: Waste Management	PWSID:	Analysis Requested		Job #:
Address: 13469 SW Highway 18	Due Date 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, Y - Trizma, Z - other (specify)
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			Other:
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Compliance Wells - Apr Oct			
Site: Oregon	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B - VOCs	8011 - EDB/DBCP	Cation/Anion Balance	300.0 - Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	S	A	R	N		
FB0113231	1/13/23	1250	G	W	Y		1	X				X	2	
MW-12A	1/13/23	1345	G	W	Y		1	X				X	2	
DUP0113231	1/13/23	1350	G	W	Y		1	X				X	2	
														1L unpreserved poly provided for TDS/chloride
														Dissolved metals analyzed for Mg, Na

TDS-2540 (See Instructions)

280-171441 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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		1/16/2023 1630	SCS		1/17/23 0915	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: 1.2 IR12 CF0.0

Ver: 01/16/2019

2/15/2023

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) 54 .	°C

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Circle appropriate units] X5 - Water Column x Gal/ft

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
1/13/23	11:30	27.60	.	5.70	.	21.90	X 1	3.56
/ /	:	.	.	.	.		X 3	10.70

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	/ /	:		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	1/13/23	13:45	F	1	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	1/13/23	13:45	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 — 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(1141)	0.00	5.37	140.0	465.7	10.7	6.10	6.16	clear/colorless
1	F(1204)	3.56	6.09	146.0	387.0	10.9	6.42	5.54	c/c
2	F(1226)	7.10	6.13	157.5	383.1	11.0	6.50	4.99	c/c
3	F(1247)	10.70	6.15	167.5	374.3	11.0	6.50	4.96	c/c
4	F(1310)	14.30	6.16	173.6	377.4	11.0	6.52	4.97	c/c
5	F(1350)	17.80	6.18	181.0	379.8	11.1	6.52	4.96	c/c
6	F(1532)	18.00	6.17	182.8	~~394.4~~ 374.4	11.1	6.52	4.95	c/c

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

20/10/20 psi ~ 500 mV/mi

SAMPLER: B. Rapoza (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:** DUP0113231
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)
/ /	:	.	.	.	.	.	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	/ /	:			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	1/13/23	13:50	F	1	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	1/13/23	13:50	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 — 2 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(1350)	0.00	.				.	.	
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected @ MW-12A

SAMPLER: B. Rogers (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:** FB0113231

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:**	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)
/ /	:	.	.	.	.	.	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 = BR

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	/ /	:			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	1/13/23	12 : 50	6	1	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	1/13/23	12 : 50	6	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 — 7 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	6 (1250)	0.00							
1		.	.			.	.	.	
2		.	.			.	.	.	
3		.	.			.	.	.	
4		.	.			.	.	.	
5		.	.			.	.	.	
6		.	.			.	.	.	

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

Collected near MW-12A

SAMPLER: B. Rapp 20 (PRINTED NAME) (SIGNATURE)

280-171441 Waybill

ORIGIN ID:BNOA

SHIP DATE: 16JAN23
ACTWGT: 41.25 LB
CAD: /SSFE2341
DIMS: 21x14x14 IN

TO SAMPLE RECEIVING
EUROFINS DENVER
4955 YARROW ST

urofins
Environment Testing
TestAmerica

ARVADA CO 80002
(303) 736-0100

1583531

(US)

INV:
PO:

REF:

DEPT:

Part # 156299-[illegible] REV [illegible] EXP 11/23

FedEx
Express

TRK# 0667 8172 4920 5755

TUE - 17 JAN 10:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-642763.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-171441-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 2/6/2023			
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, 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, Y - Trizma, 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/ (MOD) 300.0, Sulfate and Chloride (TA Bu	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB0113231 (280-171441-1)	1/13/23	12:50 Pacific		Water			X	1	
MW-12A (280-171441-2)	1/13/23	13:45 Pacific		Water			X	1	
DUP0113231 (280-171441-3)	1/13/23	13:50 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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 compliance 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: 1-19-23 16:35	Company ETAREN	Received by: Date/Time: 1-20-23 1060 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: 2.2 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-171441-1

Login Number: 171441
List Number: 1
Creator: Held, Wesley

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	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: 280-171441-1

Login Number: 171441
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 01/20/23 10:29 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	2.2 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	

Fall 2022

Detection Groundwater

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 1/9/2023 11:04:59 AM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Detection Wells - Apr Oct

JOB NUMBER

280-169302-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

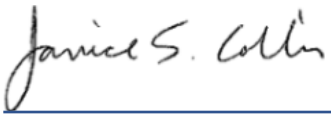
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

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
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

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: 280-169302-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-169302-1

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.

RECEIPT

The samples were received on 11/17/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt were 0.4°C, 0.8°C and 1.7°C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TRIP BLANK (280-169302-1), MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/29/2022.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 280-594854 were outside control limits for 1,1,2,2-Tetrachloroethane. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

1,2-DIBROMOETHANE, 1,2-DIBROMO-3-CHLOROPROPANE, AND 1,2,3-TRICHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TRIP BLANK (280-169302-1), MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared and analyzed on 11/18/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS

Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 12/01/2022 and analyzed on 12/02/2022.

Iron was detected in method blank MB 280-594876/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/21/2022.

Job ID: 280-169302-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 11/21/2022 and 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 12/02/2022 and 12/03/2022.

Chloride failed the recovery criteria low for the MS/MSD of sample 480-204056-2 in batch 480-651985.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/07/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 12/01/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL ORGANIC CARBON
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/05/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for Cation Anion Balance in accordance with epa methodologies. The samples were analyzed on 12/09/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-20A (280-169302-2) and FB11162201 (280-169302-3) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 12/09/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 280-169302-1

No Detections.

Client Sample ID: MW-20A — Lab Sample ID: 280-169302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	91000		500		ug/L	1		6010B	Dissolved
Iron	2100	B	30		ug/L	1		6010B	Dissolved
Magnesium	34000		200		ug/L	1		6010B	Dissolved
Manganese	2400		3.0		ug/L	1		6010B	Dissolved
Sodium	30000		1000		ug/L	1		6010B	Dissolved
Chloride	170		0.50		mg/L	1		300.0	Total/NA
Sulfate	4.9		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	1.5		1.0		mg/L	1		9060	Total/NA
Total Anions	8.9				meq/L	1		SM 1030E	Total/NA
Total Cations	8.8				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.70				%	1		SM 1030E	Total/NA
Calcium	91				mg/L	1		SM 1030E	Total/NA
Magnesium	34				mg/L	1		SM 1030E	Total/NA
Potassium	0.00				mg/L	1		SM 1030E	Total/NA
Sodium	30				mg/L	1		SM 1030E	Total/NA
Ammonia as N	0.19				mg/L	1		SM 1030E	Total/NA
Chloride	170				mg/L	1		SM 1030E	Total/NA
Sulfate	4.9				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	200				mg/L	1		SM 1030E	Total/NA
Alkalinity	200				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	450				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.2				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	520				mg/L	1		SM 1030E	Total/NA
Iron	2.1				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	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	1.3				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia as N	0.014				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	4.8				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	0.10				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	200				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	4.0				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.11				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	200		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	520		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB11162201 — Lab Sample ID: 280-169302-3

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 Denver

Detection Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

Client Sample ID: FB11162201 (Continued)

Lab Sample ID: 280-169302-3

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: 280-169302-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-169302-1	TRIP BLANK	Water	11/16/22 07:00	11/17/22 10:30
280-169302-2	MW-20A	Water	11/16/22 10:40	11/17/22 10:30
280-169302-3	FB11162201	Water	11/16/22 10:50	11/17/22 10:30

Method Summary

Client: Waste Management
Job ID: 280-169302-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	MCAWW	EET BUF
350.1	Nitrogen, Ammonia	MCAWW	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client Sample ID: TRIP BLANK
Date Collected: 11/16/22 07:00
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-1
Matrix: Water

Method: SW846 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			11/29/22 11:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/22 11:01	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/22 11:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/22 11:01	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/22 11:01	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/22 11:01	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/22 11:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/22 11:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/22 11:01	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/22 11:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/22 11:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/22 11:01	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/22 11:01	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/22 11:01	1
2-Hexanone	ND		5.0		ug/L			11/29/22 11:01	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/22 11:01	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/22 11:01	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/22 11:01	1
Acetone	ND		10		ug/L			11/29/22 11:01	1
Benzene	ND		1.0		ug/L			11/29/22 11:01	1
Bromobenzene	ND		1.0		ug/L			11/29/22 11:01	1
Bromochloromethane	ND		1.0		ug/L			11/29/22 11:01	1
Bromodichloromethane	ND		1.0		ug/L			11/29/22 11:01	1
Bromoform	ND		1.2		ug/L			11/29/22 11:01	1
Bromomethane	ND		2.4		ug/L			11/29/22 11:01	1
Carbon disulfide	ND		2.0		ug/L			11/29/22 11:01	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/22 11:01	1
Chlorobenzene	ND		1.0		ug/L			11/29/22 11:01	1
Chloroethane	ND		2.0		ug/L			11/29/22 11:01	1
Chloroform	ND		1.0		ug/L			11/29/22 11:01	1
Chloromethane	ND		2.0		ug/L			11/29/22 11:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 11:01	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/22 11:01	1
Dibromochloromethane	ND		1.0		ug/L			11/29/22 11:01	1
Dibromomethane	ND		1.0		ug/L			11/29/22 11:01	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/22 11:01	1
Ethylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
Hexachlorobutadiene	ND		1.2		ug/L			11/29/22 11:01	1
Isopropylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
Methylene Chloride	ND		5.0		ug/L			11/29/22 11:01	1
Naphthalene	ND		1.0		ug/L			11/29/22 11:01	1
n-Butylbenzene	ND		1.0		ug/L			11/29/22 11:01	1

Client Sample ID: TRIP BLANK

Date Collected: 11/16/22 07:00
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-1
Matrix: Water

Method: SW846 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			11/29/22 11:01	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
Styrene	ND		1.0		ug/L			11/29/22 11:01	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/22 11:01	1
Tetrachloroethene	ND		1.0		ug/L			11/29/22 11:01	1
Toluene	ND		1.0		ug/L			11/29/22 11:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 11:01	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/22 11:01	1
Trichloroethene	ND		1.0		ug/L			11/29/22 11:01	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/22 11:01	1
Vinyl chloride	ND		1.0		ug/L			11/29/22 11:01	1
Xylenes (total)	ND		2.0		ug/L			11/29/22 11:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*25*	*T J*	*ug/L*		*1.59*			*11/29/22 11:01*	*1*
Unknown	*7.0*	*T J*	*ug/L*		*2.26*			*11/29/22 11:01*	*1*
Unknown	*7.6*	*T J*	*ug/L*		*2.40*			*11/29/22 11:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 127*		*11/29/22 11:01*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*11/29/22 11:01*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*11/29/22 11:01*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/29/22 11:01*	*1*

Method: SW846 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		11/18/22 11:37	11/18/22 22:25	1
1,2-Dibromoethane	ND		0.050		ug/L		11/18/22 11:37	11/18/22 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*115*		*70 - 130*	*11/18/22 11:37*	*11/18/22 22:25*	*1*

Client Sample ID: MW-20A

Date Collected: 11/16/22 10:40
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-2
Matrix: Water

Method: SW846 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			11/29/22 12:07	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/22 12:07	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/22 12:07	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/22 12:07	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/22 12:07	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/22 12:07	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/22 12:07	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/22 12:07	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/22 12:07	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

Client Sample ID: MW-20A
Date Collected: 11/16/22 10:40
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-2
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0		ug/L			11/29/22 12:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/22 12:07	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/22 12:07	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/22 12:07	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/22 12:07	1
2-Hexanone	ND		5.0		ug/L			11/29/22 12:07	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/22 12:07	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/22 12:07	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/22 12:07	1
Acetone	ND		10		ug/L			11/29/22 12:07	1
Benzene	ND		1.0		ug/L			11/29/22 12:07	1
Bromobenzene	ND		1.0		ug/L			11/29/22 12:07	1
Bromochloromethane	ND		1.0		ug/L			11/29/22 12:07	1
Bromodichloromethane	ND		1.0		ug/L			11/29/22 12:07	1
Bromoform	ND		1.2		ug/L			11/29/22 12:07	1
Bromomethane	ND		2.4		ug/L			11/29/22 12:07	1
Carbon disulfide	ND		2.0		ug/L			11/29/22 12:07	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/22 12:07	1
Chlorobenzene	ND		1.0		ug/L			11/29/22 12:07	1
Chloroethane	ND		2.0		ug/L			11/29/22 12:07	1
Chloroform	ND		1.0		ug/L			11/29/22 12:07	1
Chloromethane	ND		2.0		ug/L			11/29/22 12:07	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 12:07	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/22 12:07	1
Dibromochloromethane	ND		1.0		ug/L			11/29/22 12:07	1
Dibromomethane	ND		1.0		ug/L			11/29/22 12:07	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/22 12:07	1
Ethylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
Hexachlorobutadiene	ND		1.2		ug/L			11/29/22 12:07	1
Isopropylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
Methylene Chloride	ND		5.0		ug/L			11/29/22 12:07	1
Naphthalene	ND		1.0		ug/L			11/29/22 12:07	1
n-Butylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
N-Propylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
Styrene	ND		1.0		ug/L			11/29/22 12:07	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/22 12:07	1
Tetrachloroethene	ND		1.0		ug/L			11/29/22 12:07	1
Toluene	ND		1.0		ug/L			11/29/22 12:07	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 12:07	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/22 12:07	1
Trichloroethene	ND		1.0		ug/L			11/29/22 12:07	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/22 12:07	1
Vinyl chloride	ND		1.0		ug/L			11/29/22 12:07	1
Xylenes (total)	ND		2.0		ug/L			11/29/22 12:07	1

Client Sample ID: MW-20A

Date Collected: 11/16/22 10:40
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-2

Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	38	T J	ug/L		1.59			11/29/22 12:07	1
Unknown	7.3	T J	ug/L		2.29			11/29/22 12:07	1
Unknown	8.2	T J	ug/L		2.40			11/29/22 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 127		11/29/22 12:07	1
4-Bromofluorobenzene (Surr)	101		78 - 120		11/29/22 12:07	1
Dibromofluoromethane (Surr)	99		77 - 120		11/29/22 12:07	1
Toluene-d8 (Surr)	99		80 - 125		11/29/22 12:07	1

Method: SW846 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		11/18/22 11:37	11/18/22 22:49	1
1,2-Dibromoethane	ND		0.050		ug/L		11/18/22 11:37	11/18/22 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane	119		70 - 130	11/18/22 11:37	11/18/22 22:49	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000		500		ug/L		12/01/22 09:30	12/02/22 03:37	1
Iron	2100	B	30		ug/L		12/01/22 09:30	12/02/22 03:37	1
Magnesium	34000		200		ug/L		12/01/22 09:30	12/02/22 03:37	1
Manganese	2400		3.0		ug/L		12/01/22 09:30	12/02/22 03:37	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 03:37	1
Sodium	30000		1000		ug/L		12/01/22 09:30	12/02/22 03:37	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	8.9				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	8.8				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	-0.70				%			12/09/22 13:24	1
Calcium (SM 1030E)	91				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	34				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	30				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	0.19				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	170				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	4.9				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	200				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	200				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	-0.70				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	450				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	1.2				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	520				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	2.1				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	4.5				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	2.8				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	1.3				meq/L			12/09/22 13:24	1

Client Sample ID: MW-20A

Date Collected: 11/16/22 10:40
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (SM 1030E (meq))	0.014				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	4.8				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	0.10				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	200				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	4.0				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	0.11				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	170		0.50		mg/L			12/02/22 23:33	1
Sulfate (MCAWW 300.0)	4.9		1.0		mg/L			12/02/22 23:33	1
Ammonia as N (MCAWW 350.1)	0.19		0.030		mg/L			12/07/22 12:04	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			12/01/22 14:59	1
Total Organic Carbon - Average (SW846 9060)	1.5		1.0		mg/L			12/05/22 20:09	1
Bicarbonate Alkalinity (SM 2320B)	200		10		mg/L			11/21/22 21:33	1
Total Dissolved Solids (SM 2540C)	520		10		mg/L			11/21/22 12:27	1

Client Sample ID: FB11162201

Date Collected: 11/16/22 10:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-3

Matrix: Water

Method: SW846 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			11/29/22 11:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/22 11:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/22 11:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/22 11:23	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/22 11:23	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/22 11:23	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/22 11:23	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/22 11:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/22 11:23	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/22 11:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/22 11:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/22 11:23	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/22 11:23	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/22 11:23	1
2-Hexanone	ND		5.0		ug/L			11/29/22 11:23	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/22 11:23	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/22 11:23	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/22 11:23	1
Acetone	ND		10		ug/L			11/29/22 11:23	1

Client Sample ID: FB11162201
Date Collected: 11/16/22 10:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			11/29/22 11:23	1
Bromobenzene	ND		1.0		ug/L			11/29/22 11:23	1
Bromochloromethane	ND		1.0		ug/L			11/29/22 11:23	1
Bromodichloromethane	ND		1.0		ug/L			11/29/22 11:23	1
Bromoform	ND		1.2		ug/L			11/29/22 11:23	1
Bromomethane	ND		2.4		ug/L			11/29/22 11:23	1
Carbon disulfide	ND		2.0		ug/L			11/29/22 11:23	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/22 11:23	1
Chlorobenzene	ND		1.0		ug/L			11/29/22 11:23	1
Chloroethane	ND		2.0		ug/L			11/29/22 11:23	1
Chloroform	ND		1.0		ug/L			11/29/22 11:23	1
Chloromethane	ND		2.0		ug/L			11/29/22 11:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 11:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/22 11:23	1
Dibromochloromethane	ND		1.0		ug/L			11/29/22 11:23	1
Dibromomethane	ND		1.0		ug/L			11/29/22 11:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/22 11:23	1
Ethylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
Hexachlorobutadiene	ND		1.2		ug/L			11/29/22 11:23	1
Isopropylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
Methylene Chloride	ND		5.0		ug/L			11/29/22 11:23	1
Naphthalene	ND		1.0		ug/L			11/29/22 11:23	1
n-Butylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
N-Propylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
Styrene	ND		1.0		ug/L			11/29/22 11:23	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/22 11:23	1
Tetrachloroethene	ND		1.0		ug/L			11/29/22 11:23	1
Toluene	ND		1.0		ug/L			11/29/22 11:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 11:23	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/22 11:23	1
Trichloroethene	ND		1.0		ug/L			11/29/22 11:23	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/22 11:23	1
Vinyl chloride	ND		1.0		ug/L			11/29/22 11:23	1
Xylenes (total)	ND		2.0		ug/L			11/29/22 11:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*24*	*T J*	*ug/L*		*1.59*			*11/29/22 11:23*	*1*
Unknown	*5.9*	*T J*	*ug/L*		*2.26*			*11/29/22 11:23*	*1*
Unknown	*7.8*	*T J*	*ug/L*		*2.40*			*11/29/22 11:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 127*		*11/29/22 11:23*	*1*
4-Bromofluorobenzene (Surr)	*102*		*78 - 120*		*11/29/22 11:23*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 120*		*11/29/22 11:23*	*1*
Toluene-d8 (Surr)	*96*		*80 - 125*		*11/29/22 11:23*	*1*

Method: SW846 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		11/18/22 11:37	11/18/22 23:13	1

Client Sample ID: FB11162201

Date Collected: 11/16/22 10:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-3

Matrix: Water

Method: SW846 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		11/18/22 11:37	11/18/22 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*117*		*70 - 130*	*11/18/22 11:37*	*11/18/22 23:13*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		12/01/22 09:30	12/02/22 03:57	1
Iron	ND		30		ug/L		12/01/22 09:30	12/02/22 03:57	1
Magnesium	ND		200		ug/L		12/01/22 09:30	12/02/22 03:57	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 03:57	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 03:57	1
Sodium	ND		1000		ug/L		12/01/22 09:30	12/02/22 03:57	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**0.00**				meq/L			12/09/22 13:24	1
Total Cations (SM 1030E)	**0.00**				meq/L			12/09/22 13:24	1
Percent Difference (SM 1030E)	**NC**				%			12/09/22 13:24	1
Calcium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Magnesium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Potassium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sodium (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Ammonia as N (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Chloride (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Sulfate (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Alkalinity (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Anion/Cation Balance (SM 1030E)	**NC**				%			12/09/22 13:24	1
Calculated TDS (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
TDS Ratio (SM 1030E)	**NC**				NONE			12/09/22 13:24	1
Total Dissolved Solids (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Iron (SM 1030E)	**0.00**				mg/L			12/09/22 13:24	1
Calcium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Magnesium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Potassium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sodium (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Ammonia as N (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Chloride (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Sulfate (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Alkalinity (SM 1030E (meq))	**0.00**				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Nitrate/Nitrite (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1
Iron (SM 1030E (meq))	**0.00**				meq/L			12/09/22 13:24	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	ND		0.50		mg/L			12/03/22 01:30	1
Sulfate (MCAWW 300.0)	ND		1.0		mg/L			12/03/22 01:30	1
Ammonia as N (MCAWW 350.1)	ND		0.030		mg/L			12/07/22 12:07	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

Client Sample ID: FB11162201
Date Collected: 11/16/22 10:50
Date Received: 11/17/22 10:30

Lab Sample ID: 280-169302-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			12/01/22 15:01	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			12/05/22 20:23	1
Bicarbonate Alkalinity (SM 2320B)	ND		10		mg/L			11/21/22 21:39	1
Total Dissolved Solids (SM 2540C)	ND		10		mg/L			11/22/22 11:19	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

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)
280-169302-1	TRIP BLANK	108	101	96	99
280-169302-2	MW-20A	111	101	99	99
280-169302-3	FB11162201	110	102	96	96
LCS 280-594854/1002	Lab Control Sample	105	100	96	98
LCSD 280-594854/4	Lab Control Sample Dup	104	101	90	96
MB 280-594854/7	Method Blank	110	97	98	101

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)
280-169302-1	TRIP BLANK	115
280-169302-2	MW-20A	119
280-169302-3	FB11162201	117
LCS 280-594044/2-A	Lab Control Sample	121
LCSD 280-594044/3-A	Lab Control Sample Dup	121
MB 280-594044/1-A	Method Blank	123

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-594854/7
Matrix: Water
Analysis Batch: 594854

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			11/29/22 10:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/29/22 10:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/29/22 10:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/29/22 10:36	1
1,1-Dichloroethane	ND		1.0		ug/L			11/29/22 10:36	1
1,1-Dichloroethene	ND		1.0		ug/L			11/29/22 10:36	1
1,1-Dichloropropene	ND		1.0		ug/L			11/29/22 10:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/29/22 10:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,2-Dichloroethane	ND		1.0		ug/L			11/29/22 10:36	1
1,2-Dichloropropane	ND		1.0		ug/L			11/29/22 10:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
1,3-Dichloropropane	ND		1.0		ug/L			11/29/22 10:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
2,2-Dichloropropane	ND		5.0		ug/L			11/29/22 10:36	1
2-Butanone (MEK)	ND		6.0		ug/L			11/29/22 10:36	1
2-Chlorotoluene	ND		1.0		ug/L			11/29/22 10:36	1
2-Hexanone	ND		5.0		ug/L			11/29/22 10:36	1
4-Chlorotoluene	ND		1.0		ug/L			11/29/22 10:36	1
4-Isopropyltoluene	ND		1.0		ug/L			11/29/22 10:36	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/29/22 10:36	1
Acetone	ND		10		ug/L			11/29/22 10:36	1
Benzene	ND		1.0		ug/L			11/29/22 10:36	1
Bromobenzene	ND		1.0		ug/L			11/29/22 10:36	1
Bromochloromethane	ND		1.0		ug/L			11/29/22 10:36	1
Bromodichloromethane	ND		1.0		ug/L			11/29/22 10:36	1
Bromoform	ND		1.2		ug/L			11/29/22 10:36	1
Bromomethane	ND		2.4		ug/L			11/29/22 10:36	1
Carbon disulfide	ND		2.0		ug/L			11/29/22 10:36	1
Carbon tetrachloride	ND		1.0		ug/L			11/29/22 10:36	1
Chlorobenzene	ND		1.0		ug/L			11/29/22 10:36	1
Chloroethane	ND		2.0		ug/L			11/29/22 10:36	1
Chloroform	ND		1.0		ug/L			11/29/22 10:36	1
Chloromethane	ND		2.0		ug/L			11/29/22 10:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 10:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/29/22 10:36	1
Dibromochloromethane	ND		1.0		ug/L			11/29/22 10:36	1
Dibromomethane	ND		1.0		ug/L			11/29/22 10:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/29/22 10:36	1
Ethylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
Hexachlorobutadiene	ND		1.2		ug/L			11/29/22 10:36	1
Isopropylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
Methylene Chloride	ND		5.0		ug/L			11/29/22 10:36	1
Naphthalene	ND		1.0		ug/L			11/29/22 10:36	1

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

Lab Sample ID: MB 280-594854/7
Matrix: Water
Analysis Batch: 594854

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			11/29/22 10:36	1
N-Propylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
sec-Butylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
Styrene	ND		1.0		ug/L			11/29/22 10:36	1
tert-Butylbenzene	ND		1.0		ug/L			11/29/22 10:36	1
Tetrachloroethene	ND		1.0		ug/L			11/29/22 10:36	1
Toluene	ND		1.0		ug/L			11/29/22 10:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/29/22 10:36	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/29/22 10:36	1
Trichloroethene	ND		1.0		ug/L			11/29/22 10:36	1
Trichlorofluoromethane	ND		2.0		ug/L			11/29/22 10:36	1
Vinyl chloride	ND		1.0		ug/L			11/29/22 10:36	1
Xylenes (total)	ND		2.0		ug/L			11/29/22 10:36	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/29/22 10:36*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 127*		*11/29/22 10:36*	*1*
4-Bromofluorobenzene (Surr)	*97*		*78 - 120*		*11/29/22 10:36*	*1*
Dibromofluoromethane (Surr)	*98*		*77 - 120*		*11/29/22 10:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 125*		*11/29/22 10:36*	*1*

Lab Sample ID: LCS 280-594854/1002
Matrix: Water
Analysis Batch: 594854

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	52.5		ug/L		105	74 - 121
1,1,1-Trichloroethane	50.0	47.4		ug/L		95	62 - 132
1,1,2,2-Tetrachloroethane	50.0	58.3		ug/L		117	72 - 122
1,1,2-Trichloroethane	50.0	52.0		ug/L		104	72 - 128
1,1-Dichloroethane	50.0	52.3		ug/L		105	66 - 130
1,1-Dichloroethene	50.0	43.4		ug/L		87	62 - 130
1,1-Dichloropropene	50.0	46.5		ug/L		93	64 - 133
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	70 - 127
1,2,3-Trichloropropane	50.0	55.7		ug/L		111	74 - 123
1,2,4-Trichlorobenzene	50.0	43.4		ug/L		87	73 - 124
1,2,4-Trimethylbenzene	50.0	48.7		ug/L		97	74 - 124
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	77 - 121
1,2-Dichloroethane	50.0	56.4		ug/L		113	61 - 130
1,2-Dichloropropane	50.0	50.1		ug/L		100	68 - 127
1,3,5-Trimethylbenzene	50.0	47.9		ug/L		96	73 - 127
1,3-Dichlorobenzene	50.0	49.5		ug/L		99	76 - 121
1,3-Dichloropropane	50.0	52.6		ug/L		105	80 - 118
1,4-Dichlorobenzene	50.0	49.5		ug/L		99	76 - 119
2,2-Dichloropropane	50.0	49.4		ug/L		99	57 - 140
2-Butanone (MEK)	200	241		ug/L		120	53 - 135

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

Lab Sample ID: LCS 280-594854/1002
Matrix: Water
Analysis Batch: 594854

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	50.0	45.4		ug/L		91	75 - 123
2-Hexanone	200	241		ug/L		121	58 - 134
4-Chlorotoluene	50.0	47.8		ug/L		96	74 - 124
4-Isopropyltoluene	50.0	45.3		ug/L		91	74 - 127
4-Methyl-2-pentanone	200	238		ug/L		119	56 - 135
Acetone	200	251		ug/L		126	50 - 137
Benzene	50.0	47.7		ug/L		95	69 - 126
Bromobenzene	50.0	48.0		ug/L		96	75 - 122
Bromochloromethane	50.0	51.7		ug/L		103	71 - 130
Bromodichloromethane	50.0	49.5		ug/L		99	67 - 126
Bromoform	50.0	54.8		ug/L		110	57 - 125
Bromomethane	50.0	57.3		ug/L		115	25 - 163
Carbon disulfide	50.0	46.3		ug/L		93	56 - 128
Carbon tetrachloride	50.0	47.4		ug/L		95	60 - 133
Chlorobenzene	50.0	46.5		ug/L		93	78 - 118
Chloroethane	50.0	57.5		ug/L		115	52 - 144
Chloroform	50.0	48.1		ug/L		96	68 - 128
Chloromethane	50.0	44.0		ug/L		88	43 - 142
cis-1,2-Dichloroethene	50.0	45.8		ug/L		92	69 - 126
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	75 - 120
Dibromochloromethane	50.0	55.8		ug/L		112	71 - 122
Dibromomethane	50.0	51.0		ug/L		102	68 - 129
Dichlorodifluoromethane	50.0	47.8		ug/L		96	26 - 152
Ethylbenzene	50.0	44.9		ug/L		90	76 - 121
Hexachlorobutadiene	50.0	40.7		ug/L		81	69 - 133
Isopropylbenzene	50.0	47.0		ug/L		94	70 - 127
Methylene Chloride	50.0	52.9		ug/L		106	64 - 128
Naphthalene	50.0	46.5		ug/L		93	63 - 129
n-Butylbenzene	50.0	46.4		ug/L		93	69 - 130
N-Propylbenzene	50.0	46.5		ug/L		93	73 - 127
sec-Butylbenzene	50.0	44.3		ug/L		89	72 - 127
Styrene	50.0	46.7		ug/L		93	79 - 120
tert-Butylbenzene	50.0	47.1		ug/L		94	72 - 126
Tetrachloroethene	50.0	44.1		ug/L		88	72 - 127
Toluene	50.0	44.2		ug/L		88	68 - 127
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	66 - 129
trans-1,3-Dichloropropene	50.0	55.1		ug/L		110	66 - 127
Trichloroethene	50.0	47.1		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	55.3		ug/L		111	57 - 144
Vinyl chloride	50.0	50.1		ug/L		100	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 127*
4-Bromofluorobenzene (Surr)	*100*		*78 - 120*
Dibromofluoromethane (Surr)	*96*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

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

Lab Sample ID: LCSD 280-594854/4
Matrix: Water
Analysis Batch: 594854

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	56.1		ug/L		112	74 - 121	7	20
1,1,1-Trichloroethane			50.0	47.8		ug/L		96	62 - 132	1	20
1,1,2,2-Tetrachloroethane			50.0	60.7		ug/L		121	72 - 122	4	20
1,1,2-Trichloroethane			50.0	53.9		ug/L		108	72 - 128	4	20
1,1-Dichloroethane			50.0	51.0		ug/L		102	66 - 130	3	20
1,1-Dichloroethene			50.0	44.1		ug/L		88	62 - 130	2	21
1,1-Dichloropropene			50.0	48.3		ug/L		97	64 - 133	4	20
1,2,3-Trichlorobenzene			50.0	49.8		ug/L		100	70 - 127	11	20
1,2,3-Trichloropropane			50.0	58.4		ug/L		117	74 - 123	5	20
1,2,4-Trichlorobenzene			50.0	47.2		ug/L		94	73 - 124	8	20
1,2,4-Trimethylbenzene			50.0	51.3		ug/L		103	74 - 124	5	20
1,2-Dichlorobenzene			50.0	49.6		ug/L		99	77 - 121	3	20
1,2-Dichloroethane			50.0	54.6		ug/L		109	61 - 130	3	20
1,2-Dichloropropane			50.0	49.4		ug/L		99	68 - 127	1	20
1,3,5-Trimethylbenzene			50.0	51.7		ug/L		103	73 - 127	8	20
1,3-Dichlorobenzene			50.0	50.6		ug/L		101	76 - 121	2	20
1,3-Dichloropropane			50.0	52.3		ug/L		105	80 - 118	1	20
1,4-Dichlorobenzene			50.0	51.5		ug/L		103	76 - 119	4	20
2,2-Dichloropropane			50.0	53.0		ug/L		106	57 - 140	7	22
2-Butanone (MEK)			200	264		ug/L		132	53 - 135	9	20
2-Chlorotoluene			50.0	50.2		ug/L		100	75 - 123	10	20
2-Hexanone			200	266		ug/L		133	58 - 134	10	21
4-Chlorotoluene			50.0	52.1		ug/L		104	74 - 124	9	20
4-Isopropyltoluene			50.0	49.5		ug/L		99	74 - 127	9	20
4-Methyl-2-pentanone			200	265		ug/L		133	56 - 135	11	20
Acetone			200	244		ug/L		122	50 - 137	3	21
Benzene			50.0	48.7		ug/L		97	69 - 126	2	20
Bromobenzene			50.0	48.7		ug/L		97	75 - 122	1	20
Bromochloromethane			50.0	52.8		ug/L		106	71 - 130	2	20
Bromodichloromethane			50.0	49.2		ug/L		98	67 - 126	0	20
Bromoform			50.0	53.6		ug/L		107	57 - 125	2	20
Bromomethane			50.0	53.9		ug/L		108	25 - 163	6	40
Carbon disulfide			50.0	47.5		ug/L		95	56 - 128	3	20
Carbon tetrachloride			50.0	49.3		ug/L		99	60 - 133	4	20
Chlorobenzene			50.0	48.4		ug/L		97	78 - 118	4	20
Chloroethane			50.0	52.8		ug/L		106	52 - 144	9	30
Chloroform			50.0	46.0		ug/L		92	68 - 128	4	20
Chloromethane			50.0	40.1		ug/L		80	43 - 142	9	20
cis-1,2-Dichloroethene			50.0	44.6		ug/L		89	69 - 126	3	20
cis-1,3-Dichloropropene			50.0	53.1		ug/L		106	75 - 120	1	20
Dibromochloromethane			50.0	52.8		ug/L		106	71 - 122	6	20
Dibromomethane			50.0	48.5		ug/L		97	68 - 129	5	20
Dichlorodifluoromethane			50.0	42.9		ug/L		86	26 - 152	11	21
Ethylbenzene			50.0	48.0		ug/L		96	76 - 121	7	20
Hexachlorobutadiene			50.0	45.4		ug/L		91	69 - 133	11	20
Isopropylbenzene			50.0	51.0		ug/L		102	70 - 127	8	20
Methylene Chloride			50.0	49.5		ug/L		99	64 - 128	7	20
Naphthalene			50.0	49.5		ug/L		99	63 - 129	6	21

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

Lab Sample ID: LCSD 280-594854/4
Matrix: Water
Analysis Batch: 594854

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			50.0	49.6		ug/L		99	69 - 130	7	20
N-Propylbenzene			50.0	50.9		ug/L		102	73 - 127	9	20
sec-Butylbenzene			50.0	49.1		ug/L		98	72 - 127	10	20
Styrene			50.0	47.8		ug/L		96	79 - 120	2	20
tert-Butylbenzene			50.0	49.8		ug/L		100	72 - 126	6	20
Tetrachloroethene			50.0	48.7		ug/L		97	72 - 127	10	20
Toluene			50.0	46.4		ug/L		93	68 - 127	5	20
trans-1,2-Dichloroethene			50.0	50.0		ug/L		100	66 - 129	4	20
trans-1,3-Dichloropropene			50.0	54.9		ug/L		110	66 - 127	0	20
Trichloroethene			50.0	48.8		ug/L		98	70 - 125	4	20
Trichlorofluoromethane			50.0	51.2		ug/L		102	57 - 144	8	28
Vinyl chloride			50.0	45.2		ug/L		90	53 - 141	10	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 127*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 120*
Toluene-d8 (Surr)	*96*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-594044/1-A
Matrix: Water
Analysis Batch: 594074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/18/22 11:37	11/18/22 15:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/18/22 11:37	11/18/22 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*123*		*70 - 130*	*11/18/22 11:37*	*11/18/22 15:58*	*1*

Lab Sample ID: LCS 280-594044/2-A
Matrix: Water
Analysis Batch: 594074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594044

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.246		ug/L		98	60 - 140
1,2-Dibromoethane			0.250	0.235		ug/L		94	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*121*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-594044/3-A
Matrix: Water
Analysis Batch: 594074

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 594044

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.257		ug/L		103	60 - 140	4	10
1,2-Dibromoethane			0.250	0.244		ug/L		97	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*121*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-594876/1-A
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 594876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		12/01/22 09:30	12/02/22 03:29	1
Iron	41.6		30		ug/L		12/01/22 09:30	12/02/22 03:29	1
Magnesium	ND		200		ug/L		12/01/22 09:30	12/02/22 03:29	1
Manganese	ND		3.0		ug/L		12/01/22 09:30	12/02/22 03:29	1
Potassium	ND		500		ug/L		12/01/22 09:30	12/02/22 03:29	1
Sodium	ND		1000		ug/L		12/01/22 09:30	12/02/22 03:29	1

Lab Sample ID: LCS 280-594876/2-A
Matrix: Water
Analysis Batch: 595413

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 594876

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	51000		ug/L		102	90 - 111		
Iron			10000	10500		ug/L		105	89 - 115		
Magnesium			50000	51300		ug/L		103	90 - 113		
Manganese			1000	1040		ug/L		104	90 - 110		
Potassium			50000	49100		ug/L		98	89 - 114		
Sodium			50000	48100		ug/L		96	90 - 115		

Lab Sample ID: 280-169302-2 MS
Matrix: Water
Analysis Batch: 595413

Client Sample ID: MW-20A
Prep Type: Dissolved
Prep Batch: 594876

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	91000		50000	142000		ug/L		103	48 - 153		
Iron	2100	B	10000	12400		ug/L		102	52 - 155		
Magnesium	34000		50000	86000		ug/L		104	62 - 146		
Manganese	2400		1000	3380		ug/L		100	79 - 121		
Potassium	ND		50000	49900		ug/L		99	76 - 132		
Sodium	30000		50000	80900		ug/L		101	70 - 203		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-169302-2 MSD
Matrix: Water
Analysis Batch: 595413

Client Sample ID: MW-20A
Prep Type: Dissolved
Prep Batch: 594876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	91000		50000	141000		ug/L		100	48 - 153	1	20
Iron	2100	B	10000	12400		ug/L		102	52 - 155	0	20
Magnesium	34000		50000	85500		ug/L		103	62 - 146	1	20
Manganese	2400		1000	3350		ug/L		96	79 - 121	1	20
Potassium	ND		50000	49900		ug/L		99	76 - 132	0	20
Sodium	30000		50000	80600		ug/L		101	70 - 203	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-651985/28
Matrix: Water
Analysis Batch: 651985

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			12/03/22 00:51	1
Sulfate	ND		1.0		mg/L			12/03/22 00:51	1

Lab Sample ID: MB 480-651985/4
Matrix: Water
Analysis Batch: 651985

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			12/02/22 17:01	1
Sulfate	ND		1.0		mg/L			12/02/22 17:01	1

Lab Sample ID: LCS 480-651985/29
Matrix: Water
Analysis Batch: 651985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.6		mg/L		99	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: LCS 480-651985/5
Matrix: Water
Analysis Batch: 651985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.7		mg/L		99	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Lab Sample ID: 280-169302-2 MS
Matrix: Water
Analysis Batch: 651985

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
Chloride	170		50.1	215	E	mg/L		82	81 - 120
Sulfate	4.9		50.0	55.4		mg/L		101	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-596038/62
Matrix: Water
Analysis Batch: 596038

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			12/07/22 11:51	1

Lab Sample ID: LCS 280-596038/61
Matrix: Water
Analysis Batch: 596038

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	2.57		mg/L		103	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-595276/23
Matrix: Water
Analysis Batch: 595276

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			12/01/22 13:17	1

Lab Sample ID: LCS 280-595276/21
Matrix: Water
Analysis Batch: 595276

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	5.10		mg/L		102	90 - 110

Lab Sample ID: LCSD 280-595276/22
Matrix: Water
Analysis Batch: 595276

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	5.27		mg/L		105	90 - 110	3	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-595659/4
Matrix: Water
Analysis Batch: 595659

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			12/05/22 16:31	1

Lab Sample ID: LCS 280-595659/3
Matrix: Water
Analysis Batch: 595659

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	26.6		mg/L		106	88 - 112

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCSD 280-595659/37
Matrix: Water
Analysis Batch: 595659

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 Organic Carbon - Average			25.0	25.6		mg/L		103	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-596205/1
Matrix: Water
Analysis Batch: 596205

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			12/09/22 13:24	1
Magnesium	0.000				meq/L			12/09/22 13:24	1
Potassium	0.000				meq/L			12/09/22 13:24	1
Sodium	0.000				meq/L			12/09/22 13:24	1
Ammonia as N	0.000				meq/L			12/09/22 13:24	1
Chloride	0.000				meq/L			12/09/22 13:24	1
Sulfate	0.000				meq/L			12/09/22 13:24	1
Alkalinity	0.000				mg/L			12/09/22 13:24	1
Bicarbonate Alkalinity	0.000				meq/L			12/09/22 13:24	1
Nitrate/Nitrite	0.000				meq/L			12/09/22 13:24	1
Iron	0.000				meq/L			12/09/22 13:24	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-594347/84
Matrix: Water
Analysis Batch: 594347

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			11/21/22 21:15	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-594254/1
Matrix: Water
Analysis Batch: 594254

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			11/21/22 12:27	1

Lab Sample ID: LCS 280-594254/2
Matrix: Water
Analysis Batch: 594254

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	479		mg/L		96	88 - 114

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 280-594399/1
Matrix: Water
Analysis Batch: 594399

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			11/22/22 11:19	1

Lab Sample ID: LCS 280-594399/2
Matrix: Water
Analysis Batch: 594399

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	480		mg/L		96	88 - 114		

Lab Sample ID: LCSD 280-594399/3
Matrix: Water
Analysis Batch: 594399

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	476		mg/L		95	88 - 114	1	20

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

GC/MS VOA

Analysis Batch: 594854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-1	TRIP BLANK	Total/NA	Water	8260B	
280-169302-2	MW-20A	Total/NA	Water	8260B	
280-169302-3	FB11162201	Total/NA	Water	8260B	
MB 280-594854/7	Method Blank	Total/NA	Water	8260B	
LCS 280-594854/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-594854/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 594044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-1	TRIP BLANK	Total/NA	Water	8011	
280-169302-2	MW-20A	Total/NA	Water	8011	
280-169302-3	FB11162201	Total/NA	Water	8011	
MB 280-594044/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-594044/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-594044/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 594074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-1	TRIP BLANK	Total/NA	Water	8011	594044
280-169302-2	MW-20A	Total/NA	Water	8011	594044
280-169302-3	FB11162201	Total/NA	Water	8011	594044
MB 280-594044/1-A	Method Blank	Total/NA	Water	8011	594044
LCS 280-594044/2-A	Lab Control Sample	Total/NA	Water	8011	594044
LCSD 280-594044/3-A	Lab Control Sample Dup	Total/NA	Water	8011	594044

Metals

Prep Batch: 594876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Dissolved	Water	3005A	
280-169302-3	FB11162201	Dissolved	Water	3005A	
MB 280-594876/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-594876/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-169302-2 MS	MW-20A	Dissolved	Water	3005A	
280-169302-2 MSD	MW-20A	Dissolved	Water	3005A	

Analysis Batch: 595413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Dissolved	Water	6010B	594876
280-169302-3	FB11162201	Dissolved	Water	6010B	594876
MB 280-594876/1-A	Method Blank	Total Recoverable	Water	6010B	594876
LCS 280-594876/2-A	Lab Control Sample	Total Recoverable	Water	6010B	594876
280-169302-2 MS	MW-20A	Dissolved	Water	6010B	594876
280-169302-2 MSD	MW-20A	Dissolved	Water	6010B	594876

General Chemistry

Analysis Batch: 594254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 594254 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-594254/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594254/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 594347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	SM 2320B	
280-169302-3	FB11162201	Total/NA	Water	SM 2320B	
MB 280-594347/84	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-594347/83	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 594399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-3	FB11162201	Total/NA	Water	SM 2540C	
MB 280-594399/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594399/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 280-594399/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	

Analysis Batch: 595276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	353.2	
280-169302-3	FB11162201	Total/NA	Water	353.2	
MB 280-595276/23	Method Blank	Total/NA	Water	353.2	
LCS 280-595276/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-595276/22	Lab Control Sample Dup	Total/NA	Water	353.2	

Analysis Batch: 595659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	9060	
280-169302-3	FB11162201	Total/NA	Water	9060	
MB 280-595659/4	Method Blank	Total/NA	Water	9060	
LCS 280-595659/3	Lab Control Sample	Total/NA	Water	9060	
LCSD 280-595659/37	Lab Control Sample Dup	Total/NA	Water	9060	

Analysis Batch: 596038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	350.1	
280-169302-3	FB11162201	Total/NA	Water	350.1	
MB 280-596038/62	Method Blank	Total/NA	Water	350.1	
LCS 280-596038/61	Lab Control Sample	Total/NA	Water	350.1	

Analysis Batch: 596205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	SM 1030E	
280-169302-2	MW-20A	Total/NA	Water	SM 1030E (meq)	
280-169302-3	FB11162201	Total/NA	Water	SM 1030E	
280-169302-3	FB11162201	Total/NA	Water	SM 1030E (meq)	
MB 280-596205/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 651985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-2	MW-20A	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 651985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169302-3	FB11162201	Total/NA	Water	300.0	
MB 480-651985/28	Method Blank	Total/NA	Water	300.0	
MB 480-651985/4	Method Blank	Total/NA	Water	300.0	
LCS 480-651985/29	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-651985/5	Lab Control Sample	Total/NA	Water	300.0	
280-169302-2 MS	MW-20A	Total/NA	Water	300.0	

Lab Chronicle

Client: Waste Management
Job ID: 280-169302-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TRIP BLANK
Lab Sample ID: 280-169302-1
Date Collected: 11/16/22 07:00
Matrix: Water
Date Received: 11/17/22 10:30

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	594854	11/29/22 11:01	CKL	EET DEN
Total/NA	Prep	8011			35.6 mL	35 mL	594044	11/18/22 11:37	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594074	11/18/22 22:25	ECM	EET DEN

Client Sample ID: MW-20A
Lab Sample ID: 280-169302-2
Date Collected: 11/16/22 10:40
Matrix: Water
Date Received: 11/17/22 10:30

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	594854	11/29/22 12:07	CKL	EET DEN
Total/NA	Prep	8011			35.4 mL	35 mL	594044	11/18/22 11:37	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594074	11/18/22 22:49	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594876	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 03:37	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/02/22 23:33	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 12:04	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 14:59	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595659	12/05/22 20:09	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/21/22 21:33	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594254	11/21/22 12:27	ASP	EET DEN

Client Sample ID: FB11162201
Lab Sample ID: 280-169302-3
Date Collected: 11/16/22 10:50
Matrix: Water
Date Received: 11/17/22 10:30

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	594854	11/29/22 11:23	CKL	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	594044	11/18/22 11:37	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594074	11/18/22 23:13	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	594876	12/01/22 09:30	PFM	EET DEN
Dissolved	Analysis	6010B		1			595413	12/02/22 03:57	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/03/22 01:30	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596038	12/07/22 12:07	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	595276	12/01/22 15:01	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595659	12/05/22 20:23	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596205	12/09/22 13:24	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594347	11/21/22 21:39	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594399	11/22/22 11:19	ASP	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169302-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: E. TAYlor	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: 503 507 7027	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Detection Wells - Apr Oct			
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 - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, 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)	2540/350.1- TDS/Alk	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	300.0- Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB02	11/16/22	0730	C	W						X	X			4	
MW-20A	11/16/22	1040	C	W	Y		X	X	X	X	X	X	X	10	
FB111622201	11/16/22	1050	G	W	X		X	X	X	X	X	X	X	10	

280-169302 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:

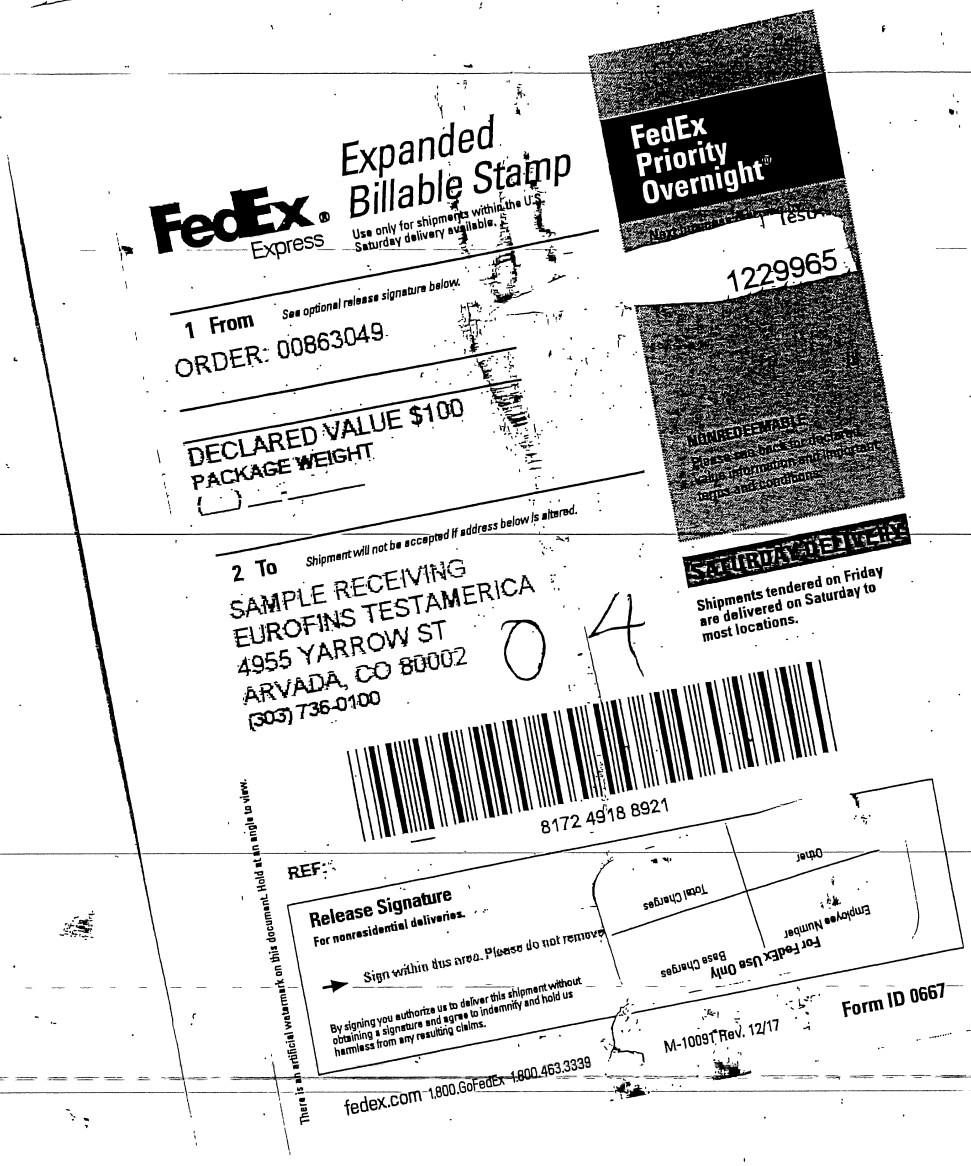
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/16/22 1630	SCS	Jordan Sc1002	11/17/22 1030	ETADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

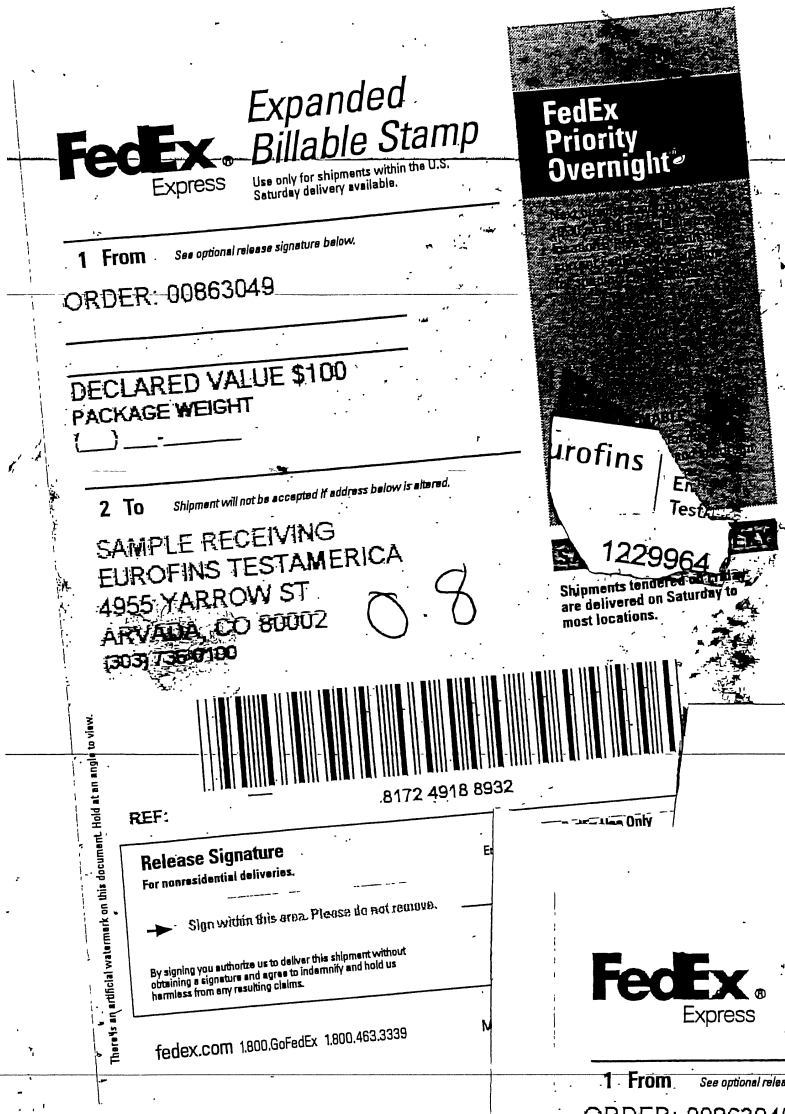
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		0.8, 1.7, 0.4 +0.0 IR12

Ver: 01/16/2019

1/9/2023



280-169302 Waybill



FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

1 From See optional release signature below.

ORDER: 00863049

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___-_____

2 To Shipment will not be accepted if address below is altered.

SAMPLE RECEIVING
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

08

FedEx Priority Overnight

urofins | Test

1229964

Shipments tendered on Friday are delivered on Saturday to most locations.

8172 4918 8932

REF:

For FedEx Use Only

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.

There is an artificial watermark on this document. Hold at an angle to view.

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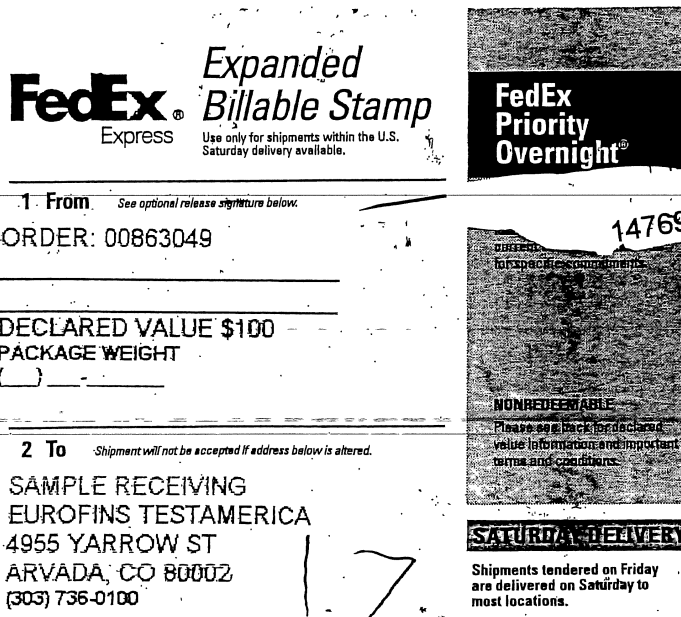

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

1 From See optional release signature below.

ORDER: 00863049

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___-_____

2 To Shipment will not be accepted if address below is altered.

SAMPLE RECEIVING
EUROFINS TESTAMERICA
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

17

FedEx Priority Overnight

1476941

NONREDEEMABLE

Please see back for declared value information and important terms and conditions.

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

00009410 ORDER: 00863049

EUROFINS TESTAMERICA
ARVADA,CO

8172 4918 8900

REF:

For FedEx Use Only

Release Signature

For nonresidential deliveries.

Employee Number | Base Charges

Sign within this area. Please do not remove.

Other | Total Charges

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.

There is an artificial watermark on this document. Hold at an angle to view.

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M-10091 Rev. 12/17

Form ID 0667

Peel here and attach label to package.

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-637049.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-169302-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2022			
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, Y - Trizma, 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 (280-169302-2)	11/16/22	10:40 Pacific		Water			X	1	
FB11162201 (280-169302-3)	11/16/22	10:50 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: 11/21/22 13:40	Company ETDEN	Received by:	Date/Time: 11/23/22 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: 2.7 # 1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-169302-1

Login Number: 169302

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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: 280-169302-1

Login Number: 169302
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/23/22 11:36 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 1/9/2023 11:03:45 AM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Downgradient Det. Wells - Oct

JOB NUMBER

280-169429-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

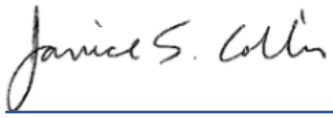
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-169429-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD 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: 280-169429-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-169429-1

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.

RECEIPT

The samples were received on 11/19/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-5A (280-169429-1), FB11172201 (280-169429-2) and TB03 (280-169429-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/30/2022.

For Method 8260, the following analyte(s) recovered outside control limits for the LCS associated with analytical batch 280-595025: 1,3-Dichloropropane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported. The results were non-detect for this compound.

For Method 8260, the RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-595025 recovered outside control limits (20%) for the following analytes: Bromoform, n-Butylbenzene, and Styrene. The associated samples were non-detect for the affected analytes and within recovery limits in the LCS and LCSD.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

1,2-DIBROMOETHANE, 1,2-DIBROMO-3-CHLOROPROPANE, AND 1,2,3-TRICHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples MW-5A (280-169429-1), FB11172201 (280-169429-2) and TB03 (280-169429-3) were analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared and analyzed on 11/22/2022.

TestAmerica Denver's practice for the reporting of dual column data in packages requiring forms and/or raw data is to report the surrogates from both columns, and the preferred result for any given target analyte from the analyst selected column. The preferred results for target analytes and surrogates are reported as PRIMARY on the Sample Datasheets.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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

Job ID: 280-169429-1 (Continued)

Laboratory: Eurofins Denver (Continued)

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: 280-169429-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-5A
Lab Sample ID: 280-169429-1

No Detections.

Client Sample ID: FB11172201
Lab Sample ID: 280-169429-2

No Detections.

Client Sample ID: TB03
Lab Sample ID: 280-169429-3

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-169429-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-169429-1	MW-5A	Water	11/17/22 12:25	11/19/22 09:20
280-169429-2	FB11172201	Water	11/17/22 12:30	11/19/22 09:20
280-169429-3	TB03	Water	11/17/22 07:00	11/19/22 09:20

Method Summary

Client: Waste Management
Job ID: 280-169429-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169429-1

Client Sample ID: MW-5A
Date Collected: 11/17/22 12:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169429-1
Matrix: Water

Method: SW846 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			11/30/22 13:58	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 13:58	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 13:58	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 13:58	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 13:58	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 13:58	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 13:58	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 13:58	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 13:58	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 13:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 13:58	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 13:58	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 13:58	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 13:58	1
2-Hexanone	ND		5.0		ug/L			11/30/22 13:58	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 13:58	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 13:58	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 13:58	1
Acetone	ND		10		ug/L			11/30/22 13:58	1
Benzene	ND		1.0		ug/L			11/30/22 13:58	1
Bromobenzene	ND		1.0		ug/L			11/30/22 13:58	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 13:58	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 13:58	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 13:58	1
Bromomethane	ND		2.4		ug/L			11/30/22 13:58	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 13:58	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 13:58	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 13:58	1
Chloroethane	ND		2.0		ug/L			11/30/22 13:58	1
Chloroform	ND		1.0		ug/L			11/30/22 13:58	1
Chloromethane	ND		2.0		ug/L			11/30/22 13:58	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 13:58	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 13:58	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 13:58	1
Dibromomethane	ND		1.0		ug/L			11/30/22 13:58	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 13:58	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 13:58	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 13:58	1
Naphthalene	ND		1.0		ug/L			11/30/22 13:58	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 13:58	1

Client Sample ID: MW-5A

Date Collected: 11/17/22 12:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169429-1

Matrix: Water

Method: SW846 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			11/30/22 13:58	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
Styrene	ND	*1	1.0		ug/L			11/30/22 13:58	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 13:58	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 13:58	1
Toluene	ND		1.0		ug/L			11/30/22 13:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 13:58	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 13:58	1
Trichloroethene	ND		1.0		ug/L			11/30/22 13:58	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 13:58	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 13:58	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 13:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 13:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 127*		*11/30/22 13:58*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*11/30/22 13:58*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 120*		*11/30/22 13:58*	*1*
Toluene-d8 (Surr)	*97*		*80 - 125*		*11/30/22 13:58*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 16:33	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*124*		*70 - 130*	*11/22/22 11:24*	*11/22/22 16:33*	*1*

Client Sample ID: FB11172201

Date Collected: 11/17/22 12:30
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169429-2

Matrix: Water

Method: SW846 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			11/30/22 11:31	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 11:31	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 11:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 11:31	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 11:31	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 11:31	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 11:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 11:31	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 11:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 11:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 11:31	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 11:31	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 11:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 11:31	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169429-1

Client Sample ID: FB11172201
Date Collected: 11/17/22 12:30
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169429-2
Matrix: Water

Method: SW846 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			11/30/22 11:31	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 11:31	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 11:31	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 11:31	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 11:31	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 11:31	1
2-Hexanone	ND		5.0		ug/L			11/30/22 11:31	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 11:31	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 11:31	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 11:31	1
Acetone	ND		10		ug/L			11/30/22 11:31	1
Benzene	ND		1.0		ug/L			11/30/22 11:31	1
Bromobenzene	ND		1.0		ug/L			11/30/22 11:31	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 11:31	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 11:31	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 11:31	1
Bromomethane	ND		2.4		ug/L			11/30/22 11:31	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 11:31	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 11:31	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 11:31	1
Chloroethane	ND		2.0		ug/L			11/30/22 11:31	1
Chloroform	ND		1.0		ug/L			11/30/22 11:31	1
Chloromethane	ND		2.0		ug/L			11/30/22 11:31	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 11:31	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 11:31	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 11:31	1
Dibromomethane	ND		1.0		ug/L			11/30/22 11:31	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 11:31	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 11:31	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 11:31	1
Naphthalene	ND		1.0		ug/L			11/30/22 11:31	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 11:31	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
Styrene	ND	*1	1.0		ug/L			11/30/22 11:31	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 11:31	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 11:31	1
Toluene	ND		1.0		ug/L			11/30/22 11:31	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 11:31	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 11:31	1
Trichloroethene	ND		1.0		ug/L			11/30/22 11:31	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 11:31	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 11:31	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 11:31	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 11:31*	*1*

Client Sample ID: FB11172201
Lab Sample ID: 280-169429-2
Date Collected: 11/17/22 12:30
Matrix: Water
Date Received: 11/19/22 09:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/30/22 11:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*78 - 120*		*11/30/22 11:31*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*11/30/22 11:31*	*1*
Toluene-d8 (Surr)	*105*		*80 - 125*		*11/30/22 11:31*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 16:58	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*125*		*70 - 130*	*11/22/22 11:24*	*11/22/22 16:58*	*1*

Client Sample ID: TB03
Lab Sample ID: 280-169429-3
Date Collected: 11/17/22 07:00
Matrix: Water
Date Received: 11/19/22 09:20

Method: SW846 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			11/30/22 10:49	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 10:49	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 10:49	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 10:49	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 10:49	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 10:49	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 10:49	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 10:49	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 10:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 10:49	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 10:49	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 10:49	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 10:49	1
2-Hexanone	ND		5.0		ug/L			11/30/22 10:49	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 10:49	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 10:49	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 10:49	1
Acetone	ND		10		ug/L			11/30/22 10:49	1
Benzene	ND		1.0		ug/L			11/30/22 10:49	1
Bromobenzene	ND		1.0		ug/L			11/30/22 10:49	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 10:49	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 10:49	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 10:49	1
Bromomethane	ND		2.4		ug/L			11/30/22 10:49	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169429-1

Client Sample ID: TB03
Date Collected: 11/17/22 07:00
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169429-3
Matrix: Water

Method: SW846 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			11/30/22 10:49	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 10:49	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 10:49	1
Chloroethane	ND		2.0		ug/L			11/30/22 10:49	1
Chloroform	ND		1.0		ug/L			11/30/22 10:49	1
Chloromethane	ND		2.0		ug/L			11/30/22 10:49	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 10:49	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 10:49	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 10:49	1
Dibromomethane	ND		1.0		ug/L			11/30/22 10:49	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 10:49	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 10:49	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 10:49	1
Naphthalene	ND		1.0		ug/L			11/30/22 10:49	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 10:49	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
Styrene	ND	*1	1.0		ug/L			11/30/22 10:49	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 10:49	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 10:49	1
Toluene	ND		1.0		ug/L			11/30/22 10:49	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 10:49	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 10:49	1
Trichloroethene	ND		1.0		ug/L			11/30/22 10:49	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 10:49	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 10:49	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 10:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 10:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 127*		*11/30/22 10:49*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*11/30/22 10:49*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 120*		*11/30/22 10:49*	*1*
Toluene-d8 (Surr)	*99*		*80 - 125*		*11/30/22 10:49*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 17:23	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*120*		*70 - 130*	*11/22/22 11:24*	*11/22/22 17:23*	*1*

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169429-1

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)
280-169429-1	MW-5A	100	101	103	97
280-169429-2	FB11172201	98	95	102	105
280-169429-3	TB03	95	101	104	99
LCS 280-595025/1002	Lab Control Sample	78	92	93	98
LCSD 280-595025/4	Lab Control Sample Dup	88	89	100	97
MB 280-595025/8	Method Blank	81	91	97	86

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)
280-169429-1	MW-5A	124
280-169429-2	FB11172201	125
280-169429-3	TB03	120
LCS 280-594402/2-A	Lab Control Sample	121
LCSD 280-594402/3-A	Lab Control Sample Dup	125
MB 280-594402/1-A	Method Blank	124

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 09:26	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 09:26	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
2-Hexanone	ND		5.0		ug/L			11/30/22 09:26	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 09:26	1
Acetone	ND		10		ug/L			11/30/22 09:26	1
Benzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromoform	ND		1.2		ug/L			11/30/22 09:26	1
Bromomethane	ND		2.4		ug/L			11/30/22 09:26	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 09:26	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 09:26	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Chloroethane	ND		2.0		ug/L			11/30/22 09:26	1
Chloroform	ND		1.0		ug/L			11/30/22 09:26	1
Chloromethane	ND		2.0		ug/L			11/30/22 09:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Dibromomethane	ND		1.0		ug/L			11/30/22 09:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 09:26	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 09:26	1
Naphthalene	ND		1.0		ug/L			11/30/22 09:26	1

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

Lab Sample ID: MB 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Styrene	ND		1.0		ug/L			11/30/22 09:26	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Toluene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 09:26	1
Trichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 09:26	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 09:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 09:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 127*		*11/30/22 09:26*	*1*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*		*11/30/22 09:26*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*11/30/22 09:26*	*1*
Toluene-d8 (Surr)	*86*		*80 - 125*		*11/30/22 09:26*	*1*

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	25.3		ug/L		101	74 - 121
1,1,1-Trichloroethane	25.0	20.9		ug/L		83	62 - 132
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	72 - 122
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	72 - 128
1,1-Dichloroethane	25.0	22.8		ug/L		91	66 - 130
1,1-Dichloroethene	25.0	23.7		ug/L		95	62 - 130
1,1-Dichloropropene	25.0	21.3		ug/L		85	64 - 133
1,2,3-Trichlorobenzene	25.0	30.4		ug/L		122	70 - 127
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	74 - 123
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		105	73 - 124
1,2,4-Trimethylbenzene	25.0	21.5		ug/L		86	74 - 124
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	77 - 121
1,2-Dichloroethane	25.0	20.7		ug/L		83	61 - 130
1,2-Dichloropropane	25.0	22.1		ug/L		89	68 - 127
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	73 - 127
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	76 - 121
1,3-Dichloropropane	25.0	19.7	*-	ug/L		79	80 - 118
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	76 - 119
2,2-Dichloropropane	25.0	22.4		ug/L		90	57 - 140
2-Butanone (MEK)	100	83.0		ug/L		83	53 - 135

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

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	24.8		ug/L		99	75 - 123
2-Hexanone	100	82.6		ug/L		83	58 - 134
4-Chlorotoluene	25.0	21.9		ug/L		88	74 - 124
4-Isopropyltoluene	25.0	23.8		ug/L		95	74 - 127
4-Methyl-2-pentanone	100	90.8		ug/L		91	56 - 135
Acetone	100	82.2		ug/L		82	50 - 137
Benzene	25.0	23.4		ug/L		93	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	25.7		ug/L		103	71 - 130
Bromodichloromethane	25.0	23.3		ug/L		93	67 - 126
Bromoform	25.0	28.7		ug/L		115	57 - 125
Bromomethane	25.0	21.9		ug/L		87	25 - 163
Carbon disulfide	25.0	24.8		ug/L		99	56 - 128
Carbon tetrachloride	25.0	22.6		ug/L		90	60 - 133
Chlorobenzene	25.0	24.2		ug/L		97	78 - 118
Chloroethane	25.0	21.4		ug/L		86	52 - 144
Chloroform	25.0	21.9		ug/L		88	68 - 128
Chloromethane	25.0	25.3		ug/L		101	43 - 142
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	69 - 126
cis-1,3-Dichloropropene	25.0	21.9		ug/L		88	75 - 120
Dibromochloromethane	25.0	22.4		ug/L		89	71 - 122
Dibromomethane	25.0	23.9		ug/L		96	68 - 129
Dichlorodifluoromethane	25.0	26.8		ug/L		107	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	22.0		ug/L		88	69 - 133
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 127
Methylene Chloride	25.0	26.7		ug/L		107	64 - 128
Naphthalene	25.0	27.9		ug/L		111	63 - 129
n-Butylbenzene	25.0	25.8		ug/L		103	69 - 130
N-Propylbenzene	25.0	23.9		ug/L		96	73 - 127
sec-Butylbenzene	25.0	24.7		ug/L		99	72 - 127
Styrene	25.0	25.8		ug/L		103	79 - 120
tert-Butylbenzene	25.0	22.2		ug/L		89	72 - 126
Tetrachloroethene	25.0	23.8		ug/L		95	72 - 127
Toluene	25.0	23.3		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	66 - 129
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	66 - 127
Trichloroethene	25.0	23.4		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	17.7		ug/L		71	57 - 144
Vinyl chloride	25.0	23.5		ug/L		94	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*93*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

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

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	21.5		ug/L		86	74 - 121	16	20
1,1,1-Trichloroethane	25.0	21.4		ug/L		85	62 - 132	2	20
1,1,2,2-Tetrachloroethane	25.0	27.2		ug/L		109	72 - 122	5	20
1,1,2-Trichloroethane	25.0	23.4		ug/L		94	72 - 128	1	20
1,1-Dichloroethane	25.0	22.0		ug/L		88	66 - 130	4	20
1,1-Dichloroethene	25.0	23.8		ug/L		95	62 - 130	1	21
1,1-Dichloropropene	25.0	21.7		ug/L		87	64 - 133	2	20
1,2,3-Trichlorobenzene	25.0	31.7		ug/L		127	70 - 127	4	20
1,2,3-Trichloropropane	25.0	26.2		ug/L		105	74 - 123	4	20
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		102	73 - 124	3	20
1,2,4-Trimethylbenzene	25.0	20.4		ug/L		82	74 - 124	5	20
1,2-Dichlorobenzene	25.0	22.8		ug/L		91	77 - 121	15	20
1,2-Dichloroethane	25.0	19.9		ug/L		80	61 - 130	4	20
1,2-Dichloropropane	25.0	21.3		ug/L		85	68 - 127	4	20
1,3,5-Trimethylbenzene	25.0	20.3		ug/L		81	73 - 127	18	20
1,3-Dichlorobenzene	25.0	22.0		ug/L		88	76 - 121	5	20
1,3-Dichloropropane	25.0	20.9		ug/L		84	80 - 118	6	20
1,4-Dichlorobenzene	25.0	21.5		ug/L		86	76 - 119	9	20
2,2-Dichloropropane	25.0	21.5		ug/L		86	57 - 140	4	22
2-Butanone (MEK)	100	80.8		ug/L		81	53 - 135	3	20
2-Chlorotoluene	25.0	25.0		ug/L		100	75 - 123	1	20
2-Hexanone	100	87.3		ug/L		87	58 - 134	6	21
4-Chlorotoluene	25.0	21.5		ug/L		86	74 - 124	2	20
4-Isopropyltoluene	25.0	21.5		ug/L		86	74 - 127	10	20
4-Methyl-2-pentanone	100	91.8		ug/L		92	56 - 135	1	20
Acetone	100	84.6		ug/L		85	50 - 137	3	21
Benzene	25.0	22.3		ug/L		89	69 - 126	5	20
Bromobenzene	25.0	24.5		ug/L		98	75 - 122	0	20
Bromochloromethane	25.0	24.9		ug/L		100	71 - 130	3	20
Bromodichloromethane	25.0	22.3		ug/L		89	67 - 126	4	20
Bromoform	25.0	23.0	*1	ug/L		92	57 - 125	22	20
Bromomethane	25.0	20.6		ug/L		82	25 - 163	6	40
Carbon disulfide	25.0	23.3		ug/L		93	56 - 128	6	20
Carbon tetrachloride	25.0	23.1		ug/L		93	60 - 133	3	20
Chlorobenzene	25.0	21.3		ug/L		85	78 - 118	13	20
Chloroethane	25.0	21.0		ug/L		84	52 - 144	2	30
Chloroform	25.0	21.9		ug/L		87	68 - 128	0	20
Chloromethane	25.0	20.7		ug/L		83	43 - 142	20	20
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	69 - 126	5	20
cis-1,3-Dichloropropene	25.0	20.9		ug/L		83	75 - 120	5	20
Dibromochloromethane	25.0	22.8		ug/L		91	71 - 122	2	20
Dibromomethane	25.0	22.5		ug/L		90	68 - 129	6	20
Dichlorodifluoromethane	25.0	24.9		ug/L		100	26 - 152	7	21
Ethylbenzene	25.0	20.8		ug/L		83	76 - 121	18	20
Hexachlorobutadiene	25.0	20.4		ug/L		82	69 - 133	7	20
Isopropylbenzene	25.0	23.4		ug/L		94	70 - 127	4	20
Methylene Chloride	25.0	25.2		ug/L		101	64 - 128	6	20
Naphthalene	25.0	26.8		ug/L		107	63 - 129	4	21

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

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	20.7	*1	ug/L		83	69 - 130	22	20
N-Propylbenzene			25.0	23.2		ug/L		93	73 - 127	3	20
sec-Butylbenzene			25.0	22.3		ug/L		89	72 - 127	10	20
Styrene			25.0	20.8	*1	ug/L		83	79 - 120	22	20
tert-Butylbenzene			25.0	24.3		ug/L		97	72 - 126	9	20
Tetrachloroethene			25.0	21.0		ug/L		84	72 - 127	13	20
Toluene			25.0	23.4		ug/L		94	68 - 127	0	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	66 - 129	6	20
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	66 - 127	0	20
Trichloroethene			25.0	22.2		ug/L		89	70 - 125	5	20
Trichlorofluoromethane			25.0	17.8		ug/L		71	57 - 144	0	28
Vinyl chloride			25.0	20.3		ug/L		81	53 - 141	15	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 127*
4-Bromofluorobenzene (Surr)	*89*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-594402/1-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/22/22 11:24	11/22/22 15:18	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*124*		*70 - 130*	*11/22/22 11:24*	*11/22/22 15:18*	*1*

Lab Sample ID: LCS 280-594402/2-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.257		ug/L		103	60 - 140
1,2-Dibromoethane			0.250	0.229		ug/L		92	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*121*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-594402/3-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.273		ug/L		109	60 - 140	6	10
1,2-Dibromoethane			0.250	0.239		ug/L		95	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*125*		*70 - 130*

QC Association Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169429-1

GC/MS VOA

Analysis Batch: 595025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169429-1	MW-5A	Total/NA	Water	8260B	
280-169429-2	FB11172201	Total/NA	Water	8260B	
280-169429-3	TB03	Total/NA	Water	8260B	
MB 280-595025/8	Method Blank	Total/NA	Water	8260B	
LCS 280-595025/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-595025/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 594402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169429-1	MW-5A	Total/NA	Water	8011	
280-169429-2	FB11172201	Total/NA	Water	8011	
280-169429-3	TB03	Total/NA	Water	8011	
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 594425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169429-1	MW-5A	Total/NA	Water	8011	594402
280-169429-2	FB11172201	Total/NA	Water	8011	594402
280-169429-3	TB03	Total/NA	Water	8011	594402
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	594402
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	594402
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	594402

Lab Chronicle

Client: Waste Management
Job ID: 280-169429-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: MW-5A
Lab Sample ID: 280-169429-1
Date Collected: 11/17/22 12:25
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 13:58	MD	EET DEN
Total/NA	Prep	8011			35.4 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 16:33	ECM	EET DEN

Client Sample ID: FB11172201
Lab Sample ID: 280-169429-2
Date Collected: 11/17/22 12:30
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 11:31	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 16:58	ECM	EET DEN

Client Sample ID: TB03
Lab Sample ID: 280-169429-3
Date Collected: 11/17/22 07:00
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 10:49	MD	EET DEN
Total/NA	Prep	8011			35.2 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 17:23	ECM	EET DEN

Laboratory References:
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

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Client Information	Sampler: Eden Taylor	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: 503 502 7627	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
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, 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, Y - Trizma, 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/Cl/SO4	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	S	A	R			
MW-05A	11/17/22	1225	G	W	X		X	X	X	X	X	X	6	
FB 11172201	11/17/22	1230	G	W	X		X	X	X	X	X	X	6	
TB03	11/17/22	0700	G	W						X	X		4	

280-169429 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
	11/18/22 @ 1630	SCS		11-19-22 0920	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.: 1073454 | Cooler Temperature(s) °C and Other Remarks: 0.6C IR12 CF0.0

Ver: 01/16/2019

Do Not Lift Using This Tag

8172 5305 3489 8172 5305 3489

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

1 From *See optional release signature below.*

ORDER: 00863049

DECLARED VALUE $100
PACKAGE WEIGHT
(__) ___.____

2 To *Shipment will not be accepted if address below is altered.*

SAMPLE RECEIVING
EUROFINS TESTAMERICA. 0.6C
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

1073454

FedEx Priority Overnight

Next business morning by 10:30 a.m. Not available to all locations. Please consult the current FedEx Service Guide for specific commitments.

NONREDEEMABLE

Please see back for declared value information and important terms and conditions.

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

REF:

8172 5305 3489

Keep this liner for your records.

this document. Hold at an angle to view.

Release Signature
For nonresidential deliveries

For FedEx Use Only

ORIGIN ID:BNOA

SHIP DATE: 18NOV22
ACTWGT: 44.50 LB
CAD: /SSFE2341
DIMS: 27x13x12 IN

Part # 156297-[illegible] REV# 05/23

TO EUROFINS DENVER
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002 (US)

(303) 736-0100 REF:

INV: DEPT:
PO:

FedEx Express

J2242221018020v

SATURDAY 12:00P

TRK# 8172 5305 [illegible]

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-169429-1

Login Number: 169429

List Source: Eurofins Denver

List Number: 1

Creator: Roehsner, Karen P

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.	False	Refer to job narrative for details
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

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

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JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Detection Wells - Apr Oct

JOB NUMBER

280-169431-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

Job Notes

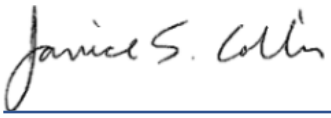
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
Janice Collins, Project Manager
Janice.Collins@et.eurofinsus.com
(303)736-0100

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Definitions/Glossary

Client: Waste Management
Job ID: 280-169431-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD 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: 280-169431-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-169431-1

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.

RECEIPT

The samples were received on 11/19/2022; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.6 C.

One of three HCL VOA containers for the following sample was received broken: DUP11172201 (280-169431-3). Sufficient volume remained for the analysis.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB03 (280-169431-1), MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/30/2022.

For Method 8260, the following analyte(s) recovered outside control limits for the LCS associated with analytical batch 280-595025: 1,3-Dichloropropane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported. The results were non-detect for this compound.

For Method 8260, the RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 280-595025 recovered outside control limits for the following analytes: Bromoform, n-Butylbenzene, and Styrene. The associated samples were non-detect for the affected analytes and within recovery limits in the LCS and LCSD.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

1,2-DIBROMOETHANE, 1,2-DIBROMO-3-CHLOROPROPANE, AND 1,2,3-TRICHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY

Samples TB03 (280-169431-1), MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by microextraction and gas chromatography in accordance with EPA SW-846 Method 8011. The samples were prepared and analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS

Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 12/02/2022 and analyzed on 12/06/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 280-169431-1 (Continued)

Laboratory: Eurofins Denver (Continued)

ALKALINITY
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 12/03/2022.

Chloride failed the recovery criteria low for the MS/MSD of sample 480-204056-2 in batch 480-651985.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/08/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 12/09/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL ORGANIC CARBON
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/06/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for Cation Anion Balance in accordance with epa methodologies. The samples were analyzed on 12/12/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples MW-19A (280-169431-2) and DUP11172201 (280-169431-3) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 12/12/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169431-1

Client Sample ID: TB03 — Lab Sample ID: 280-169431-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	13		6.0		ug/L	1		8260B	Total/NA

Client Sample ID: MW-19A — Lab Sample ID: 280-169431-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	180		30		ug/L	1		6010B	Dissolved
Magnesium	10000		200		ug/L	1		6010B	Dissolved
Manganese	220		3.0		ug/L	1		6010B	Dissolved
Potassium	1200		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	3.8		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	3.0				meq/L	1		SM 1030E	Total/NA
Total Cations	2.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.5				%	1		SM 1030E	Total/NA
Calcium	31				mg/L	1		SM 1030E	Total/NA
Magnesium	10				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	0.11				mg/L	1		SM 1030E	Total/NA
Chloride	18				mg/L	1		SM 1030E	Total/NA
Sulfate	3.8				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	120				mg/L	1		SM 1030E	Total/NA
Alkalinity	120				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	140				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	160				mg/L	1		SM 1030E	Total/NA
Iron	0.18				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	0.031				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	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	120				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0097				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	120		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	160		10		mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP11172201 — Lab Sample ID: 280-169431-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	31000		500		ug/L	1		6010B	Dissolved
Iron	180		30		ug/L	1		6010B	Dissolved
Magnesium	10000		200		ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

Client Sample ID: DUP11172201 (Continued)

Lab Sample ID: 280-169431-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	220		3.0		ug/L	1		6010B	Dissolved
Potassium	1200		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	3.8		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	3.0				meq/L	1		SM 1030E	Total/NA
Total Cations	2.9				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.5				%	1		SM 1030E	Total/NA
Calcium	31				mg/L	1		SM 1030E	Total/NA
Magnesium	10				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	0.11				mg/L	1		SM 1030E	Total/NA
Chloride	18				mg/L	1		SM 1030E	Total/NA
Sulfate	3.8				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	120				mg/L	1		SM 1030E	Total/NA
Alkalinity	120				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	140				mg/L	1		SM 1030E	Total/NA
TDS Ratio	1.1				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	160				mg/L	1		SM 1030E	Total/NA
Iron	0.18				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	0.031				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	0.079				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	120				mg/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	2.4				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate/Nitrite	0.00				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.0097				meq/L	1		SM 1030E (meq)	Total/NA
Bicarbonate Alkalinity	120		10		mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	160		10		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-169431-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-169431-1	TB03	Water	11/17/22 07:00	11/19/22 09:20
280-169431-2	MW-19A	Water	11/17/22 10:25	11/19/22 09:20
280-169431-3	DUP11172201	Water	11/17/22 10:30	11/19/22 09:20

Method Summary

Client: Waste Management
Job ID: 280-169431-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
300.0	Anions, Ion Chromatography	MCAWW	EET BUF
350.1	Nitrogen, Ammonia	MCAWW	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN
8011	Microextraction	SW846	EET DEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169431-1

Client Sample ID: TB03
Date Collected: 11/17/22 07:00
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-1
Matrix: Water

Method: SW846 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			11/30/22 11:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 11:11	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 11:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 11:11	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 11:11	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 11:11	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 11:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 11:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 11:11	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 11:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 11:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 11:11	1
2-Butanone (MEK)	**13**		6.0		ug/L			11/30/22 11:11	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 11:11	1
2-Hexanone	ND		5.0		ug/L			11/30/22 11:11	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 11:11	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 11:11	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 11:11	1
Acetone	ND		10		ug/L			11/30/22 11:11	1
Benzene	ND		1.0		ug/L			11/30/22 11:11	1
Bromobenzene	ND		1.0		ug/L			11/30/22 11:11	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 11:11	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 11:11	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 11:11	1
Bromomethane	ND		2.4		ug/L			11/30/22 11:11	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 11:11	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 11:11	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 11:11	1
Chloroethane	ND		2.0		ug/L			11/30/22 11:11	1
Chloroform	ND		1.0		ug/L			11/30/22 11:11	1
Chloromethane	ND		2.0		ug/L			11/30/22 11:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 11:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 11:11	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 11:11	1
Dibromomethane	ND		1.0		ug/L			11/30/22 11:11	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 11:11	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 11:11	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 11:11	1
Naphthalene	ND		1.0		ug/L			11/30/22 11:11	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 11:11	1

Client Sample ID: TB03

Date Collected: 11/17/22 07:00
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-1

Matrix: Water

Method: SW846 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			11/30/22 11:11	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
Styrene	ND	*1	1.0		ug/L			11/30/22 11:11	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 11:11	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 11:11	1
Toluene	ND		1.0		ug/L			11/30/22 11:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 11:11	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 11:11	1
Trichloroethene	ND		1.0		ug/L			11/30/22 11:11	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 11:11	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 11:11	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 11:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 11:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 127*		*11/30/22 11:11*	*1*
4-Bromofluorobenzene (Surr)	*87*		*78 - 120*		*11/30/22 11:11*	*1*
Dibromofluoromethane (Surr)	*102*		*77 - 120*		*11/30/22 11:11*	*1*
Toluene-d8 (Surr)	*108*		*80 - 125*		*11/30/22 11:11*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 17:47	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*125*		*70 - 130*	*11/22/22 11:24*	*11/22/22 17:47*	*1*

Client Sample ID: MW-19A

Date Collected: 11/17/22 10:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-2

Matrix: Water

Method: SW846 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			11/30/22 14:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 14:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 14:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 14:19	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 14:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 14:19	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 14:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 14:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 14:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 14:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 14:19	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 14:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 14:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 14:19	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169431-1

Client Sample ID: MW-19A
Date Collected: 11/17/22 10:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-2
Matrix: Water

Method: SW846 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			11/30/22 14:19	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 14:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 14:19	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 14:19	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 14:19	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 14:19	1
2-Hexanone	ND		5.0		ug/L			11/30/22 14:19	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 14:19	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 14:19	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 14:19	1
Acetone	ND		10		ug/L			11/30/22 14:19	1
Benzene	ND		1.0		ug/L			11/30/22 14:19	1
Bromobenzene	ND		1.0		ug/L			11/30/22 14:19	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 14:19	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 14:19	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 14:19	1
Bromomethane	ND		2.4		ug/L			11/30/22 14:19	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 14:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 14:19	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 14:19	1
Chloroethane	ND		2.0		ug/L			11/30/22 14:19	1
Chloroform	ND		1.0		ug/L			11/30/22 14:19	1
Chloromethane	ND		2.0		ug/L			11/30/22 14:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 14:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 14:19	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 14:19	1
Dibromomethane	ND		1.0		ug/L			11/30/22 14:19	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 14:19	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 14:19	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 14:19	1
Naphthalene	ND		1.0		ug/L			11/30/22 14:19	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 14:19	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
Styrene	ND	*1	1.0		ug/L			11/30/22 14:19	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 14:19	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 14:19	1
Toluene	ND		1.0		ug/L			11/30/22 14:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 14:19	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 14:19	1
Trichloroethene	ND		1.0		ug/L			11/30/22 14:19	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 14:19	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 14:19	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 14:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 14:19*	*1*

Client Sample ID: MW-19A

Date Collected: 11/17/22 10:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/30/22 14:19*	*1*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*11/30/22 14:19*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 120*		*11/30/22 14:19*	*1*
Toluene-d8 (Surr)	*111*		*80 - 125*		*11/30/22 14:19*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 18:12	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*126*		*70 - 130*	*11/22/22 11:24*	*11/22/22 18:12*	*1*

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**31000**		500		ug/L		12/02/22 19:28	12/06/22 05:02	1
Iron	**180**		30		ug/L		12/02/22 19:28	12/06/22 05:02	1
Magnesium	**10000**		200		ug/L		12/02/22 19:28	12/06/22 05:02	1
Manganese	**220**		3.0		ug/L		12/02/22 19:28	12/06/22 05:02	1
Potassium	**1200**		500		ug/L		12/02/22 19:28	12/06/22 05:02	1
Sodium	**11000**		1000		ug/L		12/02/22 19:28	12/06/22 05:02	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**3.0**				meq/L			12/12/22 10:02	1
Total Cations (SM 1030E)	**2.9**				meq/L			12/12/22 10:02	1
Percent Difference (SM 1030E)	**-1.5**				%			12/12/22 10:02	1
Calcium (SM 1030E)	**31**				mg/L			12/12/22 10:02	1
Magnesium (SM 1030E)	**10**				mg/L			12/12/22 10:02	1
Potassium (SM 1030E)	**1.2**				mg/L			12/12/22 10:02	1
Sodium (SM 1030E)	**11**				mg/L			12/12/22 10:02	1
Ammonia as N (SM 1030E)	**0.11**				mg/L			12/12/22 10:02	1
Chloride (SM 1030E)	**18**				mg/L			12/12/22 10:02	1
Sulfate (SM 1030E)	**3.8**				mg/L			12/12/22 10:02	1
Bicarbonate Alkalinity (SM 1030E)	**120**				mg/L			12/12/22 10:02	1
Alkalinity (SM 1030E)	**120**				mg/L			12/12/22 10:02	1
Nitrate/Nitrite (SM 1030E)	**0.00**				mg/L			12/12/22 10:02	1
Anion/Cation Balance (SM 1030E)	**-1.5**				%			12/12/22 10:02	1
Calculated TDS (SM 1030E)	**140**				mg/L			12/12/22 10:02	1
TDS Ratio (SM 1030E)	**1.1**				NONE			12/12/22 10:02	1
Total Dissolved Solids (SM 1030E)	**160**				mg/L			12/12/22 10:02	1
Iron (SM 1030E)	**0.18**				mg/L			12/12/22 10:02	1
Calcium (SM 1030E (meq))	**1.5**				meq/L			12/12/22 10:02	1
Magnesium (SM 1030E (meq))	**0.82**				meq/L			12/12/22 10:02	1
Potassium (SM 1030E (meq))	**0.031**				meq/L			12/12/22 10:02	1
Sodium (SM 1030E (meq))	**0.48**				meq/L			12/12/22 10:02	1
Ammonia as N (SM 1030E (meq))	**0.0079**				meq/L			12/12/22 10:02	1
Chloride (SM 1030E (meq))	**0.51**				meq/L			12/12/22 10:02	1
Sulfate (SM 1030E (meq))	**0.079**				meq/L			12/12/22 10:02	1
Alkalinity (SM 1030E (meq))	**120**				mg/L			12/12/22 10:02	1

Client Sample ID: MW-19A

Date Collected: 11/17/22 10:25
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity (SM 1030E (meq))	2.4				meq/L			12/12/22 10:02	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/12/22 10:02	1
Iron (SM 1030E (meq))	0.0097				meq/L			12/12/22 10:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	18		0.50		mg/L			12/03/22 01:50	1
Sulfate (MCAWW 300.0)	3.8		1.0		mg/L			12/03/22 01:50	1
Ammonia as N (MCAWW 350.1)	0.11		0.030		mg/L			12/08/22 11:56	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			12/09/22 15:32	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			12/06/22 19:59	1
Bicarbonate Alkalinity (SM 2320B)	120		10		mg/L			11/22/22 23:24	1
Total Dissolved Solids (SM 2540C)	160		10		mg/L			11/22/22 13:15	1

Client Sample ID: DUP11172201

Date Collected: 11/17/22 10:30
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-3

Matrix: Water

Method: SW846 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			11/30/22 14:40	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 14:40	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 14:40	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 14:40	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 14:40	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 14:40	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 14:40	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 14:40	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 14:40	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 14:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 14:40	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 14:40	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 14:40	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 14:40	1
2-Hexanone	ND		5.0		ug/L			11/30/22 14:40	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 14:40	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 14:40	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 14:40	1
Acetone	ND		10		ug/L			11/30/22 14:40	1
Benzene	ND		1.0		ug/L			11/30/22 14:40	1
Bromobenzene	ND		1.0		ug/L			11/30/22 14:40	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 14:40	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 14:40	1

Client Sample ID: DUP11172201
Date Collected: 11/17/22 10:30
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND	*1	1.2		ug/L			11/30/22 14:40	1
Bromomethane	ND		2.4		ug/L			11/30/22 14:40	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 14:40	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 14:40	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 14:40	1
Chloroethane	ND		2.0		ug/L			11/30/22 14:40	1
Chloroform	ND		1.0		ug/L			11/30/22 14:40	1
Chloromethane	ND		2.0		ug/L			11/30/22 14:40	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 14:40	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 14:40	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 14:40	1
Dibromomethane	ND		1.0		ug/L			11/30/22 14:40	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 14:40	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 14:40	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 14:40	1
Naphthalene	ND		1.0		ug/L			11/30/22 14:40	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 14:40	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
Styrene	ND	*1	1.0		ug/L			11/30/22 14:40	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 14:40	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 14:40	1
Toluene	ND		1.0		ug/L			11/30/22 14:40	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 14:40	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 14:40	1
Trichloroethene	ND		1.0		ug/L			11/30/22 14:40	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 14:40	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 14:40	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 14:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 14:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 127*		*11/30/22 14:40*	*1*
4-Bromofluorobenzene (Surr)	*93*		*78 - 120*		*11/30/22 14:40*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*11/30/22 14:40*	*1*
Toluene-d8 (Surr)	*113*		*80 - 125*		*11/30/22 14:40*	*1*

Method: SW846 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		11/22/22 11:24	11/22/22 18:37	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*119*		*70 - 130*	*11/22/22 11:24*	*11/22/22 18:37*	*1*

Client Sample ID: DUP11172201

Date Collected: 11/17/22 10:30
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169431-3

Matrix: Water

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31000		500		ug/L		12/02/22 19:28	12/06/22 05:06	1
Iron	180		30		ug/L		12/02/22 19:28	12/06/22 05:06	1
Magnesium	10000		200		ug/L		12/02/22 19:28	12/06/22 05:06	1
Manganese	220		3.0		ug/L		12/02/22 19:28	12/06/22 05:06	1
Potassium	1200		500		ug/L		12/02/22 19:28	12/06/22 05:06	1
Sodium	11000		1000		ug/L		12/02/22 19:28	12/06/22 05:06	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	3.0				meq/L			12/12/22 10:02	1
Total Cations (SM 1030E)	2.9				meq/L			12/12/22 10:02	1
Percent Difference (SM 1030E)	-1.5				%			12/12/22 10:02	1
Calcium (SM 1030E)	31				mg/L			12/12/22 10:02	1
Magnesium (SM 1030E)	10				mg/L			12/12/22 10:02	1
Potassium (SM 1030E)	1.2				mg/L			12/12/22 10:02	1
Sodium (SM 1030E)	11				mg/L			12/12/22 10:02	1
Ammonia as N (SM 1030E)	0.11				mg/L			12/12/22 10:02	1
Chloride (SM 1030E)	18				mg/L			12/12/22 10:02	1
Sulfate (SM 1030E)	3.8				mg/L			12/12/22 10:02	1
Bicarbonate Alkalinity (SM 1030E)	120				mg/L			12/12/22 10:02	1
Alkalinity (SM 1030E)	120				mg/L			12/12/22 10:02	1
Nitrate/Nitrite (SM 1030E)	0.00				mg/L			12/12/22 10:02	1
Anion/Cation Balance (SM 1030E)	-1.5				%			12/12/22 10:02	1
Calculated TDS (SM 1030E)	140				mg/L			12/12/22 10:02	1
TDS Ratio (SM 1030E)	1.1				NONE			12/12/22 10:02	1
Total Dissolved Solids (SM 1030E)	160				mg/L			12/12/22 10:02	1
Iron (SM 1030E)	0.18				mg/L			12/12/22 10:02	1
Calcium (SM 1030E (meq))	1.5				meq/L			12/12/22 10:02	1
Magnesium (SM 1030E (meq))	0.82				meq/L			12/12/22 10:02	1
Potassium (SM 1030E (meq))	0.031				meq/L			12/12/22 10:02	1
Sodium (SM 1030E (meq))	0.48				meq/L			12/12/22 10:02	1
Ammonia as N (SM 1030E (meq))	0.0079				meq/L			12/12/22 10:02	1
Chloride (SM 1030E (meq))	0.51				meq/L			12/12/22 10:02	1
Sulfate (SM 1030E (meq))	0.079				meq/L			12/12/22 10:02	1
Alkalinity (SM 1030E (meq))	120				mg/L			12/12/22 10:02	1
Bicarbonate Alkalinity (SM 1030E (meq))	2.4				meq/L			12/12/22 10:02	1
Nitrate/Nitrite (SM 1030E (meq))	0.00				meq/L			12/12/22 10:02	1
Iron (SM 1030E (meq))	0.0097				meq/L			12/12/22 10:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	18		0.50		mg/L			12/03/22 02:10	1
Sulfate (MCAWW 300.0)	3.8		1.0		mg/L			12/03/22 02:10	1
Ammonia as N (MCAWW 350.1)	0.11		0.030		mg/L			12/08/22 11:58	1
Nitrate/Nitrite (MCAWW 353.2)	ND		0.050		mg/L			12/09/22 15:34	1
Total Organic Carbon - Average (SW846 9060)	ND		1.0		mg/L			12/06/22 20:13	1
Bicarbonate Alkalinity (SM 2320B)	120		10		mg/L			11/22/22 23:30	1
Total Dissolved Solids (SM 2540C)	160		10		mg/L			11/22/22 13:15	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169431-1

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)
280-169431-1	TB03	99	87	102	108
280-169431-2	MW-19A	98	101	101	111
280-169431-3	DUP11172201	98	93	107	113
LCS 280-595025/1002	Lab Control Sample	78	92	93	98
LCSD 280-595025/4	Lab Control Sample Dup	88	89	100	97
MB 280-595025/8	Method Blank	81	91	97	86

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)
280-169431-1	TB03	125
280-169431-2	MW-19A	126
280-169431-3	DUP11172201	119
LCS 280-594402/2-A	Lab Control Sample	121
LCSD 280-594402/3-A	Lab Control Sample Dup	125
MB 280-594402/1-A	Method Blank	124

Surrogate Legend

12DBP = 1,2-Dibromopropane

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

Lab Sample ID: MB 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 09:26	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 09:26	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
2-Hexanone	ND		5.0		ug/L			11/30/22 09:26	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 09:26	1
Acetone	ND		10		ug/L			11/30/22 09:26	1
Benzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromoform	ND		1.2		ug/L			11/30/22 09:26	1
Bromomethane	ND		2.4		ug/L			11/30/22 09:26	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 09:26	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 09:26	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Chloroethane	ND		2.0		ug/L			11/30/22 09:26	1
Chloroform	ND		1.0		ug/L			11/30/22 09:26	1
Chloromethane	ND		2.0		ug/L			11/30/22 09:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Dibromomethane	ND		1.0		ug/L			11/30/22 09:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 09:26	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 09:26	1
Naphthalene	ND		1.0		ug/L			11/30/22 09:26	1

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

Lab Sample ID: MB 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Styrene	ND		1.0		ug/L			11/30/22 09:26	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Toluene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 09:26	1
Trichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 09:26	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 09:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 09:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 127*		*11/30/22 09:26*	*1*
4-Bromofluorobenzene (Surr)	*91*		*78 - 120*		*11/30/22 09:26*	*1*
Dibromofluoromethane (Surr)	*97*		*77 - 120*		*11/30/22 09:26*	*1*
Toluene-d8 (Surr)	*86*		*80 - 125*		*11/30/22 09:26*	*1*

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	25.3		ug/L		101	74 - 121
1,1,1-Trichloroethane	25.0	20.9		ug/L		83	62 - 132
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	72 - 122
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	72 - 128
1,1-Dichloroethane	25.0	22.8		ug/L		91	66 - 130
1,1-Dichloroethene	25.0	23.7		ug/L		95	62 - 130
1,1-Dichloropropene	25.0	21.3		ug/L		85	64 - 133
1,2,3-Trichlorobenzene	25.0	30.4		ug/L		122	70 - 127
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	74 - 123
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		105	73 - 124
1,2,4-Trimethylbenzene	25.0	21.5		ug/L		86	74 - 124
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	77 - 121
1,2-Dichloroethane	25.0	20.7		ug/L		83	61 - 130
1,2-Dichloropropane	25.0	22.1		ug/L		89	68 - 127
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	73 - 127
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	76 - 121
1,3-Dichloropropane	25.0	19.7	*-	ug/L		79	80 - 118
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	76 - 119
2,2-Dichloropropane	25.0	22.4		ug/L		90	57 - 140
2-Butanone (MEK)	100	83.0		ug/L		83	53 - 135

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

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	24.8		ug/L		99	75 - 123
2-Hexanone	100	82.6		ug/L		83	58 - 134
4-Chlorotoluene	25.0	21.9		ug/L		88	74 - 124
4-Isopropyltoluene	25.0	23.8		ug/L		95	74 - 127
4-Methyl-2-pentanone	100	90.8		ug/L		91	56 - 135
Acetone	100	82.2		ug/L		82	50 - 137
Benzene	25.0	23.4		ug/L		93	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	25.7		ug/L		103	71 - 130
Bromodichloromethane	25.0	23.3		ug/L		93	67 - 126
Bromoform	25.0	28.7		ug/L		115	57 - 125
Bromomethane	25.0	21.9		ug/L		87	25 - 163
Carbon disulfide	25.0	24.8		ug/L		99	56 - 128
Carbon tetrachloride	25.0	22.6		ug/L		90	60 - 133
Chlorobenzene	25.0	24.2		ug/L		97	78 - 118
Chloroethane	25.0	21.4		ug/L		86	52 - 144
Chloroform	25.0	21.9		ug/L		88	68 - 128
Chloromethane	25.0	25.3		ug/L		101	43 - 142
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	69 - 126
cis-1,3-Dichloropropene	25.0	21.9		ug/L		88	75 - 120
Dibromochloromethane	25.0	22.4		ug/L		89	71 - 122
Dibromomethane	25.0	23.9		ug/L		96	68 - 129
Dichlorodifluoromethane	25.0	26.8		ug/L		107	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	22.0		ug/L		88	69 - 133
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 127
Methylene Chloride	25.0	26.7		ug/L		107	64 - 128
Naphthalene	25.0	27.9		ug/L		111	63 - 129
n-Butylbenzene	25.0	25.8		ug/L		103	69 - 130
N-Propylbenzene	25.0	23.9		ug/L		96	73 - 127
sec-Butylbenzene	25.0	24.7		ug/L		99	72 - 127
Styrene	25.0	25.8		ug/L		103	79 - 120
tert-Butylbenzene	25.0	22.2		ug/L		89	72 - 126
Tetrachloroethene	25.0	23.8		ug/L		95	72 - 127
Toluene	25.0	23.3		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	66 - 129
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	66 - 127
Trichloroethene	25.0	23.4		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	17.7		ug/L		71	57 - 144
Vinyl chloride	25.0	23.5		ug/L		94	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*
Dibromofluoromethane (Surr)	*93*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

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

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	21.5		ug/L		86	74 - 121	16	20
1,1,1-Trichloroethane			25.0	21.4		ug/L		85	62 - 132	2	20
1,1,2,2-Tetrachloroethane			25.0	27.2		ug/L		109	72 - 122	5	20
1,1,2-Trichloroethane			25.0	23.4		ug/L		94	72 - 128	1	20
1,1-Dichloroethane			25.0	22.0		ug/L		88	66 - 130	4	20
1,1-Dichloroethene			25.0	23.8		ug/L		95	62 - 130	1	21
1,1-Dichloropropene			25.0	21.7		ug/L		87	64 - 133	2	20
1,2,3-Trichlorobenzene			25.0	31.7		ug/L		127	70 - 127	4	20
1,2,3-Trichloropropane			25.0	26.2		ug/L		105	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	25.4		ug/L		102	73 - 124	3	20
1,2,4-Trimethylbenzene			25.0	20.4		ug/L		82	74 - 124	5	20
1,2-Dichlorobenzene			25.0	22.8		ug/L		91	77 - 121	15	20
1,2-Dichloroethane			25.0	19.9		ug/L		80	61 - 130	4	20
1,2-Dichloropropane			25.0	21.3		ug/L		85	68 - 127	4	20
1,3,5-Trimethylbenzene			25.0	20.3		ug/L		81	73 - 127	18	20
1,3-Dichlorobenzene			25.0	22.0		ug/L		88	76 - 121	5	20
1,3-Dichloropropane			25.0	20.9		ug/L		84	80 - 118	6	20
1,4-Dichlorobenzene			25.0	21.5		ug/L		86	76 - 119	9	20
2,2-Dichloropropane			25.0	21.5		ug/L		86	57 - 140	4	22
2-Butanone (MEK)			100	80.8		ug/L		81	53 - 135	3	20
2-Chlorotoluene			25.0	25.0		ug/L		100	75 - 123	1	20
2-Hexanone			100	87.3		ug/L		87	58 - 134	6	21
4-Chlorotoluene			25.0	21.5		ug/L		86	74 - 124	2	20
4-Isopropyltoluene			25.0	21.5		ug/L		86	74 - 127	10	20
4-Methyl-2-pentanone			100	91.8		ug/L		92	56 - 135	1	20
Acetone			100	84.6		ug/L		85	50 - 137	3	21
Benzene			25.0	22.3		ug/L		89	69 - 126	5	20
Bromobenzene			25.0	24.5		ug/L		98	75 - 122	0	20
Bromochloromethane			25.0	24.9		ug/L		100	71 - 130	3	20
Bromodichloromethane			25.0	22.3		ug/L		89	67 - 126	4	20
Bromoform			25.0	23.0	*1	ug/L		92	57 - 125	22	20
Bromomethane			25.0	20.6		ug/L		82	25 - 163	6	40
Carbon disulfide			25.0	23.3		ug/L		93	56 - 128	6	20
Carbon tetrachloride			25.0	23.1		ug/L		93	60 - 133	3	20
Chlorobenzene			25.0	21.3		ug/L		85	78 - 118	13	20
Chloroethane			25.0	21.0		ug/L		84	52 - 144	2	30
Chloroform			25.0	21.9		ug/L		87	68 - 128	0	20
Chloromethane			25.0	20.7		ug/L		83	43 - 142	20	20
cis-1,2-Dichloroethene			25.0	23.4		ug/L		94	69 - 126	5	20
cis-1,3-Dichloropropene			25.0	20.9		ug/L		83	75 - 120	5	20
Dibromochloromethane			25.0	22.8		ug/L		91	71 - 122	2	20
Dibromomethane			25.0	22.5		ug/L		90	68 - 129	6	20
Dichlorodifluoromethane			25.0	24.9		ug/L		100	26 - 152	7	21
Ethylbenzene			25.0	20.8		ug/L		83	76 - 121	18	20
Hexachlorobutadiene			25.0	20.4		ug/L		82	69 - 133	7	20
Isopropylbenzene			25.0	23.4		ug/L		94	70 - 127	4	20
Methylene Chloride			25.0	25.2		ug/L		101	64 - 128	6	20
Naphthalene			25.0	26.8		ug/L		107	63 - 129	4	21

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

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	20.7	*1	ug/L		83	69 - 130	22	20
N-Propylbenzene			25.0	23.2		ug/L		93	73 - 127	3	20
sec-Butylbenzene			25.0	22.3		ug/L		89	72 - 127	10	20
Styrene			25.0	20.8	*1	ug/L		83	79 - 120	22	20
tert-Butylbenzene			25.0	24.3		ug/L		97	72 - 126	9	20
Tetrachloroethene			25.0	21.0		ug/L		84	72 - 127	13	20
Toluene			25.0	23.4		ug/L		94	68 - 127	0	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	66 - 129	6	20
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	66 - 127	0	20
Trichloroethene			25.0	22.2		ug/L		89	70 - 125	5	20
Trichlorofluoromethane			25.0	17.8		ug/L		71	57 - 144	0	28
Vinyl chloride			25.0	20.3		ug/L		81	53 - 141	15	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 127*
4-Bromofluorobenzene (Surr)	*89*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-594402/1-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594402

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.20		ug/L		11/22/22 11:24	11/22/22 15:18	1
1,2-Dibromoethane	ND		0.050		ug/L		11/22/22 11:24	11/22/22 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane	*124*		*70 - 130*	*11/22/22 11:24*	*11/22/22 15:18*	*1*

Lab Sample ID: LCS 280-594402/2-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane			0.250	0.257		ug/L		103	60 - 140
1,2-Dibromoethane			0.250	0.229		ug/L		92	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane	*121*		*70 - 130*

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-594402/3-A
Matrix: Water
Analysis Batch: 594425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 594402

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.250	0.273		ug/L		109	60 - 140	6	10
1,2-Dibromoethane			0.250	0.239		ug/L		95	60 - 140	4	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dibromopropane	*125*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-595232/1-A
Matrix: Water
Analysis Batch: 595725

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595232

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		500		ug/L		12/02/22 19:28	12/06/22 03:04	1
Iron	ND		30		ug/L		12/02/22 19:28	12/06/22 03:04	1
Magnesium	ND		200		ug/L		12/02/22 19:28	12/06/22 03:04	1
Manganese	ND		3.0		ug/L		12/02/22 19:28	12/06/22 03:04	1
Potassium	ND		500		ug/L		12/02/22 19:28	12/06/22 03:04	1
Sodium	ND		1000		ug/L		12/02/22 19:28	12/06/22 03:04	1

Lab Sample ID: LCS 280-595232/2-A
Matrix: Water
Analysis Batch: 595725

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595232

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50000	49900		ug/L		100	90 - 111		
Iron			10000	10100		ug/L		101	89 - 115		
Magnesium			50000	50700		ug/L		101	90 - 113		
Manganese			1000	1020		ug/L		102	90 - 110		
Potassium			50000	47800		ug/L		96	89 - 114		
Sodium			50000	50200		ug/L		100	90 - 115		

Lab Sample ID: LCSD 280-595232/3-A
Matrix: Water
Analysis Batch: 595725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 595232

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium			50000	49000		ug/L		98	90 - 111	2	20
Iron			10000	9910		ug/L		99	89 - 115	2	20
Magnesium			50000	49800		ug/L		100	90 - 113	2	20
Manganese			1000	1000		ug/L		100	90 - 110	2	20
Potassium			50000	47000		ug/L		94	89 - 114	2	20
Sodium			50000	49300		ug/L		99	90 - 115	2	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-169390-B-4-E MS
Matrix: Water
Analysis Batch: 595725

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 595232

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	83000		50000	130000		ug/L		94	48 - 153
Iron	ND		10000	9920		ug/L		99	52 - 155
Magnesium	12000		50000	60600		ug/L		97	62 - 146
Manganese	ND		1000	990		ug/L		99	79 - 121
Potassium	1900		50000	49400		ug/L		95	76 - 132
Sodium	21000		50000	70500		ug/L		98	70 - 203

Lab Sample ID: 280-169390-B-4-F MSD
Matrix: Water
Analysis Batch: 595725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 595232

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	83000		50000	129000		ug/L		92	48 - 153	1	20
Iron	ND		10000	9900		ug/L		99	52 - 155	0	20
Magnesium	12000		50000	60200		ug/L		96	62 - 146	1	20
Manganese	ND		1000	987		ug/L		99	79 - 121	0	20
Potassium	1900		50000	49400		ug/L		95	76 - 132	0	20
Sodium	21000		50000	70300		ug/L		98	70 - 203	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-651985/28
Matrix: Water
Analysis Batch: 651985

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			12/03/22 00:51	1
Sulfate	ND		1.0		mg/L			12/03/22 00:51	1

Lab Sample ID: LCS 480-651985/29
Matrix: Water
Analysis Batch: 651985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.1	49.6		mg/L		99	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: 480-204056-X-2 MS
Matrix: Water
Analysis Batch: 651985

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	5700	F1	5010	8720	F1	mg/L		60	81 - 120
Sulfate	ND		5000	4920		mg/L		98	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-204056-X-2 MSD
Matrix: Water
Analysis Batch: 651985

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	5700	F1	5010	8000	F1	mg/L		46	81 - 120	9	15
Sulfate	ND		5000	4890		mg/L		98	80 - 120	1	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-596110/56
Matrix: Water
Analysis Batch: 596110

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			12/08/22 11:34	1

Lab Sample ID: LCS 280-596110/54
Matrix: Water
Analysis Batch: 596110

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	2.57		mg/L		103	90 - 110

Lab Sample ID: LCSD 280-596110/55
Matrix: Water
Analysis Batch: 596110

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: 280-169425-A-1 MS
Matrix: Water
Analysis Batch: 596110

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	1.08		mg/L		108	90 - 110

Lab Sample ID: 280-169425-A-1 MSD
Matrix: Water
Analysis Batch: 596110

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	1.09		mg/L		109	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-596249/22
Matrix: Water
Analysis Batch: 596249

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			12/09/22 14:48	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-596249/21
Matrix: Water
Analysis Batch: 596249

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	5.10		mg/L		102	90 - 110

Lab Sample ID: 280-169398-C-1 MS
Matrix: Water
Analysis Batch: 596249

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	4.35		mg/L		99	90 - 110

Lab Sample ID: 280-169398-C-1 MSD
Matrix: Water
Analysis Batch: 596249

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	4.54		mg/L		104	90 - 110	4	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-595843/22
Matrix: Water
Analysis Batch: 595843

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			12/06/22 22:43	1

Lab Sample ID: MB 280-595843/4
Matrix: Water
Analysis Batch: 595843

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			12/06/22 18:18	1

Lab Sample ID: LCS 280-595843/20
Matrix: Water
Analysis Batch: 595843

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	25.4		mg/L		102	88 - 112

Lab Sample ID: LCS 280-595843/3
Matrix: Water
Analysis Batch: 595843

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	26.8		mg/L		107	88 - 112

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCSD 280-595843/21
Matrix: Water
Analysis Batch: 595843

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 Organic Carbon - Average			25.0	25.2		mg/L		101	88 - 112	1	15

Lab Sample ID: 280-169398-C-1 MS
Matrix: Water
Analysis Batch: 595843

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		102	88 - 112		

Lab Sample ID: 280-169398-C-1 MSD
Matrix: Water
Analysis Batch: 595843

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	26.1		mg/L		103	88 - 112	0	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-596353/1
Matrix: Water
Analysis Batch: 596353

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			12/12/22 10:02	1
Magnesium	0.000				meq/L			12/12/22 10:02	1
Potassium	0.000				meq/L			12/12/22 10:02	1
Sodium	0.000				meq/L			12/12/22 10:02	1
Ammonia as N	0.000				meq/L			12/12/22 10:02	1
Chloride	0.000				meq/L			12/12/22 10:02	1
Sulfate	0.000				meq/L			12/12/22 10:02	1
Alkalinity	0.000				mg/L			12/12/22 10:02	1
Bicarbonate Alkalinity	0.000				meq/L			12/12/22 10:02	1
Nitrate/Nitrite	0.000				meq/L			12/12/22 10:02	1
Iron	0.000				meq/L			12/12/22 10:02	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-594522/84
Matrix: Water
Analysis Batch: 594522

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			11/22/22 21:35	1

Lab Sample ID: 280-169394-B-2 DU
Matrix: Water
Analysis Batch: 594522

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bicarbonate Alkalinity	490			488		mg/L				0.1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-594436/1
Matrix: Water
Analysis Batch: 594436

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			11/22/22 13:15	1

Lab Sample ID: LCS 280-594436/2
Matrix: Water
Analysis Batch: 594436

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	472		mg/L		94	88 - 114		

Lab Sample ID: 280-169367-A-9 DU
Matrix: Water
Analysis Batch: 594436

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	130			133		mg/L				2	10

GC/MS VOA

Analysis Batch: 595025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-1	TB03	Total/NA	Water	8260B	
280-169431-2	MW-19A	Total/NA	Water	8260B	
280-169431-3	DUP11172201	Total/NA	Water	8260B	
MB 280-595025/8	Method Blank	Total/NA	Water	8260B	
LCS 280-595025/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-595025/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC Semi VOA

Prep Batch: 594402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-1	TB03	Total/NA	Water	8011	
280-169431-2	MW-19A	Total/NA	Water	8011	
280-169431-3	DUP11172201	Total/NA	Water	8011	
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 594425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-1	TB03	Total/NA	Water	8011	594402
280-169431-2	MW-19A	Total/NA	Water	8011	594402
280-169431-3	DUP11172201	Total/NA	Water	8011	594402
MB 280-594402/1-A	Method Blank	Total/NA	Water	8011	594402
LCS 280-594402/2-A	Lab Control Sample	Total/NA	Water	8011	594402
LCSD 280-594402/3-A	Lab Control Sample Dup	Total/NA	Water	8011	594402

Metals

Prep Batch: 595232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Dissolved	Water	3005A	
280-169431-3	DUP11172201	Dissolved	Water	3005A	
MB 280-595232/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-595232/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 280-595232/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
280-169390-B-4-E MS	Matrix Spike	Dissolved	Water	3005A	
280-169390-B-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 595725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Dissolved	Water	6010B	595232
280-169431-3	DUP11172201	Dissolved	Water	6010B	595232
MB 280-595232/1-A	Method Blank	Total Recoverable	Water	6010B	595232
LCS 280-595232/2-A	Lab Control Sample	Total Recoverable	Water	6010B	595232
LCSD 280-595232/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	595232
280-169390-B-4-E MS	Matrix Spike	Dissolved	Water	6010B	595232
280-169390-B-4-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	595232

General Chemistry

Analysis Batch: 594436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	SM 2540C	
280-169431-3	DUP11172201	Total/NA	Water	SM 2540C	
MB 280-594436/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594436/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-169367-A-9 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 594522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	SM 2320B	
280-169431-3	DUP11172201	Total/NA	Water	SM 2320B	
MB 280-594522/84	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-594522/83	Lab Control Sample	Total/NA	Water	SM 2320B	
280-169394-B-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 595843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	9060	
280-169431-3	DUP11172201	Total/NA	Water	9060	
MB 280-595843/22	Method Blank	Total/NA	Water	9060	
MB 280-595843/4	Method Blank	Total/NA	Water	9060	
LCS 280-595843/20	Lab Control Sample	Total/NA	Water	9060	
LCS 280-595843/3	Lab Control Sample	Total/NA	Water	9060	
LCSD 280-595843/21	Lab Control Sample Dup	Total/NA	Water	9060	
280-169398-C-1 MS	Matrix Spike	Total/NA	Water	9060	
280-169398-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 596110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	350.1	
280-169431-3	DUP11172201	Total/NA	Water	350.1	
MB 280-596110/56	Method Blank	Total/NA	Water	350.1	
LCS 280-596110/54	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-596110/55	Lab Control Sample Dup	Total/NA	Water	350.1	
280-169425-A-1 MS	Matrix Spike	Total/NA	Water	350.1	
280-169425-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 596249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	353.2	
280-169431-3	DUP11172201	Total/NA	Water	353.2	
MB 280-596249/22	Method Blank	Total/NA	Water	353.2	
LCS 280-596249/21	Lab Control Sample	Total/NA	Water	353.2	
280-169398-C-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-169398-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 596353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	SM 1030E	
280-169431-2	MW-19A	Total/NA	Water	SM 1030E (meq)	
280-169431-3	DUP11172201	Total/NA	Water	SM 1030E	
280-169431-3	DUP11172201	Total/NA	Water	SM 1030E (meq)	

General Chemistry (Continued)

Analysis Batch: 596353 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-596353/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 651985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169431-2	MW-19A	Total/NA	Water	300.0	
280-169431-3	DUP11172201	Total/NA	Water	300.0	
MB 480-651985/28	Method Blank	Total/NA	Water	300.0	
LCS 480-651985/29	Lab Control Sample	Total/NA	Water	300.0	
480-204056-X-2 MS	Matrix Spike	Total/NA	Water	300.0	
480-204056-X-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Waste Management
Job ID: 280-169431-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB03
Lab Sample ID: 280-169431-1
Date Collected: 11/17/22 07:00
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 11:11	MD	EET DEN
Total/NA	Prep	8011			34.9 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 17:47	ECM	EET DEN

Client Sample ID: MW-19A
Lab Sample ID: 280-169431-2
Date Collected: 11/17/22 10:25
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 14:19	MD	EET DEN
Total/NA	Prep	8011			35.8 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 18:12	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	595232	12/02/22 19:28	LJS	EET DEN
Dissolved	Analysis	6010B		1			595725	12/06/22 05:02	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/03/22 01:50	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596110	12/08/22 11:56	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	596249	12/09/22 15:32	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595843	12/06/22 19:59	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596353	12/12/22 10:02	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596353	12/12/22 10:02	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594522	11/22/22 23:24	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594436	11/22/22 13:15	ASP	EET DEN

Client Sample ID: DUP11172201
Lab Sample ID: 280-169431-3
Date Collected: 11/17/22 10:30
Matrix: Water
Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 14:40	MD	EET DEN
Total/NA	Prep	8011			35.5 mL	35 mL	594402	11/22/22 11:24	ECM	EET DEN
Total/NA	Analysis	8011		1	35 mL	35 mL	594425	11/22/22 18:37	ECM	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	595232	12/02/22 19:28	LJS	EET DEN
Dissolved	Analysis	6010B		1			595725	12/06/22 05:06	KRP	EET DEN
Total/NA	Analysis	300.0		1	1 mL	1 mL	651985	12/03/22 02:10	IMZ	EET BUF
Total/NA	Analysis	350.1		1	10 mL	10 mL	596110	12/08/22 11:58	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	596249	12/09/22 15:34	ZPM	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	595843	12/06/22 20:13	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596353	12/12/22 10:02	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596353	12/12/22 10:02	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594522	11/22/22 23:30	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	594436	11/22/22 13:15	ASP	EET DEN

Lab Chronicle

Client: Waste Management
Job ID: 280-169431-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Edan Tinsley	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124177-865.1
Client Contact:	Phone: 503-502-7027	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Detection Wells - Apr Oct			
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 - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, 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)	2540/350.1- TDS/Alk	6010B- Dissolved Metals (FF)	Ammonia/TOC/NO3+NO2	8260B- VOCs	8011- EDB/DBCP	Cation/Anion Balance	300.0- Chloride/Sulfate (TA Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	R		N		
TB03	11/17/22	0700	G	W						X	X			4	
MW-19A	11/17/22	1025	G	W	X		X	X	X	X	X	X	X	10	
Dup 11172201	11/17/22	1030	G	W	X		X	X	X	X	X	X	X	10	

280-169431 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		11/18/22 @ 1630	S&S		11/19/22 0920	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.: 1073454	Cooler Temperature(s) °C and Other Remarks: 0.1°C IR12 CF20

Ver: 01/16/2019

280-169431 Waybill

8172530534 89

8172530534 89

Keep this liner for your records.

Do Not Lift Using This Tag

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S. Saturday delivery available.

1 From *See optional release signature below.*

ORDER: 00863049

DECLARED VALUE $100

PACKAGE WEIGHT

( ) ___ ___

2 To *Shipment will not be accepted if address below is altered.*

SAMPLE RECEIVING
EUROFINS TESTAMERICA.
4955 YARROW ST
ARVADA, CO 80002
(303) 736-0100

0.6°C

1073454

FedEx Priority Overnight

Next business morning by 10:30 a.m. Not available to all locations. Please consult the current FedEx Service Guide for specific commitments.

NONREDEEMABLE

Please see back for declared value information and important terms and conditions.

SATURDAY DELIVERY

Shipments tendered on Friday are delivered on Saturday to most locations.

REF:

8172 5305 3489

this document. Hold at an angle to view.

Release Signature

For nonresidential deliveries

For FedEx Use Only

ORIGIN ID:BNOA

SHIP DATE: 18NOV22
ACTWGT: 44.50 LB
CAD: /SSFE2341
DIMS: 27x13x12 IN

TO EUROFINS DENVER
EUROFINS DENVER
4955 YARROW ST

ARVADA CO 80002 (US)

(303) 736-0100

INV:
PO:
REF:
DEPT:

FedEx Express

J22422210180UV

SATURDAY 12:00P

TRK# 8172 5305 3489

Part # 156297-4334 RRD 05/23

Eurofins Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-637053.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Oregon		Job #: 280-169431-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/12/2022			
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, 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, Y - Trizma, 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-19A (280-169431-2)	11/17/22	10:25 Pacific		Water			X	1	
DUP11172201 (280-169431-3)	11/17/22	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: 11/21/22 13:40	Company ETADEN	Received by:	Date/Time: 11/23/22 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: 2.7# ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-169431-1

Login Number: 169431
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.	False	Refer to job narrative for details
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to job narrative for details
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: 280-169431-1

Login Number: 169431
List Number: 2
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 11/23/22 11:37 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 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	

Fall 2022

Leachate Pond and Leachate Pond LDS Liquids

Laboratory Analytical Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. William V Hickey, PMP
Waste Management
7227 NE 55th Avenue
Portland, Oregon 97218

Generated 1/9/2023 10:59:35 AM

JOB DESCRIPTION

1003|Riverbend Landfill SCS Engineers
Semiannual Leachate Lagoon - Apr Nov

JOB NUMBER

280-169433-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

myEOL

Job Notes

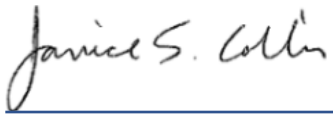
The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be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

The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Waste Management
Job ID: 280-169433-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD 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.

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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate 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: 280-169433-1

Laboratory: Eurofins Denver

Narrative

CASE NARRATIVE

Client: Waste Management

Project: 1003|Riverbend Landfill SCS Engineers

Report Number: 280-169433-1

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.

RECEIPT

The samples were received on 11/19/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.5º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB04 (280-169433-1), LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/30/2022.

1,3-Dichloropropane failed the recovery criteria low for LCS 280-595025/1002, 1,3-Dichloropropane (80%-118%) at 79%. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported. The results were non-detect for this compound.

1,2-Dibromo-3-Chloropropane failed the recovery criteria high, 1,2-Dibromo-3-Chloropropane (58%-122%) at 129%. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Bromoform, n-Butylbenzene and Styrene exceeded the RPD limit for LCSD 280-595025/4 at (20%) for the following analytes: Bromoform, n-Butylbenzene, and Styrene all at 22%. The associated samples were non-detect for the affected analytes and within recovery limits in the LCS and LCSD.

Samples LPOND LDS (280-169433-2)[4X] and LEACH POND (280-169433-3)[4X] required dilution prior to analysis diluted due to the nature of the sample matrix. The reporting limits have been adjusted accordingly. Elevated reporting limits (RLs) are provided. The samples was analyzed at a 4x dilution to prevent instrument contamination and the chromatogram shows a large non-target peak present.

In analytical batch 280-595025 for Method 8260, the following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria (pH<2) with a pH of 3 and 6 for samples 169433-2 and 3, respectively, when verified by the laboratory. The samples were analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: LPOND LDS (280-169433-2) and LEACH POND (280-169433-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS

Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for dissolved metals in accordance with EPA

Job ID: 280-169433-1 (Continued)

Laboratory: Eurofins Denver (Continued)

SW-846 Method 6010B. The samples were prepared on 12/02/2022 and 12/06/2022 and analyzed on 12/05/2022 and 12/07/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total recoverable metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 12/02/2022 and analyzed on 12/05/2022.

The method blank for preparation batch 280-595224 and analytical batch 280-595656 contained Fe above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank the result has been flagged.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total recoverable metals in accordance with EPA SW-846 Method 6020. The samples were prepared on 12/05/2022 and analyzed on 12/06/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/23/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HARDNESS
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for hardness in accordance with SM20 2340C. The samples were analyzed on 12/06/2022.

Hardness, as CaCO3 failed the recovery criteria high for the MS of sample 280-169706-3 in batch 280-595723. Hardness, as CaCO3 failed the recovery criteria high for the MSD of sample 280-169706-3 in batch 280-595723. Sample matrix interference is suspected because the associated laboratory control sample and laboratory control sample duplicate (LCS/LCSD) recovery is within acceptance limits.

Samples LPOND LDS (280-169433-2)[5X] and LEACH POND (280-169433-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL SUSPENDED SOLIDS
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total suspended solids in accordance with SM20 2540D. The samples were analyzed on 11/21/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for anions (28 days) in accordance with EPA Method 300.0 (28 Days). The samples were analyzed on 12/09/2022.

Job ID: 280-169433-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 12/13/2022.

The following sample was positive for residual chlorine detection: LEACH POND (280-169433-3). The sample was treated with Sodium Thiosulfate per standard operating procedures for this method. The sample was analyzed after the chlorine interference was removed.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL KJELDAHL NITROGEN
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 12/01/2022 and analyzed on 12/03/2022 and 12/05/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 12/09/2022 and 12/14/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were analyzed on 11/29/2022.

Chemical Oxygen Demand (COD) failed the recovery criteria low for the MS of sample 280-169553-1 in batch 280-594928. Chemical Oxygen Demand (COD) failed the recovery criteria low for the MSD of sample 280-169553-1 in batch 280-594928.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9040B. The samples were analyzed on 11/22/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for specific conductivity in accordance with SW846 9050A. The samples were analyzed on 11/28/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL ORGANIC CARBON
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 12/06/2022 and 12/07/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE
Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for Cation Anion Balance in accordance with epa methodologies. The samples were analyzed on 12/14/2022.

Job ID: 280-169433-1 (Continued)

Laboratory: Eurofins Denver (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE

Samples LPOND LDS (280-169433-2) and LEACH POND (280-169433-3) were analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 12/14/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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: 280-169433-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Client Sample ID: TB04 — Lab Sample ID: 280-169433-1

No Detections.

Client Sample ID: LPOND LDS — Lab Sample ID: 280-169433-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	4.1		1.4		ug/L	4		8260B	Total/NA
Silicon	20000		100		ug/L	1		6010B	Total Recoverable
Zinc	27		26		ug/L	1		6010B	Total Recoverable
Calcium	37000		500		ug/L	1		6010B	Dissolved
Iron	14000	B	30		ug/L	1		6010B	Dissolved
Magnesium	46000		200		ug/L	1		6010B	Dissolved
Manganese	1500		3.0		ug/L	1		6010B	Dissolved
Potassium	160000		500		ug/L	1		6010B	Dissolved
Sodium	770000		1000		ug/L	1		6010B	Dissolved
Antimony	9.4		0.60		ug/L	1		6020	Total Recoverable
Arsenic	40		1.0		ug/L	1		6020	Total Recoverable
Barium	180		1.0		ug/L	1		6020	Total Recoverable
Chromium	93		2.0		ug/L	1		6020	Total Recoverable
Cobalt	32		0.20		ug/L	1		6020	Total Recoverable
Copper	26		1.0		ug/L	1		6020	Total Recoverable
Lead	2.8		0.50		ug/L	1		6020	Total Recoverable
Nickel	82		1.0		ug/L	1		6020	Total Recoverable
Selenium	1.0		1.0		ug/L	1		6020	Total Recoverable
Vanadium	85		3.0		ug/L	1		6020	Total Recoverable
Chloride	1000		20		mg/L	20		300.0	Total/NA
Sulfate	130		21		mg/L	20		300.0	Total/NA
Ammonia as N	120		0.73		mg/L	25		350.1	Total/NA
Total Kjeldahl Nitrogen	130		17		mg/L	5		351.2	Total/NA
Nitrate Nitrite as N	2.7		0.10		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand (COD)	530		170		mg/L	20		410.4	Total/NA
pH adj. to 25 deg C	7.3	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	5100		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	170		1.7		mg/L	5		9060	Total/NA
Total Anions	53				meq/L	1		SM 1030E	Total/NA
Total Cations	53				meq/L	1		SM 1030E	Total/NA
Percent Difference	-0.52				%	1		SM 1030E	Total/NA
Calcium	37				mg/L	1		SM 1030E	Total/NA
Magnesium	46				mg/L	1		SM 1030E	Total/NA
Potassium	160				mg/L	1		SM 1030E	Total/NA
Sodium	770				mg/L	1		SM 1030E	Total/NA
Ammonia as N	120				mg/L	1		SM 1030E	Total/NA
Chloride	1000				mg/L	1		SM 1030E	Total/NA
Sulfate	130				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				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: 280-169433-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity	1100				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	1100				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	2.7				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-0.52				%	1		SM 1030E	Total/NA
Calculated TDS	2800				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.96				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2700				mg/L	1		SM 1030E	Total/NA
Iron	14				mg/L	1		SM 1030E	Total/NA
Calcium	1.8				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	3.8				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	4.1				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	33				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.75				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	8.6				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	28				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	2.7				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	0.19				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	560		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2700		19		mg/L	1		SM 2540C	Total/NA

Client Sample ID: LEACH POND — Lab Sample ID: 280-169433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	4.2		1.4		ug/L	4		8260B	Total/NA
Silicon	24000		100		ug/L	1		6010B	Total Recoverable
Zinc	30		26		ug/L	1		6010B	Total Recoverable
Calcium	69000		500		ug/L	1		6010B	Dissolved
Iron	3700		30		ug/L	1		6010B	Dissolved
Magnesium	88000		200		ug/L	1		6010B	Dissolved
Manganese	680		3.0		ug/L	1		6010B	Dissolved
Potassium	370000		500		ug/L	1		6010B	Dissolved
Sodium	1400000		1000		ug/L	1		6010B	Dissolved
Antimony	20		0.60		ug/L	1		6020	Total Recoverable
Arsenic	170		1.0		ug/L	1		6020	Total Recoverable
Barium	290		1.0		ug/L	1		6020	Total Recoverable
Chromium	140		2.0		ug/L	1		6020	Total Recoverable
Cobalt	32		0.20		ug/L	1		6020	Total Recoverable
Lead	1.7		0.50		ug/L	1		6020	Total Recoverable
Nickel	84		1.0		ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: LEACH POND (Continued)

Lab Sample ID: 280-169433-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	94		3.0		ug/L	1		6020	Total Recoverable
Chloride	1900		51		mg/L	50		300.0	Total/NA
Sulfate	84		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	300		2.3		mg/L	80		350.1	Total/NA
Total Kjeldahl Nitrogen	320		34		mg/L	10		351.2	Total/NA
Nitrate Nitrite as N	47		4.4		mg/L	100		353.2	Total/NA
Chemical Oxygen Demand (COD)	1700		430		mg/L	50		410.4	Total/NA
pH adj. to 25 deg C	8.3	HF	0.1		SU	1		9040B	Total/NA
Specific Conductance	9500		2.0		umhos/cm	1		9050A	Total/NA
Total Organic Carbon - Average	310		6.9		mg/L	20		9060	Total/NA
Total Anions	110				meq/L	1		SM 1030E	Total/NA
Total Cations	100				meq/L	1		SM 1030E	Total/NA
Percent Difference	-1.9				%	1		SM 1030E	Total/NA
Calcium	69				mg/L	1		SM 1030E	Total/NA
Magnesium	88				mg/L	1		SM 1030E	Total/NA
Potassium	370				mg/L	1		SM 1030E	Total/NA
Sodium	1400				mg/L	1		SM 1030E	Total/NA
Ammonia as N	300				mg/L	1		SM 1030E	Total/NA
Chloride	1900				mg/L	1		SM 1030E	Total/NA
Sulfate	84				mg/L	1		SM 1030E	Total/NA
Carbonate Alkalinity	0.00				mg/L	1		SM 1030E	Total/NA
Bicarbonate Alkalinity	2400				mg/L	1		SM 1030E	Total/NA
Total Alkalinity	2400				mg/L	1		SM 1030E	Total/NA
Nitrate/Nitrite	47				mg/L	1		SM 1030E	Total/NA
Anion/Cation Balance	-1.9				%	1		SM 1030E	Total/NA
Calculated TDS	5600				mg/L	1		SM 1030E	Total/NA
TDS Ratio	0.45				NONE	1		SM 1030E	Total/NA
Total Dissolved Solids	2500				mg/L	1		SM 1030E	Total/NA
Iron	3.7				mg/L	1		SM 1030E	Total/NA
Calcium	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Magnesium	7.2				meq/L	1		SM 1030E (meq)	Total/NA
Potassium	9.5				meq/L	1		SM 1030E (meq)	Total/NA
Sodium	61				meq/L	1		SM 1030E (meq)	Total/NA
Iron	0.20				meq/L	1		SM 1030E (meq)	Total/NA
Ammonia	21				meq/L	1		SM 1030E (meq)	Total/NA
Chloride	54				meq/L	1		SM 1030E (meq)	Total/NA
Sulfate	1.7				meq/L	1		SM 1030E (meq)	Total/NA
Nitrate Nitrite as N	3.4				meq/L	1		SM 1030E (meq)	Total/NA
Alkalinity	48				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	48				meq/L	1		SM 1030E (meq)	Total/NA
Total Alkalinity	2400		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	2400		10		mg/L	1		SM 2320B	Total/NA
Hardness, as CaCO3	730		3.0		mg/L	5		SM 2340C	Total/NA
Total Dissolved Solids	2500		47		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	25		4.0		mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Waste Management
Job ID: 280-169433-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-169433-1	TB04	Water	11/17/22 07:00	11/19/22 09:20
280-169433-2	LPOND LDS	Water	11/17/22 13:10	11/19/22 09:20
280-169433-3	LEACH POND	Water	11/17/22 13:40	11/19/22 09:20

Method Summary

Client: Waste Management
Job ID: 280-169433-1
Project/Site: 1003|Riverbend Landfill SCS Engineers

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
6010B	Metals (ICP)	SW846	EET DEN
6020	Metals (ICP/MS)	SW846	EET DEN
300.0	Anions, Ion Chromatography	MCAWW	EET DEN
350.1	Nitrogen, Ammonia	MCAWW	EET DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
410.4	COD	MCAWW	EET DEN
9040B	pH	SW846	EET DEN
9050A	Specific Conductance	SW846	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 1030E	Cation Anion Balance	SM	EET DEN
SM 1030E (meq)	Cation Anion Balance	SM	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
SM 2340C	Hardness, Total (mg/l as CaC03)	SM	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET DEN
SM 2540D	Solids, Total Suspended (TSS)	SM	EET DEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

Client Sample ID: TB04
Date Collected: 11/17/22 07:00
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-1
Matrix: Water

Method: SW846 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			11/30/22 09:47	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 09:47	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 09:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 09:47	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 09:47	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 09:47	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 09:47	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 09:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,2-Dibromo-3-Chloropropane	ND	*+	5.0		ug/L			11/30/22 09:47	1
1,2-Dibromoethane	ND		1.0		ug/L			11/30/22 09:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 09:47	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 09:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
1,3-Dichloropropane	ND	*-	1.0		ug/L			11/30/22 09:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 09:47	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 09:47	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:47	1
2-Hexanone	ND		5.0		ug/L			11/30/22 09:47	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:47	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 09:47	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 09:47	1
Acetone	ND		10		ug/L			11/30/22 09:47	1
Benzene	ND		1.0		ug/L			11/30/22 09:47	1
Bromobenzene	ND		1.0		ug/L			11/30/22 09:47	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 09:47	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 09:47	1
Bromoform	ND	*1	1.2		ug/L			11/30/22 09:47	1
Bromomethane	ND		2.4		ug/L			11/30/22 09:47	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 09:47	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 09:47	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 09:47	1
Chloroethane	ND		2.0		ug/L			11/30/22 09:47	1
Chloroform	ND		1.0		ug/L			11/30/22 09:47	1
Chloromethane	ND		2.0		ug/L			11/30/22 09:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:47	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 09:47	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 09:47	1
Dibromomethane	ND		1.0		ug/L			11/30/22 09:47	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 09:47	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 09:47	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
Methylene Chloride	ND		5.0		ug/L			11/30/22 09:47	1

Client Sample ID: TB04

Date Collected: 11/17/22 07:00
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-1

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			11/30/22 09:47	1
n-Butylbenzene	ND	*1	1.0		ug/L			11/30/22 09:47	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
Styrene	ND	*1	1.0		ug/L			11/30/22 09:47	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 09:47	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 09:47	1
Toluene	ND		1.0		ug/L			11/30/22 09:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:47	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 09:47	1
Trichloroethene	ND		1.0		ug/L			11/30/22 09:47	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 09:47	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 09:47	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 09:47	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 09:47*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 127*		*11/30/22 09:47*	*1*
4-Bromofluorobenzene (Surr)	*104*		*78 - 120*		*11/30/22 09:47*	*1*
Dibromofluoromethane (Surr)	*107*		*77 - 120*		*11/30/22 09:47*	*1*
Toluene-d8 (Surr)	*107*		*80 - 125*		*11/30/22 09:47*	*1*

Client Sample ID: LPOND LDS

Date Collected: 11/17/22 13:10
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.3		ug/L			11/30/22 11:52	4
1,1,1-Trichloroethane	ND		1.6		ug/L			11/30/22 11:52	4
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 11:52	4
1,1,2-Trichloroethane	ND		1.1		ug/L			11/30/22 11:52	4
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 11:52	4
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 11:52	4
1,1-Dichloropropene	ND		1.7		ug/L			11/30/22 11:52	4
1,2,3-Trichlorobenzene	ND		2.8		ug/L			11/30/22 11:52	4
1,2,3-Trichloropropane	ND		3.4		ug/L			11/30/22 11:52	4
1,2,4-Trichlorobenzene	ND		2.3		ug/L			11/30/22 11:52	4
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 11:52	4
1,2-Dibromo-3-Chloropropane	ND	*+	7.1		ug/L			11/30/22 11:52	4
1,2-Dibromoethane	ND		1.6		ug/L			11/30/22 11:52	4
1,2-Dichlorobenzene	ND		1.5		ug/L			11/30/22 11:52	4
1,2-Dichloroethane	ND		2.2		ug/L			11/30/22 11:52	4
1,2-Dichloropropane	ND		2.1		ug/L			11/30/22 11:52	4
1,3,5-Trimethylbenzene	ND		1.5		ug/L			11/30/22 11:52	4
1,3-Dichlorobenzene	ND		1.3		ug/L			11/30/22 11:52	4
1,3-Dichloropropane	ND	*-	1.5		ug/L			11/30/22 11:52	4
1,4-Dichlorobenzene	ND		1.6		ug/L			11/30/22 11:52	4

Client Sample ID: LPOND LDS
Date Collected: 11/17/22 13:10
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-2
Matrix: Water

Method: SW846 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			11/30/22 11:52	4
2-Butanone (MEK)	ND		24		ug/L			11/30/22 11:52	4
2-Chlorotoluene	ND		1.4		ug/L			11/30/22 11:52	4
2-Hexanone	ND		6.8		ug/L			11/30/22 11:52	4
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 11:52	4
4-Isopropyltoluene	ND		1.7		ug/L			11/30/22 11:52	4
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 11:52	4
Acetone	ND		26		ug/L			11/30/22 11:52	4
Benzene	ND		1.2		ug/L			11/30/22 11:52	4
Bromobenzene	ND		1.6		ug/L			11/30/22 11:52	4
Bromochloromethane	ND		1.6		ug/L			11/30/22 11:52	4
Bromodichloromethane	ND		1.5		ug/L			11/30/22 11:52	4
Bromoform	ND	*1	4.8		ug/L			11/30/22 11:52	4
Bromomethane	ND		9.4		ug/L			11/30/22 11:52	4
Carbon disulfide	ND		2.5		ug/L			11/30/22 11:52	4
Carbon tetrachloride	ND		2.3		ug/L			11/30/22 11:52	4
Chlorobenzene	ND		1.7		ug/L			11/30/22 11:52	4
Chloroethane	ND		5.5		ug/L			11/30/22 11:52	4
Chloroform	**4.1**		1.4		ug/L			11/30/22 11:52	4
Chloromethane	ND		3.0		ug/L			11/30/22 11:52	4
cis-1,2-Dichloroethene	ND		1.3		ug/L			11/30/22 11:52	4
cis-1,3-Dichloropropene	ND		2.5		ug/L			11/30/22 11:52	4
Dibromochloromethane	ND		2.5		ug/L			11/30/22 11:52	4
Dibromomethane	ND		1.4		ug/L			11/30/22 11:52	4
Dichlorodifluoromethane	ND		3.8		ug/L			11/30/22 11:52	4
Ethylbenzene	ND		1.2		ug/L			11/30/22 11:52	4
Hexachlorobutadiene	ND		4.7		ug/L			11/30/22 11:52	4
Isopropylbenzene	ND		1.5		ug/L			11/30/22 11:52	4
Methylene Chloride	ND		5.0		ug/L			11/30/22 11:52	4
Naphthalene	ND		2.5		ug/L			11/30/22 11:52	4
n-Butylbenzene	ND	*1	1.9		ug/L			11/30/22 11:52	4
N-Propylbenzene	ND		2.1		ug/L			11/30/22 11:52	4
sec-Butylbenzene	ND		1.8		ug/L			11/30/22 11:52	4
Styrene	ND	*1	1.4		ug/L			11/30/22 11:52	4
tert-Butylbenzene	ND		1.7		ug/L			11/30/22 11:52	4
Tetrachloroethene	ND		1.6		ug/L			11/30/22 11:52	4
Toluene	ND		1.3		ug/L			11/30/22 11:52	4
trans-1,2-Dichloroethene	ND		1.5		ug/L			11/30/22 11:52	4
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 11:52	4
Trichloroethene	ND		1.2		ug/L			11/30/22 11:52	4
Trichlorofluoromethane	ND		2.3		ug/L			11/30/22 11:52	4
Vinyl chloride	ND		2.0		ug/L			11/30/22 11:52	4
Xylenes (total)	ND		2.0		ug/L			11/30/22 11:52	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 11:52*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*11/30/22 11:52*	*4*
4-Bromofluorobenzene (Surr)	*101*		*78 - 120*		*11/30/22 11:52*	*4*

Client Sample ID: LPOND LDS

Date Collected: 11/17/22 13:10
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*77 - 120*		*11/30/22 11:52*	*4*
Toluene-d8 (Surr)	*85*		*80 - 125*		*11/30/22 11:52*	*4*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**20000**		100		ug/L		12/02/22 19:26	12/05/22 22:41	1
Silver	ND		3.0		ug/L		12/02/22 19:26	12/05/22 22:41	1
Zinc	**27**		26		ug/L		12/02/22 19:26	12/05/22 22:41	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**37000**		500		ug/L		12/02/22 19:26	12/05/22 23:16	1
Iron	**14000**	**B**	30		ug/L		12/02/22 19:26	12/05/22 23:16	1
Magnesium	**46000**		200		ug/L		12/02/22 19:26	12/05/22 23:16	1
Manganese	**1500**		3.0		ug/L		12/02/22 19:26	12/05/22 23:16	1
Potassium	**160000**		500		ug/L		12/02/22 19:26	12/05/22 23:16	1
Sodium	**770000**		1000		ug/L		12/02/22 19:26	12/05/22 23:16	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**9.4**		0.60		ug/L		12/05/22 08:47	12/06/22 23:19	1
Arsenic	**40**		1.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Barium	**180**		1.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Beryllium	ND		0.40		ug/L		12/05/22 08:47	12/06/22 23:19	1
Cadmium	ND		0.30		ug/L		12/05/22 08:47	12/06/22 23:19	1
Chromium	**93**		2.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Cobalt	**32**		0.20		ug/L		12/05/22 08:47	12/06/22 23:19	1
Copper	**26**		1.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Lead	**2.8**		0.50		ug/L		12/05/22 08:47	12/06/22 23:19	1
Nickel	**82**		1.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Selenium	**1.0**		1.0		ug/L		12/05/22 08:47	12/06/22 23:19	1
Thallium	ND		0.20		ug/L		12/05/22 08:47	12/06/22 23:19	1
Vanadium	**85**		3.0		ug/L		12/05/22 08:47	12/06/22 23:19	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	**53**				meq/L			12/14/22 13:59	1
Total Cations (SM 1030E)	**53**				meq/L			12/14/22 13:59	1
Percent Difference (SM 1030E)	**-0.52**				%			12/14/22 13:59	1
Calcium (SM 1030E)	**37**				mg/L			12/14/22 13:59	1
Magnesium (SM 1030E)	**46**				mg/L			12/14/22 13:59	1
Potassium (SM 1030E)	**160**				mg/L			12/14/22 13:59	1
Sodium (SM 1030E)	**770**				mg/L			12/14/22 13:59	1
Ammonia as N (SM 1030E)	**120**				mg/L			12/14/22 13:59	1
Chloride (SM 1030E)	**1000**				mg/L			12/14/22 13:59	1
Sulfate (SM 1030E)	**130**				mg/L			12/14/22 13:59	1
Carbonate Alkalinity (SM 1030E)	**0.00**				mg/L			12/14/22 13:59	1
Bicarbonate Alkalinity (SM 1030E)	**1100**				mg/L			12/14/22 13:59	1
Total Alkalinity (SM 1030E)	**1100**				mg/L			12/14/22 13:59	1
Nitrate/Nitrite (SM 1030E)	**2.7**				mg/L			12/14/22 13:59	1

Client Sample ID: LPOND LDS

Lab Sample ID: 280-169433-2
Matrix: Water
Date Collected: 11/17/22 13:10
Date Received: 11/19/22 09:20

General Chemistry (Continued)

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance (SM 1030E)	-0.52				%			12/14/22 13:59	1
Calculated TDS (SM 1030E)	2800				mg/L			12/14/22 13:59	1
TDS Ratio (SM 1030E)	0.96				NONE			12/14/22 13:59	1
Total Dissolved Solids (SM 1030E)	2700				mg/L			12/14/22 13:59	1
Iron (SM 1030E)	14				mg/L			12/14/22 13:59	1
Calcium (SM 1030E (meq))	1.8				meq/L			12/14/22 13:59	1
Magnesium (SM 1030E (meq))	3.8				meq/L			12/14/22 13:59	1
Potassium (SM 1030E (meq))	4.1				meq/L			12/14/22 13:59	1
Sodium (SM 1030E (meq))	33				meq/L			12/14/22 13:59	1
Iron (SM 1030E (meq))	0.75				meq/L			12/14/22 13:59	1
Ammonia (SM 1030E (meq))	8.6				meq/L			12/14/22 13:59	1
Chloride (SM 1030E (meq))	28				meq/L			12/14/22 13:59	1
Sulfate (SM 1030E (meq))	2.7				meq/L			12/14/22 13:59	1
Nitrate Nitrite as N (SM 1030E (meq))	0.19				meq/L			12/14/22 13:59	1
Alkalinity (SM 1030E (meq))	22				meq/L			12/14/22 13:59	1
Carbonate Alkalinity as CaCO3 (SM 1030E (meq))	0.00				meq/L			12/14/22 13:59	1
Bicarbonate Alkalinity as CaCO3 (SM 1030E (meq))	22				meq/L			12/14/22 13:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	1000		20		mg/L			12/09/22 09:19	20
Sulfate (MCAWW 300.0)	130		21		mg/L			12/09/22 09:19	20
Ammonia as N (MCAWW 350.1)	120		0.73		mg/L			12/13/22 09:57	25
Total Kjeldahl Nitrogen (MCAWW 351.2)	130		17		mg/L		12/01/22 16:45	12/03/22 17:56	5
Nitrate Nitrite as N (MCAWW 353.2	2.7		0.10		mg/L			12/09/22 15:36	1
Chemical Oxygen Demand (COD) (MCAWW 410.4)	530		170		mg/L			11/29/22 12:38	20
Total Organic Carbon - Average (SW846 9060)	170		1.7		mg/L			12/06/22 20:28	5
Total Alkalinity (SM 2320B)	1100		10		mg/L			11/23/22 12:08	1
Bicarbonate Alkalinity (SM 2320B)	1100		10		mg/L			11/23/22 12:08	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			11/23/22 12:08	1
Hardness, as CaCO3 (SM 2340C)	560		3.0		mg/L			12/06/22 11:33	5
Total Dissolved Solids (SM 2540C)	2700		19		mg/L			11/22/22 11:21	1
Total Suspended Solids (SM 2540D)	ND		4.0		mg/L			11/21/22 12:36	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	7.3	HF	0.1		SU			11/22/22 14:37	1
Specific Conductance (SW846 9050A)	5100		2.0		umhos/cm			11/28/22 12:07	1

Client Sample ID: LEACH POND

Lab Sample ID: 280-169433-3
Matrix: Water
Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.3		ug/L			11/30/22 12:13	4
1,1,1-Trichloroethane	ND		1.6		ug/L			11/30/22 12:13	4
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 12:13	4

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

Client Sample ID: LEACH POND
Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-3
Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.1		ug/L			11/30/22 12:13	4
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 12:13	4
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 12:13	4
1,1-Dichloropropene	ND		1.7		ug/L			11/30/22 12:13	4
1,2,3-Trichlorobenzene	ND		2.8		ug/L			11/30/22 12:13	4
1,2,3-Trichloropropane	ND		3.4		ug/L			11/30/22 12:13	4
1,2,4-Trichlorobenzene	ND		2.3		ug/L			11/30/22 12:13	4
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 12:13	4
1,2-Dibromo-3-Chloropropane	ND	*+	7.1		ug/L			11/30/22 12:13	4
1,2-Dibromoethane	ND		1.6		ug/L			11/30/22 12:13	4
1,2-Dichlorobenzene	ND		1.5		ug/L			11/30/22 12:13	4
1,2-Dichloroethane	ND		2.2		ug/L			11/30/22 12:13	4
1,2-Dichloropropane	ND		2.1		ug/L			11/30/22 12:13	4
1,3,5-Trimethylbenzene	ND		1.5		ug/L			11/30/22 12:13	4
1,3-Dichlorobenzene	ND		1.3		ug/L			11/30/22 12:13	4
1,3-Dichloropropane	ND	*-	1.5		ug/L			11/30/22 12:13	4
1,4-Dichlorobenzene	ND		1.6		ug/L			11/30/22 12:13	4
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 12:13	4
2-Butanone (MEK)	ND		24		ug/L			11/30/22 12:13	4
2-Chlorotoluene	ND		1.4		ug/L			11/30/22 12:13	4
2-Hexanone	ND		6.8		ug/L			11/30/22 12:13	4
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 12:13	4
4-Isopropyltoluene	ND		1.7		ug/L			11/30/22 12:13	4
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 12:13	4
Acetone	ND		26		ug/L			11/30/22 12:13	4
Benzene	ND		1.2		ug/L			11/30/22 12:13	4
Bromobenzene	ND		1.6		ug/L			11/30/22 12:13	4
Bromochloromethane	ND		1.6		ug/L			11/30/22 12:13	4
Bromodichloromethane	ND		1.5		ug/L			11/30/22 12:13	4
Bromoform	ND	*1	4.8		ug/L			11/30/22 12:13	4
Bromomethane	ND		9.4		ug/L			11/30/22 12:13	4
Carbon disulfide	ND		2.5		ug/L			11/30/22 12:13	4
Carbon tetrachloride	ND		2.3		ug/L			11/30/22 12:13	4
Chlorobenzene	ND		1.7		ug/L			11/30/22 12:13	4
Chloroethane	ND		5.5		ug/L			11/30/22 12:13	4
Chloroform	**4.2**		1.4		ug/L			11/30/22 12:13	4
Chloromethane	ND		3.0		ug/L			11/30/22 12:13	4
cis-1,2-Dichloroethene	ND		1.3		ug/L			11/30/22 12:13	4
cis-1,3-Dichloropropene	ND		2.5		ug/L			11/30/22 12:13	4
Dibromochloromethane	ND		2.5		ug/L			11/30/22 12:13	4
Dibromomethane	ND		1.4		ug/L			11/30/22 12:13	4
Dichlorodifluoromethane	ND		3.8		ug/L			11/30/22 12:13	4
Ethylbenzene	ND		1.2		ug/L			11/30/22 12:13	4
Hexachlorobutadiene	ND		4.7		ug/L			11/30/22 12:13	4
Isopropylbenzene	ND		1.5		ug/L			11/30/22 12:13	4
Methylene Chloride	ND		5.0		ug/L			11/30/22 12:13	4
Naphthalene	ND		2.5		ug/L			11/30/22 12:13	4
n-Butylbenzene	ND	*1	1.9		ug/L			11/30/22 12:13	4
N-Propylbenzene	ND		2.1		ug/L			11/30/22 12:13	4

Client Sample ID: LEACH POND

Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.8		ug/L			11/30/22 12:13	4
Styrene	ND	*1	1.4		ug/L			11/30/22 12:13	4
tert-Butylbenzene	ND		1.7		ug/L			11/30/22 12:13	4
Tetrachloroethene	ND		1.6		ug/L			11/30/22 12:13	4
Toluene	ND		1.3		ug/L			11/30/22 12:13	4
trans-1,2-Dichloroethene	ND		1.5		ug/L			11/30/22 12:13	4
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 12:13	4
Trichloroethene	ND		1.2		ug/L			11/30/22 12:13	4
Trichlorofluoromethane	ND		2.3		ug/L			11/30/22 12:13	4
Vinyl chloride	ND		2.0		ug/L			11/30/22 12:13	4
Xylenes (total)	ND		2.0		ug/L			11/30/22 12:13	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/30/22 12:13*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 127*		*11/30/22 12:13*	*4*
4-Bromofluorobenzene (Surr)	*96*		*78 - 120*		*11/30/22 12:13*	*4*
Dibromofluoromethane (Surr)	*99*		*77 - 120*		*11/30/22 12:13*	*4*
Toluene-d8 (Surr)	*96*		*80 - 125*		*11/30/22 12:13*	*4*

Method: SW846 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**24000**		100		ug/L		12/02/22 19:26	12/05/22 22:49	1
Silver	ND		3.0		ug/L		12/02/22 19:26	12/05/22 22:49	1
Zinc	**30**		26		ug/L		12/02/22 19:26	12/05/22 22:49	1

Method: SW846 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**69000**		500		ug/L		12/02/22 19:26	12/05/22 23:24	1
Iron	**3700**		30		ug/L		12/06/22 15:58	12/07/22 16:39	1
Magnesium	**88000**		200		ug/L		12/02/22 19:26	12/05/22 23:24	1
Manganese	**680**		3.0		ug/L		12/02/22 19:26	12/05/22 23:24	1
Potassium	**370000**		500		ug/L		12/02/22 19:26	12/05/22 23:24	1
Sodium	**1400000**		1000		ug/L		12/02/22 19:26	12/05/22 23:24	1

Method: SW846 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**20**		0.60		ug/L		12/05/22 08:47	12/06/22 23:21	1
Arsenic	**170**		1.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Barium	**290**		1.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Beryllium	ND		0.40		ug/L		12/05/22 08:47	12/06/22 23:21	1
Cadmium	ND		0.30		ug/L		12/05/22 08:47	12/06/22 23:21	1
Chromium	**140**		2.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Cobalt	**32**		0.20		ug/L		12/05/22 08:47	12/06/22 23:21	1
Copper	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Lead	**1.7**		0.50		ug/L		12/05/22 08:47	12/06/22 23:21	1
Nickel	**84**		1.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Selenium	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:21	1
Thallium	ND		0.20		ug/L		12/05/22 08:47	12/06/22 23:21	1
Vanadium	**94**		3.0		ug/L		12/05/22 08:47	12/06/22 23:21	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

Client Sample ID: LEACH POND

Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Total Anions (SM 1030E)	110				meq/L			12/14/22 13:59	1
Total Cations (SM 1030E)	100				meq/L			12/14/22 13:59	1
Percent Difference (SM 1030E)	-1.9				%			12/14/22 13:59	1
Calcium (SM 1030E)	69				mg/L			12/14/22 13:59	1
Magnesium (SM 1030E)	88				mg/L			12/14/22 13:59	1
Potassium (SM 1030E)	370				mg/L			12/14/22 13:59	1
Sodium (SM 1030E)	1400				mg/L			12/14/22 13:59	1
Ammonia as N (SM 1030E)	300				mg/L			12/14/22 13:59	1
Chloride (SM 1030E)	1900				mg/L			12/14/22 13:59	1
Sulfate (SM 1030E)	84				mg/L			12/14/22 13:59	1
Carbonate Alkalinity (SM 1030E)	0.00				mg/L			12/14/22 13:59	1
Bicarbonate Alkalinity (SM 1030E)	2400				mg/L			12/14/22 13:59	1
Total Alkalinity (SM 1030E)	2400				mg/L			12/14/22 13:59	1
Nitrate/Nitrite (SM 1030E)	47				mg/L			12/14/22 13:59	1
Anion/Cation Balance (SM 1030E)	-1.9				%			12/14/22 13:59	1
Calculated TDS (SM 1030E)	5600				mg/L			12/14/22 13:59	1
TDS Ratio (SM 1030E)	0.45				NONE			12/14/22 13:59	1
Total Dissolved Solids (SM 1030E)	2500				mg/L			12/14/22 13:59	1
Iron (SM 1030E)	3.7				mg/L			12/14/22 13:59	1
Calcium (SM 1030E (meq))	3.4				meq/L			12/14/22 13:59	1
Magnesium (SM 1030E (meq))	7.2				meq/L			12/14/22 13:59	1
Potassium (SM 1030E (meq))	9.5				meq/L			12/14/22 13:59	1
Sodium (SM 1030E (meq))	61				meq/L			12/14/22 13:59	1
Iron (SM 1030E (meq))	0.20				meq/L			12/14/22 13:59	1
Ammonia (SM 1030E (meq))	21				meq/L			12/14/22 13:59	1
Chloride (SM 1030E (meq))	54				meq/L			12/14/22 13:59	1
Sulfate (SM 1030E (meq))	1.7				meq/L			12/14/22 13:59	1
Nitrate Nitrite as N (SM 1030E (meq))	3.4				meq/L			12/14/22 13:59	1
Alkalinity (SM 1030E (meq))	48				meq/L			12/14/22 13:59	1
Carbonate Alkalinity as CaCO3 (SM 1030E (meq))	0.00				meq/L			12/14/22 13:59	1
Bicarbonate Alkalinity as CaCO3 (SM 1030E (meq))	48				meq/L			12/14/22 13:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (MCAWW 300.0)	1900		51		mg/L			12/09/22 09:53	50
Sulfate (MCAWW 300.0)	84		5.0		mg/L			12/09/22 09:36	1
Ammonia as N (MCAWW 350.1)	300		2.3		mg/L			12/13/22 09:59	80
Total Kjeldahl Nitrogen (MCAWW 351.2)	320		34		mg/L		12/01/22 16:45	12/05/22 11:38	10
Nitrate Nitrite as N (MCAWW 353.2	47		4.4		mg/L			12/14/22 14:08	100
Chemical Oxygen Demand (COD) (MCAWW 410.4)	1700		430		mg/L			11/29/22 12:38	50
Total Organic Carbon - Average (SW846 9060)	310		6.9		mg/L			12/07/22 19:40	20
Total Alkalinity (SM 2320B)	2400		10		mg/L			11/23/22 12:29	1
Bicarbonate Alkalinity (SM 2320B)	2400		10		mg/L			11/23/22 12:29	1
Carbonate Alkalinity (SM 2320B)	ND		10		mg/L			11/23/22 12:29	1
Hardness, as CaCO3 (SM 2340C)	730		3.0		mg/L			12/06/22 11:33	5
Total Dissolved Solids (SM 2540C)	2500		47		mg/L			11/22/22 11:21	1

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

Client Sample ID: LEACH POND
Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	25		4.0		mg/L			11/21/22 12:36	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C (SW846 9040B)	8.3	HF	0.1		SU			11/22/22 14:41	1
Specific Conductance (SW846 9050A)	9500		2.0		umhos/cm			11/28/22 12:07	1

Surrogate Summary

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

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)
280-169433-1	TB04	92	104	107	107
280-169433-2	LPOND LDS	97	101	100	85
280-169433-3	LEACH POND	97	96	99	96
LCS 280-595025/1002	Lab Control Sample	78	92	93	98
LCSD 280-595025/4	Lab Control Sample Dup	88	89	100	97
MB 280-595025/8	Method Blank	81	91	97	86

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 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
1,1-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,3-Trichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/30/22 09:26	1
1,2-Dibromoethane	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloroethane	ND		1.0		ug/L			11/30/22 09:26	1
1,2-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
1,3-Dichloropropane	ND		1.0		ug/L			11/30/22 09:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
2,2-Dichloropropane	ND		5.0		ug/L			11/30/22 09:26	1
2-Butanone (MEK)	ND		6.0		ug/L			11/30/22 09:26	1
2-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
2-Hexanone	ND		5.0		ug/L			11/30/22 09:26	1
4-Chlorotoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Isopropyltoluene	ND		1.0		ug/L			11/30/22 09:26	1
4-Methyl-2-pentanone	ND		5.0		ug/L			11/30/22 09:26	1
Acetone	ND		10		ug/L			11/30/22 09:26	1
Benzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Bromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromodichloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Bromoform	ND		1.2		ug/L			11/30/22 09:26	1
Bromomethane	ND		2.4		ug/L			11/30/22 09:26	1
Carbon disulfide	ND		2.0		ug/L			11/30/22 09:26	1
Carbon tetrachloride	ND		1.0		ug/L			11/30/22 09:26	1
Chlorobenzene	ND		1.0		ug/L			11/30/22 09:26	1
Chloroethane	ND		2.0		ug/L			11/30/22 09:26	1
Chloroform	ND		1.0		ug/L			11/30/22 09:26	1
Chloromethane	ND		2.0		ug/L			11/30/22 09:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/30/22 09:26	1
Dibromochloromethane	ND		1.0		ug/L			11/30/22 09:26	1
Dibromomethane	ND		1.0		ug/L			11/30/22 09:26	1
Dichlorodifluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Ethylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Hexachlorobutadiene	ND		1.2		ug/L			11/30/22 09:26	1
Isopropylbenzene	ND		1.0		ug/L			11/30/22 09:26	1

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

Lab Sample ID: MB 280-595025/8
Matrix: Water
Analysis Batch: 595025

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			11/30/22 09:26	1
Naphthalene	ND		1.0		ug/L			11/30/22 09:26	1
n-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
N-Propylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
sec-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Styrene	ND		1.0		ug/L			11/30/22 09:26	1
tert-Butylbenzene	ND		1.0		ug/L			11/30/22 09:26	1
Tetrachloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Toluene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
trans-1,3-Dichloropropene	ND		3.0		ug/L			11/30/22 09:26	1
Trichloroethene	ND		1.0		ug/L			11/30/22 09:26	1
Trichlorofluoromethane	ND		2.0		ug/L			11/30/22 09:26	1
Vinyl chloride	ND		1.0		ug/L			11/30/22 09:26	1
Xylenes (total)	ND		2.0		ug/L			11/30/22 09:26	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/30/22 09:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 127		11/30/22 09:26	1
4-Bromofluorobenzene (Surr)	91		78 - 120		11/30/22 09:26	1
Dibromofluoromethane (Surr)	97		77 - 120		11/30/22 09:26	1
Toluene-d8 (Surr)	86		80 - 125		11/30/22 09:26	1

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	25.3		ug/L		101	74 - 121
1,1,1-Trichloroethane	25.0	20.9		ug/L		83	62 - 132
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	72 - 122
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	72 - 128
1,1-Dichloroethane	25.0	22.8		ug/L		91	66 - 130
1,1-Dichloroethene	25.0	23.7		ug/L		95	62 - 130
1,1-Dichloropropene	25.0	21.3		ug/L		85	64 - 133
1,2,3-Trichlorobenzene	25.0	30.4		ug/L		122	70 - 127
1,2,3-Trichloropropane	25.0	27.2		ug/L		109	74 - 123
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		105	73 - 124
1,2,4-Trimethylbenzene	25.0	21.5		ug/L		86	74 - 124
1,2-Dibromo-3-Chloropropane	25.0	32.3	*+	ug/L		129	58 - 122
1,2-Dibromoethane	25.0	22.2		ug/L		89	81 - 118
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	77 - 121
1,2-Dichloroethane	25.0	20.7		ug/L		83	61 - 130
1,2-Dichloropropane	25.0	22.1		ug/L		89	68 - 127
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	73 - 127
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	76 - 121

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

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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	19.7	*-	ug/L		79	80 - 118
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	76 - 119
2,2-Dichloropropane	25.0	22.4		ug/L		90	57 - 140
2-Butanone (MEK)	100	83.0		ug/L		83	53 - 135
2-Chlorotoluene	25.0	24.8		ug/L		99	75 - 123
2-Hexanone	100	82.6		ug/L		83	58 - 134
4-Chlorotoluene	25.0	21.9		ug/L		88	74 - 124
4-Isopropyltoluene	25.0	23.8		ug/L		95	74 - 127
4-Methyl-2-pentanone	100	90.8		ug/L		91	56 - 135
Acetone	100	82.2		ug/L		82	50 - 137
Benzene	25.0	23.4		ug/L		93	69 - 126
Bromobenzene	25.0	24.6		ug/L		98	75 - 122
Bromochloromethane	25.0	25.7		ug/L		103	71 - 130
Bromodichloromethane	25.0	23.3		ug/L		93	67 - 126
Bromoform	25.0	28.7		ug/L		115	57 - 125
Bromomethane	25.0	21.9		ug/L		87	25 - 163
Carbon disulfide	25.0	24.8		ug/L		99	56 - 128
Carbon tetrachloride	25.0	22.6		ug/L		90	60 - 133
Chlorobenzene	25.0	24.2		ug/L		97	78 - 118
Chloroethane	25.0	21.4		ug/L		86	52 - 144
Chloroform	25.0	21.9		ug/L		88	68 - 128
Chloromethane	25.0	25.3		ug/L		101	43 - 142
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	69 - 126
cis-1,3-Dichloropropene	25.0	21.9		ug/L		88	75 - 120
Dibromochloromethane	25.0	22.4		ug/L		89	71 - 122
Dibromomethane	25.0	23.9		ug/L		96	68 - 129
Dichlorodifluoromethane	25.0	26.8		ug/L		107	26 - 152
Ethylbenzene	25.0	24.9		ug/L		100	76 - 121
Hexachlorobutadiene	25.0	22.0		ug/L		88	69 - 133
Isopropylbenzene	25.0	22.6		ug/L		90	70 - 127
Methylene Chloride	25.0	26.7		ug/L		107	64 - 128
Naphthalene	25.0	27.9		ug/L		111	63 - 129
n-Butylbenzene	25.0	25.8		ug/L		103	69 - 130
N-Propylbenzene	25.0	23.9		ug/L		96	73 - 127
sec-Butylbenzene	25.0	24.7		ug/L		99	72 - 127
Styrene	25.0	25.8		ug/L		103	79 - 120
tert-Butylbenzene	25.0	22.2		ug/L		89	72 - 126
Tetrachloroethene	25.0	23.8		ug/L		95	72 - 127
Toluene	25.0	23.3		ug/L		93	68 - 127
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	66 - 129
trans-1,3-Dichloropropene	25.0	22.2		ug/L		89	66 - 127
Trichloroethene	25.0	23.4		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	17.7		ug/L		71	57 - 144
Vinyl chloride	25.0	23.5		ug/L		94	53 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 127*
4-Bromofluorobenzene (Surr)	*92*		*78 - 120*

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

Lab Sample ID: LCS 280-595025/1002
Matrix: Water
Analysis Batch: 595025

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*93*		*77 - 120*
Toluene-d8 (Surr)	*98*		*80 - 125*

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	21.5		ug/L		86	74 - 121	16	20
1,1,1-Trichloroethane			25.0	21.4		ug/L		85	62 - 132	2	20
1,1,2,2-Tetrachloroethane			25.0	27.2		ug/L		109	72 - 122	5	20
1,1,2-Trichloroethane			25.0	23.4		ug/L		94	72 - 128	1	20
1,1-Dichloroethane			25.0	22.0		ug/L		88	66 - 130	4	20
1,1-Dichloroethene			25.0	23.8		ug/L		95	62 - 130	1	21
1,1-Dichloropropene			25.0	21.7		ug/L		87	64 - 133	2	20
1,2,3-Trichlorobenzene			25.0	31.7		ug/L		127	70 - 127	4	20
1,2,3-Trichloropropane			25.0	26.2		ug/L		105	74 - 123	4	20
1,2,4-Trichlorobenzene			25.0	25.4		ug/L		102	73 - 124	3	20
1,2,4-Trimethylbenzene			25.0	20.4		ug/L		82	74 - 124	5	20
1,2-Dibromo-3-Chloropropane			25.0	27.1		ug/L		109	58 - 122	17	21
1,2-Dibromoethane			25.0	22.7		ug/L		91	81 - 118	2	20
1,2-Dichlorobenzene			25.0	22.8		ug/L		91	77 - 121	15	20
1,2-Dichloroethane			25.0	19.9		ug/L		80	61 - 130	4	20
1,2-Dichloropropane			25.0	21.3		ug/L		85	68 - 127	4	20
1,3,5-Trimethylbenzene			25.0	20.3		ug/L		81	73 - 127	18	20
1,3-Dichlorobenzene			25.0	22.0		ug/L		88	76 - 121	5	20
1,3-Dichloropropane			25.0	20.9		ug/L		84	80 - 118	6	20
1,4-Dichlorobenzene			25.0	21.5		ug/L		86	76 - 119	9	20
2,2-Dichloropropane			25.0	21.5		ug/L		86	57 - 140	4	22
2-Butanone (MEK)			100	80.8		ug/L		81	53 - 135	3	20
2-Chlorotoluene			25.0	25.0		ug/L		100	75 - 123	1	20
2-Hexanone			100	87.3		ug/L		87	58 - 134	6	21
4-Chlorotoluene			25.0	21.5		ug/L		86	74 - 124	2	20
4-Isopropyltoluene			25.0	21.5		ug/L		86	74 - 127	10	20
4-Methyl-2-pentanone			100	91.8		ug/L		92	56 - 135	1	20
Acetone			100	84.6		ug/L		85	50 - 137	3	21
Benzene			25.0	22.3		ug/L		89	69 - 126	5	20
Bromobenzene			25.0	24.5		ug/L		98	75 - 122	0	20
Bromochloromethane			25.0	24.9		ug/L		100	71 - 130	3	20
Bromodichloromethane			25.0	22.3		ug/L		89	67 - 126	4	20
Bromoform			25.0	23.0	*1	ug/L		92	57 - 125	22	20
Bromomethane			25.0	20.6		ug/L		82	25 - 163	6	40
Carbon disulfide			25.0	23.3		ug/L		93	56 - 128	6	20
Carbon tetrachloride			25.0	23.1		ug/L		93	60 - 133	3	20
Chlorobenzene			25.0	21.3		ug/L		85	78 - 118	13	20
Chloroethane			25.0	21.0		ug/L		84	52 - 144	2	30
Chloroform			25.0	21.9		ug/L		87	68 - 128	0	20
Chloromethane			25.0	20.7		ug/L		83	43 - 142	20	20

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

Lab Sample ID: LCSD 280-595025/4
Matrix: Water
Analysis Batch: 595025

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	23.4		ug/L		94	69 - 126	5	20
cis-1,3-Dichloropropene			25.0	20.9		ug/L		83	75 - 120	5	20
Dibromochloromethane			25.0	22.8		ug/L		91	71 - 122	2	20
Dibromomethane			25.0	22.5		ug/L		90	68 - 129	6	20
Dichlorodifluoromethane			25.0	24.9		ug/L		100	26 - 152	7	21
Ethylbenzene			25.0	20.8		ug/L		83	76 - 121	18	20
Hexachlorobutadiene			25.0	20.4		ug/L		82	69 - 133	7	20
Isopropylbenzene			25.0	23.4		ug/L		94	70 - 127	4	20
Methylene Chloride			25.0	25.2		ug/L		101	64 - 128	6	20
Naphthalene			25.0	26.8		ug/L		107	63 - 129	4	21
n-Butylbenzene			25.0	20.7	*1	ug/L		83	69 - 130	22	20
N-Propylbenzene			25.0	23.2		ug/L		93	73 - 127	3	20
sec-Butylbenzene			25.0	22.3		ug/L		89	72 - 127	10	20
Styrene			25.0	20.8	*1	ug/L		83	79 - 120	22	20
tert-Butylbenzene			25.0	24.3		ug/L		97	72 - 126	9	20
Tetrachloroethene			25.0	21.0		ug/L		84	72 - 127	13	20
Toluene			25.0	23.4		ug/L		94	68 - 127	0	20
trans-1,2-Dichloroethene			25.0	24.0		ug/L		96	66 - 129	6	20
trans-1,3-Dichloropropene			25.0	22.2		ug/L		89	66 - 127	0	20
Trichloroethene			25.0	22.2		ug/L		89	70 - 125	5	20
Trichlorofluoromethane			25.0	17.8		ug/L		71	57 - 144	0	28
Vinyl chloride			25.0	20.3		ug/L		81	53 - 141	15	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 127*
4-Bromofluorobenzene (Surr)	*89*		*78 - 120*
Dibromofluoromethane (Surr)	*100*		*77 - 120*
Toluene-d8 (Surr)	*97*		*80 - 125*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-595224/1-A
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		80		ug/L		12/02/22 19:26	12/05/22 22:28	1
Silicon	ND		100		ug/L		12/02/22 19:26	12/05/22 22:28	1
Iron	491		30		ug/L		12/02/22 19:26	12/05/22 22:28	1
Silver	ND		3.0		ug/L		12/02/22 19:26	12/05/22 22:28	1
Magnesium	ND		50		ug/L		12/02/22 19:26	12/05/22 22:28	1
Zinc	ND		26		ug/L		12/02/22 19:26	12/05/22 22:28	1
Manganese	ND		10		ug/L		12/02/22 19:26	12/05/22 22:28	1
Potassium	ND		500		ug/L		12/02/22 19:26	12/05/22 22:28	1
Sodium	ND		1000		ug/L		12/02/22 19:26	12/05/22 22:28	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-595224/2-A
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	49600		ug/L		99	90 - 111
Silicon	10000	9720		ug/L		97	90 - 110
Iron	10000	10200		ug/L		102	89 - 115
Silver	50.0	51.5		ug/L		103	86 - 115
Magnesium	50000	49900		ug/L		100	90 - 113
Zinc	1000	987		ug/L		99	85 - 111
Manganese	1000	1010		ug/L		101	90 - 110
Potassium	50000	47800		ug/L		96	89 - 114
Sodium	50000	47900		ug/L		96	90 - 115

Lab Sample ID: LCSD 280-595224/3-A
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 595224

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	50000	50000		ug/L		100	90 - 111	1	20
Silicon	10000	9760		ug/L		98	90 - 110	0	20
Iron	10000	10300		ug/L		103	89 - 115	1	20
Silver	50.0	51.9		ug/L		104	86 - 115	1	20
Magnesium	50000	50300		ug/L		101	90 - 113	1	20
Zinc	1000	997		ug/L		100	85 - 111	1	20
Manganese	1000	1020		ug/L		102	90 - 110	1	20
Potassium	50000	48300		ug/L		97	89 - 114	1	20
Sodium	50000	48300		ug/L		97	90 - 115	1	20

Lab Sample ID: 280-168996-A-5-C MS
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 595224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silicon	16000		10000	25600		ug/L		99	79 - 140
Silver	ND		50.0	52.8		ug/L		106	75 - 141
Zinc	ND		1000	973		ug/L		97	60 - 137

Lab Sample ID: 280-168996-A-5-D MSD
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 595224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silicon	16000		10000	25200		ug/L		96	79 - 140	1	20
Silver	ND		50.0	51.7		ug/L		103	75 - 141	2	20
Zinc	ND		1000	957		ug/L		95	60 - 137	2	20

Lab Sample ID: MB 280-595768/1-A
Matrix: Water
Analysis Batch: 595984

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595768

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		30		ug/L		12/06/22 15:58	12/07/22 15:06	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-595768/2-A
Matrix: Water
Analysis Batch: 595984

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595768

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10000	10000		ug/L		100	89 - 115

Lab Sample ID: LCSD 280-595768/3-A
Matrix: Water
Analysis Batch: 595984

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 595768

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	10000	10000		ug/L		100	89 - 115	0	20

Lab Sample ID: 280-169378-A-1-B MS
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 595224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	28000		50000	76600		ug/L		98	48 - 153
Magnesium	12000		50000	61700		ug/L		99	62 - 146
Manganese	54		1000	1050		ug/L		100	79 - 121
Potassium	14000		50000	64100		ug/L		99	76 - 132
Sodium	380000		50000	431000	4	ug/L		107	70 - 203

Lab Sample ID: 280-169378-A-1-C MSD
Matrix: Water
Analysis Batch: 595656

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 595224

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	28000		50000	78000		ug/L		100	48 - 153	2	20
Magnesium	12000		50000	62700		ug/L		101	62 - 146	2	20
Manganese	54		1000	1070		ug/L		101	79 - 121	2	20
Potassium	14000		50000	65200		ug/L		102	76 - 132	2	20
Sodium	380000		50000	442000	4	ug/L		128	70 - 203	2	20

Lab Sample ID: 280-168996-A-11-J MS
Matrix: Water
Analysis Batch: 595984

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 595768

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	65		10000	10200		ug/L		101	52 - 155

Lab Sample ID: 280-168996-A-11-K MSD
Matrix: Water
Analysis Batch: 595984

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 595768

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Iron	65		10000	10200		ug/L		101	52 - 155	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-595222/1-A
Matrix: Water
Analysis Batch: 595811

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 595222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.60		ug/L		12/05/22 08:47	12/06/22 23:05	1
Arsenic	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Barium	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Beryllium	ND		0.40		ug/L		12/05/22 08:47	12/06/22 23:05	1
Cadmium	ND		0.30		ug/L		12/05/22 08:47	12/06/22 23:05	1
Chromium	ND		2.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Cobalt	ND		0.20		ug/L		12/05/22 08:47	12/06/22 23:05	1
Copper	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Lead	ND		0.50		ug/L		12/05/22 08:47	12/06/22 23:05	1
Nickel	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Selenium	ND		1.0		ug/L		12/05/22 08:47	12/06/22 23:05	1
Thallium	ND		0.20		ug/L		12/05/22 08:47	12/06/22 23:05	1
Vanadium	ND		3.0		ug/L		12/05/22 08:47	12/06/22 23:05	1

Lab Sample ID: LCS 280-595222/2-A
Matrix: Water
Analysis Batch: 595811

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 595222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	40.0	40.1		ug/L		100	85 - 115
Arsenic	40.0	40.6		ug/L		102	85 - 117
Barium	40.0	40.2		ug/L		100	85 - 118
Beryllium	40.0	39.8		ug/L		100	80 - 125
Cadmium	40.0	38.0		ug/L		95	85 - 115
Chromium	40.0	40.1		ug/L		100	84 - 121
Cobalt	40.0	40.0		ug/L		100	85 - 120
Copper	40.0	39.4		ug/L		99	85 - 119
Lead	40.0	40.3		ug/L		101	85 - 118
Nickel	40.0	41.3		ug/L		103	85 - 119
Selenium	40.0	41.7		ug/L		104	77 - 122
Thallium	40.0	40.2		ug/L		100	85 - 118
Vanadium	40.0	40.4		ug/L		101	85 - 120

Lab Sample ID: 280-169397-C-2-C MS
Matrix: Water
Analysis Batch: 595811

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 595222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		40.0	39.3		ug/L		98	85 - 115
Arsenic	ND		40.0	41.6		ug/L		104	85 - 117
Barium	ND		40.0	38.8		ug/L		96	85 - 118
Beryllium	ND		40.0	37.7		ug/L		94	80 - 125
Cadmium	ND		40.0	39.4		ug/L		99	85 - 115
Chromium	ND		40.0	39.9		ug/L		100	84 - 121
Cobalt	ND		40.0	39.1		ug/L		98	85 - 120
Copper	ND		40.0	39.7		ug/L		99	85 - 119
Lead	ND		40.0	39.8		ug/L		99	85 - 118
Nickel	ND		40.0	40.4		ug/L		101	85 - 119
Selenium	ND		40.0	39.2		ug/L		98	77 - 122

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

Lab Sample ID: 280-169397-C-2-C MS
Matrix: Water
Analysis Batch: 595811

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 595222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	ND		40.0	39.9		ug/L		100	85 - 118
Vanadium	ND		40.0	39.9		ug/L		100	85 - 120

Lab Sample ID: 280-169397-C-2-D MSD
Matrix: Water
Analysis Batch: 595811

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 595222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		40.0	39.8		ug/L		99	85 - 115	1	20
Arsenic	ND		40.0	39.0		ug/L		98	85 - 117	6	20
Barium	ND		40.0	40.1		ug/L		99	85 - 118	3	20
Beryllium	ND		40.0	39.5		ug/L		99	80 - 125	5	20
Cadmium	ND		40.0	38.7		ug/L		97	85 - 115	2	20
Chromium	ND		40.0	40.3		ug/L		101	84 - 121	1	20
Cobalt	ND		40.0	40.2		ug/L		101	85 - 120	3	20
Copper	ND		40.0	40.8		ug/L		102	85 - 119	3	20
Lead	ND		40.0	40.0		ug/L		100	85 - 118	1	20
Nickel	ND		40.0	41.4		ug/L		104	85 - 119	2	20
Selenium	ND		40.0	40.5		ug/L		101	77 - 122	3	20
Thallium	ND		40.0	40.0		ug/L		100	85 - 118	0	20
Vanadium	ND		40.0	40.2		ug/L		101	85 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-596090/47
Matrix: Water
Analysis Batch: 596090

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			12/09/22 07:03	1
Sulfate	ND		5.0		mg/L			12/09/22 07:03	1

Lab Sample ID: MB 280-596090/6
Matrix: Water
Analysis Batch: 596090

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			12/08/22 19:26	1
Sulfate	ND		5.0		mg/L			12/08/22 19:26	1

Lab Sample ID: LCS 280-596090/4
Matrix: Water
Analysis Batch: 596090

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	51.1		mg/L		102	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 280-596090/45
Matrix: Water
Analysis Batch: 596090

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	51.4		mg/L		103	90 - 110		
Sulfate			50.0	52.1		mg/L		104	90 - 110		

Lab Sample ID: LCSD 280-596090/46
Matrix: Water
Analysis Batch: 596090

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			50.0	51.2		mg/L		102	90 - 110	0	10
Sulfate			50.0	52.1		mg/L		104	90 - 110	0	10

Lab Sample ID: LCSD 280-596090/5
Matrix: Water
Analysis Batch: 596090

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			50.0	49.3		mg/L		99	90 - 110	0	10
Sulfate			50.0	51.1		mg/L		102	90 - 110	0	10

Lab Sample ID: MRL 280-596090/3
Matrix: Water
Analysis Batch: 596090

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			2.50	2.40	J	mg/L		96	50 - 150		
Sulfate			2.50	2.48	J	mg/L		99	50 - 150		

Lab Sample ID: 280-169478-A-1 MS
Matrix: Water
Analysis Batch: 596090

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	390		500	871		mg/L		96	80 - 120		
Sulfate	46		500	585		mg/L		108	80 - 120		

Lab Sample ID: 280-169478-A-1 MSD
Matrix: Water
Analysis Batch: 596090

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	390		500	883		mg/L		99	80 - 120	1	20
Sulfate	46		500	588		mg/L		108	80 - 120	0	20

Lab Sample ID: 280-169569-A-2 MS
Matrix: Water
Analysis Batch: 596090

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		1000	1180		mg/L		114	80 - 120		
Sulfate	3500	E	1000	4530	E	mg/L		99	80 - 120		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 280-169569-A-2 MSD
Matrix: Water
Analysis Batch: 596090

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		1000	1190		mg/L		115	80 - 120	0	20
Sulfate	3500	E	1000	4520	E	mg/L		99	80 - 120	0	20

Lab Sample ID: 280-169602-B-2 MS
Matrix: Water
Analysis Batch: 596090

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	65.7		mg/L		104	80 - 120
Sulfate	49		50.0	101	E	mg/L		105	80 - 120

Lab Sample ID: 280-169602-B-2 MSD
Matrix: Water
Analysis Batch: 596090

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	65.5		mg/L		104	80 - 120	0	20
Sulfate	49		50.0	101	E	mg/L		105	80 - 120	0	20

Lab Sample ID: 280-169478-A-1 DU
Matrix: Water
Analysis Batch: 596090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	390		382		mg/L		2	15
Sulfate	46		45.2		mg/L		2	15

Lab Sample ID: 280-169569-A-2 DU
Matrix: Water
Analysis Batch: 596090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	40		39.2		mg/L		3	15
Sulfate	3500	E	3490	E	mg/L		1	15

Lab Sample ID: 280-169602-B-2 DU
Matrix: Water
Analysis Batch: 596090

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	14		13.7		mg/L		0	15
Sulfate	49		48.9		mg/L		0.05	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-596566/19
Matrix: Water
Analysis Batch: 596566

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			12/13/22 09:41	1

Lab Sample ID: LCS 280-596566/17
Matrix: Water
Analysis Batch: 596566

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		101	90 - 110		

Lab Sample ID: LCSD 280-596566/18
Matrix: Water
Analysis Batch: 596566

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	0	10

Lab Sample ID: 280-169558-A-3 MS
Matrix: Water
Analysis Batch: 596566

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	3.1		1.00	4.10		mg/L		103	90 - 110		

Lab Sample ID: 280-169558-A-3 MSD
Matrix: Water
Analysis Batch: 596566

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	3.1		1.00	4.10		mg/L		104	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-595277/28-A
Matrix: Water
Analysis Batch: 595473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 595277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		12/01/22 16:45	12/03/22 17:16	1

Lab Sample ID: MB 280-595277/2-A
Matrix: Water
Analysis Batch: 595559

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 595277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		1.0		mg/L		12/01/22 16:45	12/05/22 11:34	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-595277/1-A
Matrix: Water
Analysis Batch: 595559

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 595277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	6.00	6.01		mg/L		100	90 - 110

Lab Sample ID: LCS 280-595277/27-A
Matrix: Water
Analysis Batch: 595473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 595277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	6.00	6.20		mg/L		103	90 - 110

Lab Sample ID: 280-169611-A-4-B MS
Matrix: Water
Analysis Batch: 595559

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 595277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	ND		3.00	3.96		mg/L		99	90 - 110

Lab Sample ID: 280-169611-A-4-C MSD
Matrix: Water
Analysis Batch: 595559

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 595277

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	3.95		mg/L		99	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-596249/22
Matrix: Water
Analysis Batch: 596249

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			12/09/22 14:48	1

Lab Sample ID: LCS 280-596249/21
Matrix: Water
Analysis Batch: 596249

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	5.10		mg/L		102	90 - 110

Lab Sample ID: 280-169398-C-1 MS
Matrix: Water
Analysis Batch: 596249

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	0.39		4.00	4.35		mg/L		99	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 280-169398-C-1 MSD
Matrix: Water
Analysis Batch: 596249

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	0.39		4.00	4.54		mg/L		104	90 - 110	4	10

Lab Sample ID: MB 280-596716/61
Matrix: Water
Analysis Batch: 596716

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			12/14/22 12:56	1

Lab Sample ID: LCS 280-596716/60
Matrix: Water
Analysis Batch: 596716

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	5.10		mg/L		102	90 - 110

Lab Sample ID: 280-169656-B-6 MS
Matrix: Water
Analysis Batch: 596716

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	4.06		mg/L		100	90 - 110

Lab Sample ID: 280-169656-B-6 MSD
Matrix: Water
Analysis Batch: 596716

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	4.46		mg/L		110	90 - 110	9	10

Method: 410.4 - COD

Lab Sample ID: MB 280-594928/5
Matrix: Water
Analysis Batch: 594928

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			11/29/22 12:38	1

Lab Sample ID: LCS 280-594928/3
Matrix: Water
Analysis Batch: 594928

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 280-594928/4
Matrix: Water
Analysis Batch: 594928

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	104		mg/L		104	90 - 110	7	11

Lab Sample ID: 280-169553-B-1 MS
Matrix: Water
Analysis Batch: 594928

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	57.3	F1	mg/L		82	90 - 110		

Lab Sample ID: 280-169553-B-1 MSD
Matrix: Water
Analysis Batch: 594928

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	59.3	F1	mg/L		86	90 - 110	3	11

Method: 9040B - pH

Lab Sample ID: LCS 280-594521/4
Matrix: Water
Analysis Batch: 594521

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: 280-169459-D-2 DU
Matrix: Water
Analysis Batch: 594521

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	7.6			7.6		SU				0.1	5

Method: 9050A - Specific Conductance

Lab Sample ID: MB 280-594767/5
Matrix: Water
Analysis Batch: 594767

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			11/28/22 12:07	1

Lab Sample ID: LCS 280-594767/4
Matrix: Water
Analysis Batch: 594767

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	1400		umhos/cm		100	90 - 110		

Method: 9050A - Specific Conductance (Continued)

Lab Sample ID: 280-169457-A-2 DU
Matrix: Water
Analysis Batch: 594767

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	3000		3040		umhos/cm		0	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-595843/4
Matrix: Water
Analysis Batch: 595843

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			12/06/22 18:18	1

Lab Sample ID: LCS 280-595843/3
Matrix: Water
Analysis Batch: 595843

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	26.8		mg/L		107	88 - 112

Lab Sample ID: LCSD 280-595843/21
Matrix: Water
Analysis Batch: 595843

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 Organic Carbon - Average	25.0	25.2		mg/L		101	88 - 112	1	15

Lab Sample ID: 280-169222-A-3 MS
Matrix: Water
Analysis Batch: 595843

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	16		250	285		mg/L		107	88 - 112

Lab Sample ID: 280-169222-A-3 MSD
Matrix: Water
Analysis Batch: 595843

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	16		250	283		mg/L		106	88 - 112	1	15

Lab Sample ID: MB 280-596033/4
Matrix: Water
Analysis Batch: 596033

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			12/07/22 16:30	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-596033/3
Matrix: Water
Analysis Batch: 596033

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average			25.0	23.7		mg/L		95	88 - 112		

Lab Sample ID: 280-169273-A-3 MS
Matrix: Water
Analysis Batch: 596033

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	130		501	606		mg/L		95	88 - 112		

Lab Sample ID: 280-169273-A-3 MSD
Matrix: Water
Analysis Batch: 596033

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	130		501	599		mg/L		94	88 - 112	1	15

Method: SM 1030E (meq) - Cation Anion Balance

Lab Sample ID: MB 280-596713/1
Matrix: Water
Analysis Batch: 596713

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			12/14/22 13:55	1
Magnesium	0.000				meq/L			12/14/22 13:55	1
Potassium	0.000				meq/L			12/14/22 13:55	1
Sodium	0.000				meq/L			12/14/22 13:55	1
Iron	0.000				meq/L			12/14/22 13:55	1
Ammonia	0.000				meq/L			12/14/22 13:55	1
Ammonia as N	0.000				meq/L			12/14/22 13:55	1
Chloride	0.000				meq/L			12/14/22 13:55	1
Sulfate	0.000				meq/L			12/14/22 13:55	1
Nitrate Nitrite as N	0.000				meq/L			12/14/22 13:55	1
Nitrate/Nitrite	0.000				meq/L			12/14/22 13:55	1
Alkalinity	0.000				meq/L			12/14/22 13:55	1
Total Alkalinity	0.000				meq/L			12/14/22 13:55	1
Carbonate Alkalinity	0.000				meq/L			12/14/22 13:55	1
Carbonate Alkalinity as CaCO3	0.000				meq/L			12/14/22 13:55	1
Bicarbonate Alkalinity	0.000				meq/L			12/14/22 13:55	1
Bicarbonate Alkalinity as CaCO3	0.000				meq/L			12/14/22 13:55	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-594596/5
Matrix: Water
Analysis Batch: 594596

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			11/23/22 10:24	1
Bicarbonate Alkalinity	ND		10		mg/L			11/23/22 10:24	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-594596/5
Matrix: Water
Analysis Batch: 594596

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity	ND		10		mg/L			11/23/22 10:24	1

Lab Sample ID: LCS 280-594596/4
Matrix: Water
Analysis Batch: 594596

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: 280-169353-J-1 DU
Matrix: Water
Analysis Batch: 594596

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	440			442		mg/L				0.1	10
Bicarbonate Alkalinity	440			442		mg/L				0.1	20
Carbonate Alkalinity	ND			ND		mg/L				NC	20

Method: SM 2340C - Hardness, Total (mg/l as CaC03)

Lab Sample ID: MB 280-595723/3
Matrix: Water
Analysis Batch: 595723

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			12/06/22 11:32	1

Lab Sample ID: LCS 280-595723/1
Matrix: Water
Analysis Batch: 595723

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			400	432		mg/L		108	90 - 110		

Lab Sample ID: LCSD 280-595723/2
Matrix: Water
Analysis Batch: 595723

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
Hardness, as CaCO3			400	433		mg/L		108	90 - 110	0	10

Lab Sample ID: 280-169706-B-3 MS
Matrix: Water
Analysis Batch: 595723

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	17	F1	400	468	F1	mg/L		113	90 - 110		

Method: SM 2340C - Hardness, Total (mg/l as CaC03) (Continued)

Lab Sample ID: 280-169706-B-3 MSD
Matrix: Water
Analysis Batch: 595723

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	17	F1	400	464	F1	mg/L		112	90 - 110	1	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-594400/1
Matrix: Water
Analysis Batch: 594400

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			11/22/22 11:21	1

Lab Sample ID: LCS 280-594400/2
Matrix: Water
Analysis Batch: 594400

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: 280-169351-A-5 DU
Matrix: Water
Analysis Batch: 594400

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	3200		3250		mg/L		0.2	10

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 280-594259/3
Matrix: Water
Analysis Batch: 594259

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			11/21/22 12:35	1

Lab Sample ID: LCS 280-594259/1
Matrix: Water
Analysis Batch: 594259

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	503	473		mg/L		94	79 - 114

Lab Sample ID: LCSD 280-594259/2
Matrix: Water
Analysis Batch: 594259

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	503	520		mg/L		104	79 - 114	10	20

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 280-169383-A-1 DU
Matrix: Water
Analysis Batch: 594259

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: 595025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-1	TB04	Total/NA	Water	8260B	
280-169433-2	LPOND LDS	Total/NA	Water	8260B	
280-169433-3	LEACH POND	Total/NA	Water	8260B	
MB 280-595025/8	Method Blank	Total/NA	Water	8260B	
LCS 280-595025/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-595025/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Metals

Prep Batch: 595222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total Recoverable	Water	3005A	
280-169433-3	LEACH POND	Total Recoverable	Water	3005A	
MB 280-595222/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-595222/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-169397-C-2-C MS	Matrix Spike	Total Recoverable	Water	3005A	
280-169397-C-2-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 595224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Dissolved	Water	3005A	
280-169433-2	LPOND LDS	Total Recoverable	Water	3005A	
280-169433-3	LEACH POND	Dissolved	Water	3005A	
280-169433-3	LEACH POND	Total Recoverable	Water	3005A	
MB 280-595224/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-595224/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 280-595224/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
280-168996-A-5-C MS	Matrix Spike	Total Recoverable	Water	3005A	
280-168996-A-5-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
280-169378-A-1-B MS	Matrix Spike	Dissolved	Water	3005A	
280-169378-A-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 595656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Dissolved	Water	6010B	595224
280-169433-2	LPOND LDS	Total Recoverable	Water	6010B	595224
280-169433-3	LEACH POND	Dissolved	Water	6010B	595224
280-169433-3	LEACH POND	Total Recoverable	Water	6010B	595224
MB 280-595224/1-A	Method Blank	Total Recoverable	Water	6010B	595224
LCS 280-595224/2-A	Lab Control Sample	Total Recoverable	Water	6010B	595224
LCSD 280-595224/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	595224
280-168996-A-5-C MS	Matrix Spike	Total Recoverable	Water	6010B	595224
280-168996-A-5-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	595224
280-169378-A-1-B MS	Matrix Spike	Dissolved	Water	6010B	595224
280-169378-A-1-C MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	595224

Prep Batch: 595768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Dissolved	Water	3005A	
MB 280-595768/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-595768/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 595768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-595768/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
280-168996-A-11-J MS	Matrix Spike	Dissolved	Water	3005A	
280-168996-A-11-K MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	

Analysis Batch: 595811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total Recoverable	Water	6020	595222
280-169433-3	LEACH POND	Total Recoverable	Water	6020	595222
MB 280-595222/1-A	Method Blank	Total Recoverable	Water	6020	595222
LCS 280-595222/2-A	Lab Control Sample	Total Recoverable	Water	6020	595222
280-169397-C-2-C MS	Matrix Spike	Total Recoverable	Water	6020	595222
280-169397-C-2-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	595222

Analysis Batch: 595984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Dissolved	Water	6010B	595768
MB 280-595768/1-A	Method Blank	Total Recoverable	Water	6010B	595768
LCS 280-595768/2-A	Lab Control Sample	Total Recoverable	Water	6010B	595768
LCSD 280-595768/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	595768
280-168996-A-11-J MS	Matrix Spike	Dissolved	Water	6010B	595768
280-168996-A-11-K MSD	Matrix Spike Duplicate	Dissolved	Water	6010B	595768

General Chemistry

Analysis Batch: 594259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	SM 2540D	
280-169433-3	LEACH POND	Total/NA	Water	SM 2540D	
MB 280-594259/3	Method Blank	Total/NA	Water	SM 2540D	
LCS 280-594259/1	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 280-594259/2	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
280-169383-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	

Analysis Batch: 594400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	SM 2540C	
280-169433-3	LEACH POND	Total/NA	Water	SM 2540C	
MB 280-594400/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 280-594400/2	Lab Control Sample	Total/NA	Water	SM 2540C	
280-169351-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 594521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	9040B	
280-169433-3	LEACH POND	Total/NA	Water	9040B	
LCS 280-594521/4	Lab Control Sample	Total/NA	Water	9040B	
280-169459-D-2 DU	Duplicate	Total/NA	Water	9040B	

Analysis Batch: 594596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 594596 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Total/NA	Water	SM 2320B	
MB 280-594596/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-594596/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-169353-J-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 594767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	9050A	
280-169433-3	LEACH POND	Total/NA	Water	9050A	
MB 280-594767/5	Method Blank	Total/NA	Water	9050A	
LCS 280-594767/4	Lab Control Sample	Total/NA	Water	9050A	
280-169457-A-2 DU	Duplicate	Total/NA	Water	9050A	

Analysis Batch: 594928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	410.4	
280-169433-3	LEACH POND	Total/NA	Water	410.4	
MB 280-594928/5	Method Blank	Total/NA	Water	410.4	
LCS 280-594928/3	Lab Control Sample	Total/NA	Water	410.4	
LCSD 280-594928/4	Lab Control Sample Dup	Total/NA	Water	410.4	
280-169553-B-1 MS	Matrix Spike	Total/NA	Water	410.4	
280-169553-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	

Prep Batch: 595277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	351.2	
280-169433-3	LEACH POND	Total/NA	Water	351.2	
MB 280-595277/28-A	Method Blank	Total/NA	Water	351.2	
MB 280-595277/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-595277/1-A	Lab Control Sample	Total/NA	Water	351.2	
LCS 280-595277/27-A	Lab Control Sample	Total/NA	Water	351.2	
280-169611-A-4-B MS	Matrix Spike	Total/NA	Water	351.2	
280-169611-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	

Analysis Batch: 595473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	351.2	595277
MB 280-595277/28-A	Method Blank	Total/NA	Water	351.2	595277
LCS 280-595277/27-A	Lab Control Sample	Total/NA	Water	351.2	595277

Analysis Batch: 595559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Total/NA	Water	351.2	595277
MB 280-595277/2-A	Method Blank	Total/NA	Water	351.2	595277
LCS 280-595277/1-A	Lab Control Sample	Total/NA	Water	351.2	595277
280-169611-A-4-B MS	Matrix Spike	Total/NA	Water	351.2	595277
280-169611-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	595277

Analysis Batch: 595723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	SM 2340C	

General Chemistry (Continued)

Analysis Batch: 595723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Total/NA	Water	SM 2340C	
MB 280-595723/3	Method Blank	Total/NA	Water	SM 2340C	
LCS 280-595723/1	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 280-595723/2	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
280-169706-B-3 MS	Matrix Spike	Total/NA	Water	SM 2340C	
280-169706-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	

Analysis Batch: 595843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	9060	
MB 280-595843/4	Method Blank	Total/NA	Water	9060	
LCS 280-595843/3	Lab Control Sample	Total/NA	Water	9060	
LCSD 280-595843/21	Lab Control Sample Dup	Total/NA	Water	9060	
280-169222-A-3 MS	Matrix Spike	Total/NA	Water	9060	
280-169222-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 596033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Total/NA	Water	9060	
MB 280-596033/4	Method Blank	Total/NA	Water	9060	
LCS 280-596033/3	Lab Control Sample	Total/NA	Water	9060	
280-169273-A-3 MS	Matrix Spike	Total/NA	Water	9060	
280-169273-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	9060	

Analysis Batch: 596090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	300.0	
280-169433-3	LEACH POND	Total/NA	Water	300.0	
280-169433-3	LEACH POND	Total/NA	Water	300.0	
MB 280-596090/47	Method Blank	Total/NA	Water	300.0	
MB 280-596090/6	Method Blank	Total/NA	Water	300.0	
LCS 280-596090/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-596090/45	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-596090/46	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-596090/5	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 280-596090/3	Lab Control Sample	Total/NA	Water	300.0	
280-169478-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-169478-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-169569-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-169569-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-169602-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
280-169602-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-169478-A-1 DU	Duplicate	Total/NA	Water	300.0	
280-169569-A-2 DU	Duplicate	Total/NA	Water	300.0	
280-169602-B-2 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 596249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	353.2	
MB 280-596249/22	Method Blank	Total/NA	Water	353.2	
LCS 280-596249/21	Lab Control Sample	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 596249 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169398-C-1 MS	Matrix Spike	Total/NA	Water	353.2	
280-169398-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Analysis Batch: 596566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	350.1	
280-169433-3	LEACH POND	Total/NA	Water	350.1	
MB 280-596566/19	Method Blank	Total/NA	Water	350.1	
LCS 280-596566/17	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-596566/18	Lab Control Sample Dup	Total/NA	Water	350.1	
280-169558-A-3 MS	Matrix Spike	Total/NA	Water	350.1	
280-169558-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

Analysis Batch: 596713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-2	LPOND LDS	Total/NA	Water	SM 1030E	
280-169433-2	LPOND LDS	Total/NA	Water	SM 1030E (meq)	
280-169433-3	LEACH POND	Total/NA	Water	SM 1030E	
280-169433-3	LEACH POND	Total/NA	Water	SM 1030E (meq)	
MB 280-596713/1	Method Blank	Total/NA	Water	SM 1030E (meq)	

Analysis Batch: 596716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-169433-3	LEACH POND	Total/NA	Water	353.2	
MB 280-596716/61	Method Blank	Total/NA	Water	353.2	
LCS 280-596716/60	Lab Control Sample	Total/NA	Water	353.2	
280-169656-B-6 MS	Matrix Spike	Total/NA	Water	353.2	
280-169656-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	

Client Sample ID: TB04

Lab Sample ID: 280-169433-1

Date Collected: 11/17/22 07:00

Matrix: Water

Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	595025	11/30/22 09:47	MD	EET DEN

Client Sample ID: LPOND LDS

Lab Sample ID: 280-169433-2

Date Collected: 11/17/22 13:10

Matrix: Water

Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	595025	11/30/22 11:52	MD	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	595224	12/02/22 19:26	LJS	EET DEN
Dissolved	Analysis	6010B		1			595656	12/05/22 23:16	KRP	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	595224	12/02/22 19:26	LJS	EET DEN
Total Recoverable	Analysis	6010B		1			595656	12/05/22 22:41	KRP	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	595222	12/05/22 08:47	LJS	EET DEN
Total Recoverable	Analysis	6020		1			595811	12/06/22 23:19	LRD	EET DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	596090	12/09/22 09:19	MEC	EET DEN
Total/NA	Analysis	350.1		25	10 mL	10 mL	596566	12/13/22 09:57	MMP	EET DEN
Total/NA	Prep	351.2			5 mL	25 mL	595277	12/01/22 16:45	BCR	EET DEN
Total/NA	Analysis	351.2		5			595473	12/03/22 17:56	LRB	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	596249	12/09/22 15:36	ZPM	EET DEN
Total/NA	Analysis	410.4		20	2 mL	2 mL	594928	11/29/22 12:38	BCR	EET DEN
Total/NA	Analysis	9040B		1			594521	11/22/22 14:37	KEG	EET DEN
Total/NA	Analysis	9050A		1			594767	11/28/22 12:07	KEG	EET DEN
Total/NA	Analysis	9060		5	20 mL	20 mL	595843	12/06/22 20:28	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596713	12/14/22 13:59	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596713	12/14/22 13:59	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594596	11/23/22 12:08	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	595723	12/06/22 11:33	SJD	EET DEN
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	594400	11/22/22 11:21	ASP	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	594259	11/21/22 12:36	ASP	EET DEN

Client Sample ID: LEACH POND

Lab Sample ID: 280-169433-3

Date Collected: 11/17/22 13:40

Matrix: Water

Date Received: 11/19/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	595025	11/30/22 12:13	MD	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	595224	12/02/22 19:26	LJS	EET DEN
Dissolved	Analysis	6010B		1			595656	12/05/22 23:24	KRP	EET DEN
Dissolved	Prep	3005A			50 mL	50 mL	595768	12/06/22 15:58	LJS	EET DEN
Dissolved	Analysis	6010B		1			595984	12/07/22 16:39	KRP	EET DEN
Total Recoverable	Prep	3005A			50 mL	50 mL	595224	12/02/22 19:26	LJS	EET DEN
Total Recoverable	Analysis	6010B		1			595656	12/05/22 22:49	KRP	EET DEN

Lab Chronicle

Client: Waste Management
Project/Site: 1003|Riverbend Landfill SCS Engineers

Job ID: 280-169433-1

Client Sample ID: LEACH POND

Date Collected: 11/17/22 13:40
Date Received: 11/19/22 09:20

Lab Sample ID: 280-169433-3

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	595222	12/05/22 08:47	LJS	EET DEN
Total Recoverable	Analysis	6020		1			595811	12/06/22 23:21	LRD	EET DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	596090	12/09/22 09:36	MEC	EET DEN
Total/NA	Analysis	300.0		50	5 mL	5 mL	596090	12/09/22 09:53	MEC	EET DEN
Total/NA	Analysis	350.1		80	10 mL	10 mL	596566	12/13/22 09:59	MMP	EET DEN
Total/NA	Prep	351.2			5 mL	25 mL	595277	12/01/22 16:45	BCR	EET DEN
Total/NA	Analysis	351.2		10			595559	12/05/22 11:38	LRB	EET DEN
Total/NA	Analysis	353.2		100	100 mL	100 mL	596716	12/14/22 14:08	ZPM	EET DEN
Total/NA	Analysis	410.4		50	2 mL	2 mL	594928	11/29/22 12:38	BCR	EET DEN
Total/NA	Analysis	9040B		1			594521	11/22/22 14:41	KEG	EET DEN
Total/NA	Analysis	9050A		1			594767	11/28/22 12:07	KEG	EET DEN
Total/NA	Analysis	9060		20	20 mL	20 mL	596033	12/07/22 19:40	ABW	EET DEN
Total/NA	Analysis	SM 1030E		1			596713	12/14/22 13:59	SAH	EET DEN
Total/NA	Analysis	SM 1030E (meq)		1			596713	12/14/22 13:59	SAH	EET DEN
Total/NA	Analysis	SM 2320B		1			594596	11/23/22 12:29	KEG	EET DEN
Total/NA	Analysis	SM 2340C		5	25 mL	25 mL	595723	12/06/22 11:33	SJD	EET DEN
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	594400	11/22/22 11:21	ASP	EET DEN
Total/NA	Analysis	SM 2540D		1	250 mL	250 mL	594259	11/21/22 12:36	ASP	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: E. Taylor	Lab PM: Collins, Janice S	Carrier Tracking No(s):	COC No: 280-124181-869.1
Client Contact:	Phone: 903 502 7627	E-Mail: Janice.Collins@et.eurofinsus.com	State of Origin:	Page: 1 of 1
Company: Waste Management	PWSID:			Job #:
Address: 13469 SW Highway 18	Due Date Requested:			
City: McMinnville	TAT Requested (days):			
State, Zip: OR, 97128	Compliance Project: Δ Yes Δ No			
Phone:	PO #:			
Email:	WO #:			
Project Name: 1003|Riverbend Landfill SCS Engineers	Project #: 28002786- Semiannual Leachate Lagoon - Apr Nov			
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 - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, 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	6010B/6020/7470A/2340C- Total Metals/Hardness	Ammonia/COD/TKN/TOC/NOXT	8260B- VOCs	2540D- TSS	6010B- Dissolved Metals (FF)	Cation/Anion Balance	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	A	N	D			
TB04	11/17/22	0700	G	W						X	X			2	Short Holds: pH
L Pond LDS	11/17/22	1310	G	W	X		X	X	X	X	X	X	X	9	
Leach Pond	11/17/22	1340	G	W	X		X	X	X	X	X	X	X	9	

280-169433 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		11/18/22 @ 1630	SCS		11-19-22 0920	ETA 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: Δ Yes Δ No | Custody Seal No.: 1073455

Cooler Temperature(s) °C and Other Remarks: 0.5°C IR12 CF0.0

Ver: 01/16/2019

1/9/2023

Do Not Lift Using This Tag

ORIGIN ID:BNOA

SHIP DATE: 18NOV22
ACTWGT: 50.80 LB
CAD: /SSFE2341
DIMS: 27x13x12 IN

Part # 156207-438-NNNN REV 05/21

TO SAMPLE RECEIVING
EUROFINS DENVER
4955 YARROW ST

0.5°C
1073455

ARVADA CO 80002 (US)
(303) 736-0100
INV:
PO: REF: DEPT:

FedEx Express

J224222101802uv

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0667 8172 5304 4223

XO LAAA

80002
CO-US DEN

RT 938 1/ A
12:00 4223
ST 6

280-169433 Waybill

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-169433-1

Login Number: 169433
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	

Eurofins Environmental Testing

ORELAP Certification

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 : **1/9/2022**
EXPIRATION DATE : **1/8/2023**
Certificate No : **4025 - 016**

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 - 016

Issue Date: 1/9/2022 Expiration Date: 1/8/2023

As of 1/9/2022 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
		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)		
	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		

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Arvada, CO 80002

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Issue Date: 1/9/2022 Expiration Date: 1/8/2023

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4680	cis-1,3-Dichloropropene		
		4595	Dibromomethane (Methylene bromide)		
		4625	Dichlorodifluoromethane (Freon-12)		

TestAmerica Denver

4955 Yarrow St.

Arvada, CO 80002

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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
		9369	Diesel range organics (DRO)		
	AK103 RRO			90015400	Determination of Residual Range Organics - Alaska Department of Environmental Conservation

TestAmerica Denver

4955 Yarrow St.

Arvada, CO 80002

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		7044	Ammonium Perfluorooctanoate (APFO)		
		4846	N-Ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		

TestAmerica Denver

4955 Yarrow St.

Arvada, CO 80002

ORELAP ID: 4025

EPA CODE: CO00026

Certificate: 4025 - 016

Issue Date: 1/9/2022 Expiration Date: 1/8/2023

As of 1/9/2022 this list supersedes all previous lists for this certificate number.

Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4847	N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)		
		6911	Perfluorobutane Sulfonate (PFBS)		
		6918	Perfluorobutane sulfonic acid (PFBS)		
		6915	Perfluorobutanoic acid (PFBA)		
		9562	Perfluorodecane Sulfonate (PFDS)		
		6920	Perfluorodecane sulfonic acid (PFDS)		
		6905	Perfluorodecanoic acid (PFDA)		
		6923	Perfluorododecane sulfonic acid (PFDoS)		
		6903	Perfluorododecanoic acid (PFDoA)		
		9470	Perfluoroheptane sulfonic acid (PFHpS)		
		6908	Perfluoroheptanoic acid (PFHpA)		
		6901	Perfluorohexadecanoic acid (PFHxDA)		
		6910	Perfluorohexane sulfonate (PFHxS)		
		6927	Perfluorohexane sulfonic acid (PFHxS)		
		6913	Perfluorohexanoic acid (PFHxA)		
		6929	Perfluorononane sulfonic acid (PFNS)		
		6906	Perfluorononanoic acid (PFNA)		
		6916	Perfluorooctadecanoic acid (PFODA)		
		6917	Perfluorooctane sulfonamide (PFOSAm)		
		6909	Perfluorooctane sulfonate (PFOS)		
		6931	Perfluorooctane sulfonic acid (PFOS)		
		6912	Perfluorooctanoic acid (PFOA)		
		6934	Perfluoropentane sulfonic acid (PFPeS)		
		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

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
					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			10261617	N-Hexane Extractable Material (Oil and Grease) by Extraction and Gravimetry
		1803	n-Hexane Extractable Material (O&G)		
		1860	Oil & Grease		
	EPA 1664B (SGT-HEM)			10260628	Silica Gel Treated n-Hexane Extractable Material (Oil & Grease)
		2050	Total Petroleum Hydrocarbons (TPH)		
	EPA 180.1 2			10011800	Turbidity - Nephelometric
		2055	Turbidity		
	EPA 200.7 4.4			10013806	ICP - metals
		1000	Aluminum		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		1180	Titanium		
		1185	Vanadium		
		1190	Zinc		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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		
		1820	Nitrate plus Nitrite as N		
		1840	Nitrite as N		
		1870	Orthophosphate as P		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 1.0			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		
		1820	Nitrate plus Nitrite as N		
		1840	Nitrite as N		
		1825	Total nitrate+nitrite		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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		
	EPA 524.2			10088605	Volatile Organic Compounds GC/MS Capillary Column
		5105	1,1,1,2-Tetrachloroethane		
		5160	1,1,1-Trichloroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4390	Bromochloromethane		
		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		
		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)		
	EPA 6010B			10155609	ICP - AES

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		
		1185	Vanadium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		1160	Strontium		
		2017	Sulfur		
		1165	Thallium		
		1175	Tin		
		1180	Titanium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1185	Vanadium		
		1190	Zinc		
	EPA 6010D 4			10155916	Metals by 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		
		2017	Sulfur		
		1165	Thallium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		1190	Zinc		
	EPA 6020A 1			10156419	Inductively Coupled Plasma -Mass Spectrometry
		1000	Aluminum		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		
		1020	Beryllium		
		1030	Cadmium		
		1040	Chromium		
		1050	Cobalt		
		1055	Copper		
		1075	Lead		
		1090	Manganese		
		1100	Molybdenum		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1105	Nickel		
		1140	Selenium		
		1150	Silver		
		1160	Strontium		
		1165	Thallium		
		1170	Thorium		
		1175	Tin		
		1183	Tungsten		
		1184	Uranium (mass)		
		1185	Vanadium		
		1190	Zinc		
	EPA 608			10103603	Organochlorine Pesticides & PCBs by GC/ECD
		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)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		
		7250	Chlordane (tech.)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		7810	Methoxychlor		
	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)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		7390	Demeton		
		7395	Demeton-o		
		7385	Demeton-s		
		7410	Diazinon		
		8625	Disulfoton		
		7770	Malathion		
		7825	Methyl parathion (Parathion, methyl)		
		7955	Parathion, ethyl		
	EPA 624.1			10298121	Purgeables by 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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 625.1			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		
		6190	2,6-Dinitrotoluene (2,6-DNT)		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			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		
		5670	Butyl benzyl phthalate		
		5680	Carbazole		
		7210	Carbofuran phenol		
		5855	Chrysene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6665	Pyrene		
		5095	Pyridine		
		5200	Triethylamine		
	EPA 6860			10304800	Perchlorate in Water, Soils and Solid Wastes Using Ion Chromatography/Electrospray Ionization/Mass Spectrometry

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1895	Perchlorate		
	EPA 7196A Update I			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		
	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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		7725	Isodrin		
		7740	Kepone		
		7810	Methoxychlor		
		7870	Mirex		
		8045	Propachlor (Ramrod)		
		8250	Toxaphene (Chlorinated camphene)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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-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 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)		
		8896	Total Pentachlorobiphenyls		
	EPA 8141A			10182000	Organophosphorous Pesticides by GC/NPD
		7045	Anilazine		
		7065	Atrazine		
		7070	Azinphos-ethyl (Ethyl guthion)		
		7075	Azinphos-methyl (Guthion)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		8110	Ronnel		
		8125	Simazine		
		8155	Sulfotepp		
		8200	Tetrachlorvinphos (Stirophos, Gardona) Z-isomer		
		8235	Thionazin (Zinophos)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		7850	Mevinphos		
		7905	Naled		
		7955	Parathion, ethyl		
		7985	Phorate		
		8000	Phosmet (Imidan)		
		8110	Ronnel		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 (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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 (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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4400	Bromoform		
		4403	Butyl acetate		
		4450	Carbon disulfide		
		4455	Carbon tetrachloride		
		4475	Chlorobenzene		
		4575	Chlorodibromomethane		
		4577	Chlorodifluoromethane (Freon-22)		
		4485	Chloroethane (Ethyl chloride)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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-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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		5120	Tetrahydrofuran (THF)		
		9574	Tetrahydrothiophene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			(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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)

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EPA CODE: CO00026

Certificate: 4025 - 016

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5580	Benzo(a)pyrene		
		5605	Benzo(e)pyrene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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 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)		

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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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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 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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		
		6105	4-Dimethyl aminoazobenzene		
		6410	4-Methylphenol (p-Cresol)		
		6470	4-Nitroaniline		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		7510	Endosulfan I		
		4810	Ethyl methacrylate		
		6260	Ethyl methanesulfonate		
		7580	Famphur		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6590	Pentachlorobenzene		
		5035	Pentachloroethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6525	n-Nitrosodiethylamine		
		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 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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		
		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		
		6635	Phthalic acid		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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-		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
			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)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
	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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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			10199209	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			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
		1710	Dissolved organic carbon (DOC)		
		1813	Total Inorganic Carbon		
		2040	Total organic carbon		
	EPA 9060A			10244823	Total Organic Carbon
		1710	Dissolved organic carbon (DOC)		
		1813	Total Inorganic Carbon		
		1813	Total Inorganic Carbon		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		2040	Total organic 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)		
	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 online			20045618	Alkalinity as CaCO3
		1505	Alkalinity as CaCO3		
	SM 2320 B-97			20045607	Alkalinity by Titration Method

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	1997				
		1505	Alkalinity as CaCO3		
	SM 2340 B-2011 online			20046611	Hardness
		1550	Calcium hardness as CaCO3		
		1750	Hardness		
		1755	Total hardness as CaCO3		
	SM 2340 B-97 1997			20046600	Hardness by calculation
		1550	Calcium hardness as CaCO3		
		1750	Hardness		
		1755	Total hardness as CaCO3		
	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		
	SM 2510 B-97 1997			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 1997			20049405	Total Solids Dried at 103 - 105C
		1950	Residue-total		
	SM 2540 C-2011 online			20050413	Residue-filterable (TDS)

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1955	Residue-filterable (TDS)		
	SM 2540 C-97 1997			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 1997			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
		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

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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			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
		1840	Nitrite as N		
	SM 4500-$NO2^-$			20112407	Nitrite by Colorimetric Determination

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	B 19th ED				
		1840	Nitrite as N		
	SM 4500-NO2⁻ B 20th ED			20112601	Nitrite by Colorimetric Determination
		1840	Nitrite as N		
	SM 4500-NO2⁻ B 21st ED			20112805	Nitrite by Colorimetric Method
		1840	Nitrite as N		
	SM 4500-NO2⁻ B 22nd ED			20112816	Nitrite - Colorimetric Method
		1840	Nitrite as N		
	SM 4500-NO2⁻ 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

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		2000	Sulfate		
	SM 5210 B-2001 online			20135255	Biochemical Oxygen Demand (BOD), 5-Day
		1530	Biochemical oxygen demand		
	SM 5210 B-2011 online			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 Graphite Furnace Absorption Spectrometry
		1208	Organic Lead		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	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
		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		
	EPA 1311			10118806	Toxicity Characteristic Leaching Procedure

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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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		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
		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		

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		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		
		1170	Thorium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		1005	Antimony		
		1010	Arsenic		
		1015	Barium		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 6860			10304800	Perchlorate in Water, Soils and Solid Wastes Using Ion Chromatography/Electrospray Ionization/Mass Spectrometry
		1895	Perchlorate		
	EPA 7196A Update I			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
		5180	1,2,3-Trichloropropane		
		4585	1,2-Dibromoethane (EDB, Ethylene dibromide)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		7240	cis-chlordane (alpha-Chlordane)		
		7105	delta-BHC		
		7405	Diallate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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-Hexachlorocyclohexane)		
		7115	beta-BHC (beta-Hexachlorocyclohexane)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		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)		
	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		
		8625	Disulfoton		
		7550	EPN		
		7570	Ethoprop		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		7315	Coumaphos		
		7390	Demeton		
		7395	Demeton-o		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		8560	2,4-DB		
		8555	Dalapon		
		8595	Dicamba		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		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)		
		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		
		4385	Bromobenzene		
		4390	Bromochloromethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4795	Ethylene oxide		
		4770	Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)		
		4772	Fluoromethane (Freon 41)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4370	T-amylmethylether (TAME)		
		4420	tert-Butyl alcohol		
		4445	tert-Butylbenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		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		
		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)		
		4375	Benzene		
		5635	Benzyl chloride		
		4385	Bromobenzene		
		4390	Bromochloromethane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		4760	Ethyl acrylate		
		4810	Ethyl methacrylate		
		4765	Ethylbenzene		
		4795	Ethylene oxide		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		4505	Chloroform		
		4680	cis-1,3-Dichloropropene		
		4835	Hexachlorobutadiene		
		4420	tert-Butyl alcohol		
		4685	trans-1,3-Dichloropropylene		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
	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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5795	2-Chloronaphthalene		
		5800	2-Chlorophenol		
		5866	2-Ethoxyethanol (cellosolve)		
		6360	2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6125	a-a-Dimethylphenethylamine		
		5500	Acenaphthene		
		5505	Acenaphthylene		
		5510	Acetophenone		
		4330	Acrylamide		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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-Chlorophenol		
		5862	Cresols, Total		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		
		7405	Diallate		
		9354	Dibenz(a, h) acridine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6325	Isosafrole		
		7740	Kepone		
		6345	Methapyrilene		
		6375	Methyl methanesulfonate		
		7825	Methyl parathion (Parathion, methyl)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6635	Phthalic acid		
		6640	Phthalic anhydride		
		6650	Pronamide (Kerb)		
		6665	Pyrene		
		5095	Pyridine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5765	bis(2-Chloroethyl) ether		
		5670	Butyl benzyl phthalate		
		5855	Chrysene		
		6065	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		6430	2-Naphthylamine		
		6460	2-Nitroaniline		
		6490	2-Nitrophenol		
		5050	2-Picoline (2-Methylpyridine)		
		6412	3 & 4 Methylphenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5555	Anthracene		
		5560	Aramite		
		7065	Atrazine		
		5562	Azobenzene		
		5570	Benzaldehyde		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6070	Diethyl phthalate		
		7475	Dimethoate		
		6135	Dimethyl phthalate		
		5925	Di-n-butyl phthalate		
		6200	Di-n-octyl phthalate		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5015	Nitrobenzene		
		6525	n-Nitrosodiethylamine		
		6530	n-Nitrosodimethylamine		
		5025	n-Nitroso-di-n-butylamine		
		6545	n-Nitrosodi-n-propylamine		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)		
		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

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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)		
		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		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5660	4-Bromophenyl phenyl ether (BDE-3)		
		5700	4-Chloro-3-methylphenol		
		5745	4-Chloroaniline		
		5825	4-Chlorophenyl phenylether		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5585	Benzo[b]fluoranthene		
		5610	Benzoic acid		
		5630	Benzyl alcohol		
		5760	bis(2-Chloroethoxy)methane		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6265	Fluoranthene		
		6270	Fluorene		
		6275	Hexachlorobenzene		
		4835	Hexachlorobutadiene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5550	o-Anisidine		
		5553	Octachlorostyrene		
		7955	Parathion, ethyl		
		6590	Pentachlorobenzene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		5500	Acenaphthene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		6530	n-Nitrosodimethylamine		
		6545	n-Nitrosodi-n-propylamine		
		6535	n-Nitrosodiphenylamine		
		6605	Pentachlorophenol		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		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)		
		9507	2-Nitrotoluene		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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		
		9558	Pentaerythritoltetranitrate (PETN)		
		8075	Propham		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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)
		6885	1,3,5-Trinitrobenzene (1,3,5-TNB)		
		6160	1,3-Dinitrobenzene (1,3-DNB)		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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
		2005	Sulfide		
	EPA 9034			10196006	Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides
		2005	Sulfide		
	EPA 9045C			10198400	Soil and Waste pH

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		1900	pH		
	EPA 9045D			10244607	Soil and Waste pH
		1900	pH		
	EPA 9050A			10198808	Specific Conductance
		1610	Conductivity		
	EPA 9056			10199209	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			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		
	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

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
		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 1997			20045607	Alkalinity by Titration Method
		1505	Alkalinity as CaCO3		
	SM 2510 B-2011			20048617	Conductivity by Probe
		1610	Conductivity		
	SM 2510 B-97 1997			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
		1645	Total cyanide		
	SM 4500-NO2 B-2011 online			20113115	Nitrite as N
		1840	Nitrite as N		

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Matrix	Reference	Analyte Code	Analyte	Method Code	Description
	SM 4500-NO_2^- B-2000 online			20113104	Nitrite by Colorimetric Determination
		1835	Nitrite		
		1840	Nitrite as N		

APPENDIX D

Results of Field and Laboratory QA/QC Review

(on CD)

Spring 2022

Compliance Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161414-1

Samples: MW-12A, MW-12B, MW-15A, MW-15B, MW-16A, DUP1 (MW-16A), MW-16B, MW-21A and TB1.

Sample Date: 04/19-21/2022
Laboratory Sample Received Date: 04/22/2022 and 04/25/2022
Sample Temperatures on arrival at lab: 0.4, 2.1, 3.2, 4.4, and 7.5°C
Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/01/2022 (IH)

Cation/Anion Balance: MW-12A = -2.6%, MW-12B = 2.4%, MW-15A = -20%, MW-15B = -0.47%, MW-16A = 6.3%, DUP1 (MW-16A) = 9.6%, MW-16B = -1.6%, MW-21A = -1.8%,

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, and all surrogate recoveries are within control limits except for 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene in batch 573474 (*- flags). These are noted and qualified for in the case narrative.
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 573474 (F1 and F2 flags). These are 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.
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 limit..
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 04/19-21/2022 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 Duplicates

A field duplicate (DUP1) was collected on 04/19/2022 at MW-16A. All RPDs were within 20% except for dissolved iron (32%). It should be noted that the concentrations of dissolved iron in the DUP1 and MW-16A sample were less than five times the reporting limit and, therefore, not controlled by RPDs.

Data Quality Reviews (DQRs)

A DQR was initiated on 05/23/2022 to check the cation/anion balances for MW-15A, MW-16A, and DUP1. On 6/9/2022, the recalculated cation/anion balance for MW-15A was -3.9%. The cation/anion balance for the DUP1 and MW-16A samples were confirmed at 9.6% and 6.3%, respectively.

Notes

None.

Data Validation

Upon final review of lab report #280-161414-1 for Riverbend Landfill, SCS Engineers finds the data to be /valid for its intended use ***(06/09/2022; IH).***

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161449-1

Samples: MW-14A, MW-14B, and TB3

Sample Date: 04/22/2022
Laboratory Sample Received Date: 04/23/2022
Sample Temperatures on arrival at lab: 1.1 and 2.7°C
Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/02/2022 (BR)

Cation/Anion Balance: MW-14A = -3.1%, MW-14B = -2.1%

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 573935 (F1 F2 flags). This is noted and qualified for in the case narrative.
TICs	TICS were not identified in any samples except for MW-14A.

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.
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 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 (TB3) were carried into the field 04/22/2022 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 #280-161449-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/02/2022; BR).***

SCS Engineers QA/QC Review
Groundwater – Spring 2022 Compliance Wells
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-162989-1

Samples: FB5 (MW-21B), MW-21B, and DUP5 (MW-21B)

Sample Date: 06/01/2022
Laboratory Sample Received Date: 06/02/2022
Sample Temperatures on arrival at lab: 4.4°C
Laboratory Data Received Date: 06/22/2022
QA/QC Review Date: 06/23/2022 (BR)

Cation/Anion Balance: FB5 (MW-21B) = NC, MW-21B = 1.9%, and DUP5 (MW-21B) = 8.8%

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 except bromomethane in batch 577411 (*+ flag). This is noted and qualified for in the case narrative.
LCSD	All RPDs are within control limits except chloroethane, chloromethane, and vinyl chloride in batch 577411 (*1 flags). This is noted and qualified for in the case narrative.
MS/MSD	MS/MSD were not performed for Method 8260B due to insufficient sample volume. All other MS and MSD results were within established 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 limits, and all surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits.

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 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 06/01/2022 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 (FB5) was collected on 06/01/2022 near MW-21B. All analytes were reported as non-detect.

Field Duplicates

A field duplicate (DUP5) was collected on 06/01/2022 at MW-21B. All RPDs were within 20%.

Data Quality Reviews (DQRs)

None.

Notes

None.

Data Validation

Upon final review of lab report #280-162989-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/23/2022; BR).***

Spring 2022

Detection Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161417-1

Samples: P-05A, P-06A, P-07A, and FB1

Sample Date: 04/19-20/2022
Laboratory Sample Received Date: 04/22/2022
Sample Temperatures on arrival at lab: 0.4, 2.1, 3.2, and 4.4°C
Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/01/2022 (IH)

Cation/Anion Balance: not applicable.

Dissolved Metals

Method Blanks	All analytes are non-detect except for dissolved iron and dissolved manganese in batch 573344 (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 for ammonia in batch 574030 (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.

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
Field Blank
A field blank was collected on 4/19/22 near P-07A. All analytes were reported as non-detect.

Data Quality Reviews (DQRs
None.

Notes
None.

Data Validation
Upon final review of lab report #280-161417-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/01/2022; IH).***

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161448-1

Samples: MW-19A, FB4, DUP4, and TB3.

Sample Date: 04/22/2022
Laboratory Sample Received Date: 04/23/2022
Sample Temperatures on arrival at lab: 1.1ºC and 2.7ºC.
Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/02/2022 (BR)

Cation/Anion Balance: MW-19A = -3.9%, FB4 = NC, DUP4 = -1.9%.

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 (TB3) were carried into the field on 04/22/2022 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 on 4/22/2022. All calculated RPDs were within 20% except TOC (75%), dissolved potassium (24%), and ammonia (26%). It should be noted that the concentrations of TOC, dissolved potassium, and ammonia in the DUP4 and MW-19A samples were less than 5 times the reporting limit therefore are not controlled by RPDs.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of lab report #280-161448-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/02/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161462-1

Samples: MW-20A, MW-20B, and TB1.

Sample Date: 04/19/2022
Laboratory Sample Received Date: 04/25/2022
Sample Temperatures on arrival at lab: 3.2 and 7.5ºC
Laboratory Data Received Date: 05/13/2022
QA/QC Review Date: 06/02/2022 (BR)

Cation/Anion Balance: MW-20A=-1.1% and MW-20B = -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. 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 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	All MS/MSD limits and RPDs are within control limits.

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	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.
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 04/19/2022 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 Continuing Calibration Blank (CCB) was outside control limits for Bicarbonate Alkalinity during Method 2320B analysis. Because the associated samples exhibited detections of Total Alkalinity and Bicarbonate Alkalinity greater than ten times the CCB result, corrective action was deemed unnecessary.

Data Validation

Upon final review of lab report #280-161462-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/02/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161465-1

Samples: MW-5A, MW-5B, DUP2, and TB1

Sample Date: 04/19-20/2022
Laboratory Sample Received Date: 04/25/2022
Sample Temperatures on arrival at lab: 3.2°C
Laboratory Data Received Date: 05/10/2022
QA/QC Review Date: 06/02/2022 (BR)

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 except 1,2,3-Trichlorobenzene in batch 573456 (flag), 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	A TIC was identified in TB1.

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
The holding 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 04/19/2022 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 Duplicate
A field duplicate (DUP2) was collected at MW-5A on 4/20/2022. All calculated RPDs were within 20% except 1,4-Dichlorobenzene (154%) and chlorobenzene (143%). It should be noted that the concentrations of 1,4-Dichlorobenzene and chlorobenzene in the DUP2 samples were more than 5 times the reporting limit therefore are controlled by RPDs.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of lab report #280-161465-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/02/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Spring 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161418-1

Samples: TB1, MW-22A, DUP3 (MW-22A), and FB3 (MW-22A).

Sample Date: 04/21/2022
Laboratory Sample Received Date: 04/22/2022
Sample Temperatures on arrival at lab: 0.4, 2.1 and 3.2ºC
Preliminary Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/01/2022 (IH)

Cation/Anion Balance: MW-22A=-1.0%, FB3= NC, DUP3=-2.0%.

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, except for 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene in batch 573474 (*- flags). These are noted and qualified for in the case narrative.
LCSD	All RPDs are within control limits.
Matrix Spike	All MS recoveries were within control limits except for multiple compounds in batch 573474 (F1 and F2 flags). These are noted and qualified for in the case narrative.
MSD	All RPDs were within control limits except for multiple compounds in batch 573474 (F1 and F2 flags). These are noted and qualified for in the case narrative.
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 ammonia in batch 574030 (F1 flag). This is noted and qualified for in the case narrative.
MSD	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 04/19/2022 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 (DUP3) was collected at MW-22A. All RPDs were within 20% except for ammonia (62%). It should be noted that the reported concentrations of ammonia in the DUP3 and MW-22A sample were less than 5 times the reporting limit and, therefore, not controlled by RPDs.

Field Blank
A field blank (FB3) 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 final review of data presented in lab report #280-161418-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/01/2022; IH).***

Spring 2022

Surface Water

QA/QC Results

SCS Engineers QA/QC Review
Surface Water – Spring 2022 South Yamhill River Surface Water Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161382-1

Samples: Trip Blank, SYR SW-1, SYR SW-2, and SYR MW-12A.

Sample Date: 04/21/2022
Laboratory Sample Received Date: 04/22/2022 and 04/25/2022
Sample Temperatures on arrival at lab: 0.9, 1.2, and 4.4°C
Laboratory Data Received Date: 05/12/2022
QA/QC Review Date: 06/01/2022 (IH)

Cation/Anion Balance: SYR SW-1= -3.2%, SYR SW-2 = 1.3%, SYR MW-12A= 6.6%.

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, except for trichlorofluoromethane in batch 573793 (*+ flag). This is noted and qualified for in the case narrative.
LCSD	All RPDs are within control limits except for acetone in batch 573793 (*1 flag). This is noted and qualified for in the case narrative,
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 identified in all 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.
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 COD in batch 574418 and nitrate + nitrite as nitrogen in batch 573912 (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 (HF flags) and orthophosphate (H flags) for sample SYR SW-1. 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 04/21/2022 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

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 #280-161382-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/01/2022; IH).***

Spring 2022

Leachate Management System Liquids

QA/QC Results

SCS Engineers QA/QC Review
Leachate – Spring 2022 Leachate Management System Sumps Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161446-1

Samples: TB2, FB2, 1/5P, 4/5S, 4/5S, 6/7P, 6/7S, 8P, 8S, 9P, 9S

Sample Date: 04/20/2022, 4/22/2022
Laboratory Sample Received Date: 04/23/2022
Sample Temperatures on Arrival at Lab: 0.5 °C, 0.7°C, 1.0 °C, 2.7 °C, 3.0 °C
Preliminary Laboratory Data Received Date: 05/13/2022
QA/QC Review Date: 06/02/2022 (BR)

Cation/Anion Balance: FB2 = NC, 1/5P = 9.8%, 4/5S = 1.6%, 6/7P = -2.2%, 6/7S = 1.9%, 8P = 13.0%, 8S = -1.3%, 9P = 4.1%, and 9S = -1.8%.

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 except 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane from batch 573649 (*- flag). 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 1/5P, TB2, and FB2

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 except for sodium from batch 574148 (F1 flag). This is noted and qualified in the case narrative.
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 Nitrate/Nitrite in batch 573912 (F1 flag) and COD in batch 574418 (F2 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 except batch 574240 (F3 flag). This is noted in the case narrative.

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 (TB2) were carried into the field 04/20/2022 with all samples and returned to the lab for Method 8260B analyses. All analytes are non-detect, and all surrogates are within control limits.

Field Blank
A field blank was collected on 04/20/2022 near 4/5S using laboratory supplied DI water. All analytes were non-detect.

Data Quality Reviews (DQRs)
None.

Notes
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 6/7S, 8P, 9S, 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.

Data Validation
Upon final review of lab report #280-161446-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/02/2022; BR).***

SCS Engineers QA/QC Review
Leachate – Spring 2022 Leachate Lagoon Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-161447-1

Samples: TB2, LEACH POND, LPOND LDS

Sample Date: 04/20/2022
Laboratory Sample Received Date: 04/23/2022
Sample Temperatures on Arrival at Lab: 0.7°C, 2.7°C
Preliminary Laboratory Data Received Date: 05/13/2022
QA/QC Review Date: 06/02/2022 (BR)

Cation/Anion Balance: LEACH-POND = 8.5%, LPOND LDS = 2.6%

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 except 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane in batch 573649 (*- flag). This is noted and qualified for in the case narrative.
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.
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 COD in batch 574418 (F1 flag). 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. 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 04/20/2022 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 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 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.

Data Validation
Upon final review of lab report #280-161447-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(06/01/2022; BR)***.

Fall 2022

Compliance Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Fall 2022 Compliance Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-169301-1

Samples: MW-12A, MW-12B, MW-14B, MW-15B, DUP11152201 (MW-15B), MW-16A, DUP11162201 (MW-16A), MW-16B, FB11152201 (MW-16B), MW-21A, MW-21B, and TRIP BLANK.

Sample Date: 11/15-16/2022
Laboratory Sample Received Date: 11/17/2022
Sample Temperatures on arrival at lab: 0.4, 0.8, and 1.7 °C
Preliminary Laboratory Data Received Date: 12/14/2022
QA/QC Review Date: 12/16/2022 (BR)

Cation/Anion Balance: MW-12A = 0.92%, MW-12B = 1.1%, MW-14B = -0.64, MW-15B = 1.1%, DUP11152201 (MW-15B) = 0.59%, MW-16A = -4.2%, DUP11162201 (MW-16A) = -4.1%, MW-16B = -0.95%, FB11152201 (MW-16B) = NC, MW-21A = -0.58%, MW-21B = -0.53%

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 except chloromethane and dichlorodifluoromethane in batch 594149 (*1 flag). 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.
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.

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 11/15-16/2022 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 (FB11152201) was collected on 11/15/2022 near MW-16B. All analytes were reported as non-detect.

Field Duplicates

A field duplicate (DUP11152201) was collected on 11/15/2022 at MW-15B. All RPDs were within 20% except for ammonia (90%).

A field duplicate (DUP11162201) was collected on 11/16/2022 at MW-16A. All RPDs were within 20% except for dissolved iron (38%), dissolved manganese (49%), and nitrogen, nitrate-nitrite (43%). It should be noted that the concentrations of dissolved iron and nitrogen, nitrate-nitrite in samples MW-16A and DUP11162201 were less than five times the reporting limit. Consequently, these results are not controlled by RPDs.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of the data presented in lab report #280-169301-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/16/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Fall 2022 Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-171058-1

Samples: MW-14A, DUP105231, MW-15A, FB1052301, and TRIP BLANK.

Sample Date: 1/5/2023
Laboratory Sample Received Date: 1/6/2023
Sample Temperatures on arrival at lab: 4.1 °C
Preliminary Laboratory Data Received Date: 1/27/2023
QA/QC Review Date: 3/3/2023 (BR)

Cation/Anion Balance: MW-14A = 2.0%, DUP105231 = -1.4%, MW-15A = 22%, FB1052301 = 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.
TICs	Two unknown TICs were identified in every sample.

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.

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 nitrate/nitrite in batch 599911 (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.

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 1/5/2023 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 (FB10052301) was collected on 1/5/2023 near MW-15A. All analytes were reported as non-detect.

Field Duplicates

A field duplicate (DUP1005231) was collected on 1/5/2023 at MW-14A. All RPDs were within 20%.

Data Quality Reviews (DQRs)
On March 13, 2022, a request was made of the laboratory to check the Cation/Anion balance on MW-15A (22%). The laboratory responded on 3/14/23 that the balance was correct.

Notes
None.

Data Validation
Upon final review of the data presented in lab report #280-171058-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(03/03/2023; BR).***

SCS Engineers QA/QC Review
Groundwater – 4Q2022 MW-12 Resample Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-171441-1

Samples: MW-12A, DUP0113231, FB0113231

Sample Date: 01/13/23
Laboratory Sample Received Date: 01/17/2023
Sample Temperatures on arrival at lab: 1.2ºC
Preliminary Laboratory Data Received Date: 02/8/2023
QA/QC Review Date: 02/14/2023 (BR)

Dissolved Metals

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.

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.
Duplicate	All RPDs are within control limits except TDS in batch 599908 (E 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
Field Duplicate
A field duplicate (DUP0113231) was collected at MW-12A.

Field Blank
A field blank (FB0113231) was collected near MW-12A using laboratory supplied DI water. All analytes were reported as non-detect.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of data presented in lab report #280-171441-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(02/14/2023; BR).***

Fall 2022

Detection Groundwater

QA/QC Results

SCS Engineers QA/QC Review
Groundwater - Fall 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-169429-1

Samples: TB03, MW-5A, and FB11172201

Sample Date: 11/17/2022
Laboratory Sample Received Date: 11/19/2022
Sample Temperatures on arrival at lab: 0.6ºC
Preliminary Laboratory Data Received Date: 12/7/2022
QA/QC Review Date: 12/14/2022 (BR)

Cation/Anion Balance: NA

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 except 1,3-dichloropropane in batch 595025 (*- flag). This is noted and qualified for in the case narrative. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits except bromoform, n-butylbenzene, and styrene in batch 595025 (*1 flag). This is noted and qualified for in the case narrative.
TICs	TICs were not identified in any sample.

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.

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 (TB03) were carried into the field on 11/17/2022 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 Blank
A field blank (FB11172201) was collected near MW-5A using laboratory supplied DI water. All analytes were reported as non-detect.

Data Quality Reviews (DQRs)
None.

Notes
None.

Data Validation
Upon final review of data presented in lab report #280-169429-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/14/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Fall 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-169431-1

Samples: TRIP BLANK, MW-19A, and DUP11172201

Sample Date: 11/17/2022
Laboratory Sample Received Date: 11/19/2022
Sample Temperatures on arrival at lab: 0.6ºC
Preliminary Laboratory Data Received Date: 12/13/2022
QA/QC Review Date: 12/14/2022 (BR)

Cation/Anion Balance: MW-19A=-1.5%, DUP11172201 = -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 except 1,3-dichloropropane in batch (*- flag). This is noted and qualified for in the case narrative. All surrogate recoveries are within control limits.
LCSD	All RPDs are within control limits except bromoform, n-butylbenzene, and styrene in batch 595025 (*1 flag) This is noted and qualified for in the case narrative.
TICs	TICs were not identified in sample.

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.

Dissolved Metals

Method Blanks	All analytes are non-detect except iron in batch 595413. 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.
MSD	All spike recoveries and 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 chloride in batch 651985 (F1 flag). This is 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 (TB03) were carried into the field on 11/17/2022 with all samples are returned to the lab for Method 8260B and 8011 analyses. All analytes are non-detect except 2-butanone. All surrogates are within control limits.

Field Duplicate

A field duplicate (DUP11172201) 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.

Data Quality Reviews (DQRs)

None.

Notes

None.

Data Validation

Upon final review of data presented in lab report #280-169431-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/14/2022; BR).***

SCS Engineers QA/QC Review
Groundwater - Fall 2022 Detection Groundwater Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-169302-1

Samples: TRIP BLANK, MW-20A, and FB11162201

Sample Date: 11/16/2022
Laboratory Sample Received Date: 11/17/2022
Sample Temperatures on arrival at lab: 0.4, 0.8, and 1.7ºC
Preliminary Laboratory Data Received Date: 12/9/2022
QA/QC Review Date: 12/14/2022 (BR)

Cation/Anion Balance: MW-20A=-0.7%, FB11162201 = 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 are within control limits except 1,1,2,2-tetrachloroethane in MSD batch 594854 (F1 flag). This is noted and qualified for in the case narrative.
MSD	All RPDs are within control limits.
TICs	Three unknown TICs were identified in TRIP BLANK, MW-20A, and FB11162201.

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.

Dissolved Metals

Method Blanks	All analytes are non-detect except iron in batch 595413. 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.

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 chloride in batch 651985 (F1 Flag). This is 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 (TRIP BLANK) were carried into the field on 11/16/2022 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 Blank

A field blank (FB11162201) was collected near MW-20A using laboratory supplied DI water. All analytes were reported as non-detect.

Data Quality Reviews (DQRs)

None.

Notes

None.

Data Validation

Upon final review of data presented in lab report #280-169302-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/14/2022; BR).***

Fall 2022

Leachate Pond and Leachate Pond LDS Liquids

QA/QC Results

SCS Engineers QA/QC Review
Leachate – Fall 2022 Leachate Lagoon Monitoring Event
Riverbend Landfill
Eurofins Environmental Testing-Denver Report #280-169433-1

Samples: TB04, LPOND LDS, and LEACH POND.

Sample Date: 11/17/2022
Laboratory Sample Received Date: 11/19/2022
Sample Temperatures on Arrival at Lab: 0.5°C
Preliminary Laboratory Data Received Date: 12/19/2022
QA/QC Review Date: 12/17/2021 (IH)

Cation/Anion Balance: LPond LDS = -0.52%, Leach-Pond= -1.9%

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 except 1,2-dibromo-3-chloropropane and 1,3-dichloropropane in batch 595025 (*+ flag). This is noted and qualified for in the case narrative.
LCSD	All spike recoveries and RPDs are within control limits except bromoform, n-butylbenzene, and styrene in batch 595025 (*1 flag). This is noted and qualified for in the case narrative.
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 except iron in batch 595224 and 595656. This is noted in 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.
LCSD	All RPDs are within control limits.
Matrix Spikes	All matrix spike recoveries are within control limits except COD in batch 594928 and Hardness, as CaCO3 in batch 595723 (F1 flags). This is noted and qualified for 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
None.

Field QA/QC
Trip Blanks
Laboratory supplied trip blanks (TB04) were carried into the field 11/17/2022 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
In analytical batch 280-595025 for Method 8260, the following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria (pH<2) with a pH of 3 and 6 for samples 169433-2 and 3, respectively, when verified by the laboratory. The samples were analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: LPOND LDS (280-169433-2) and LEACH POND (280-169433-3).

Data Validation
Upon final review of the data presented in lab report #280-169433-1 for Riverbend Landfill, SCS Engineers finds the data to be valid for its intended use ***(12/20/2022; BR)***.

APPENDIX E

Time-Concentration Graphs of 2022 and Historical Groundwater, Surface Water, and Leachate Management System Samples Analytical Data

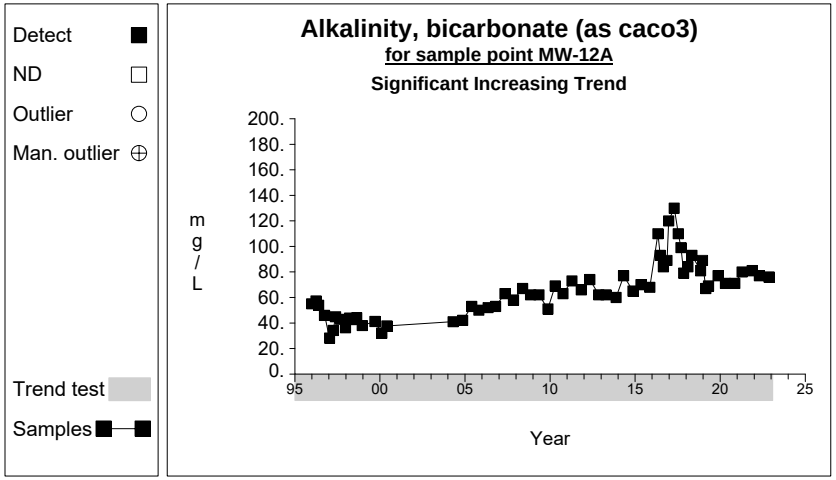
(on CD)

Compliance and Detection Wells

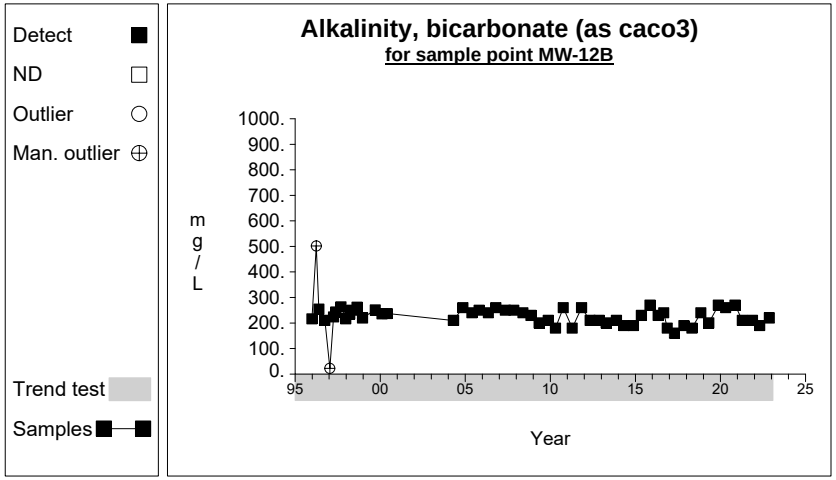
Shallow (Silt-Clay) and Deep (Sand-Gravel) Water-Bearing Zones

Time-Concentration Graphs

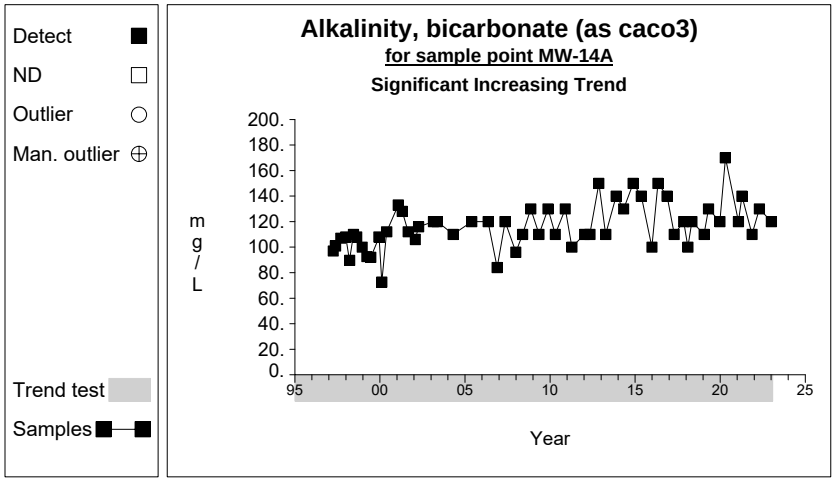
Time Series



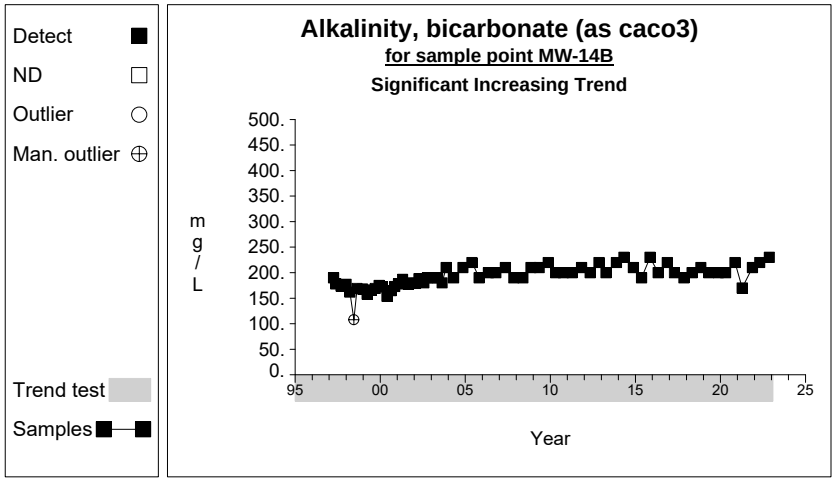
Graph 1



Graph 2

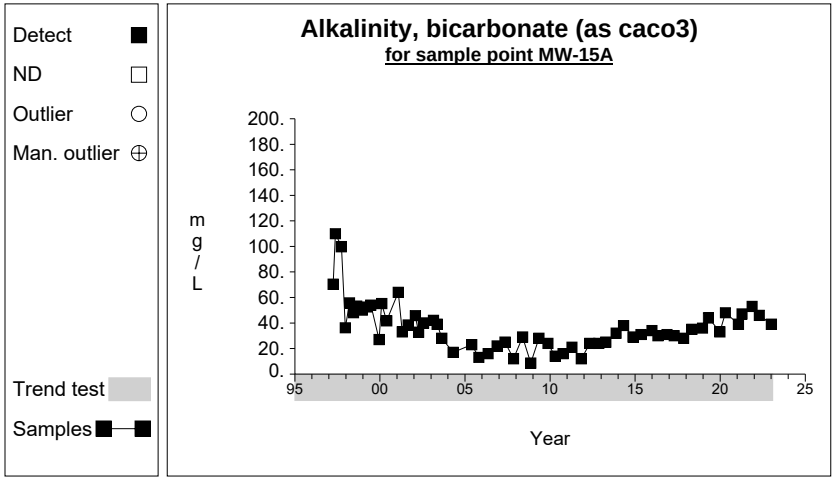


Graph 3

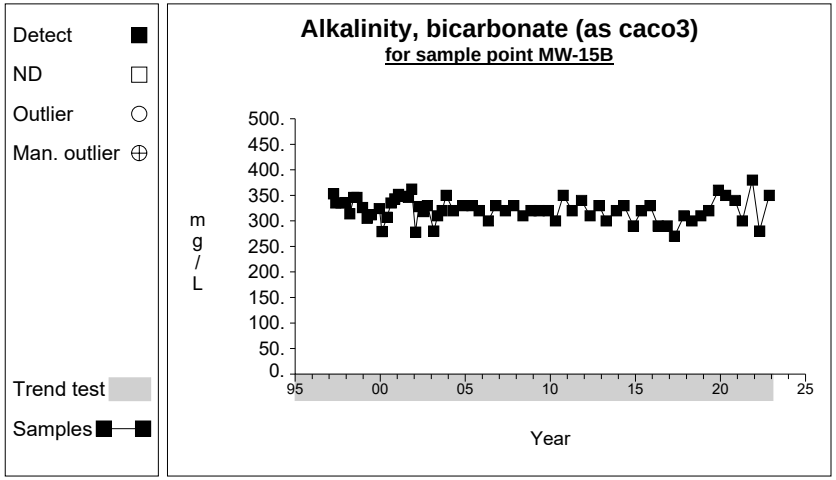


Graph 4

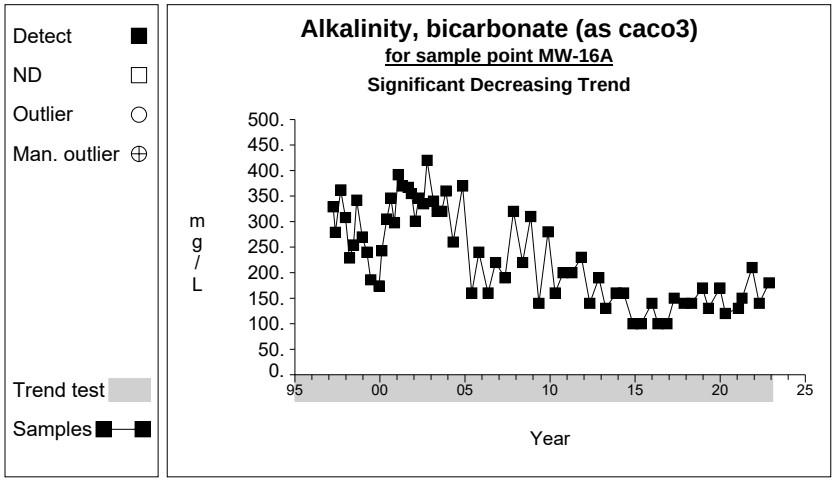
Time Series



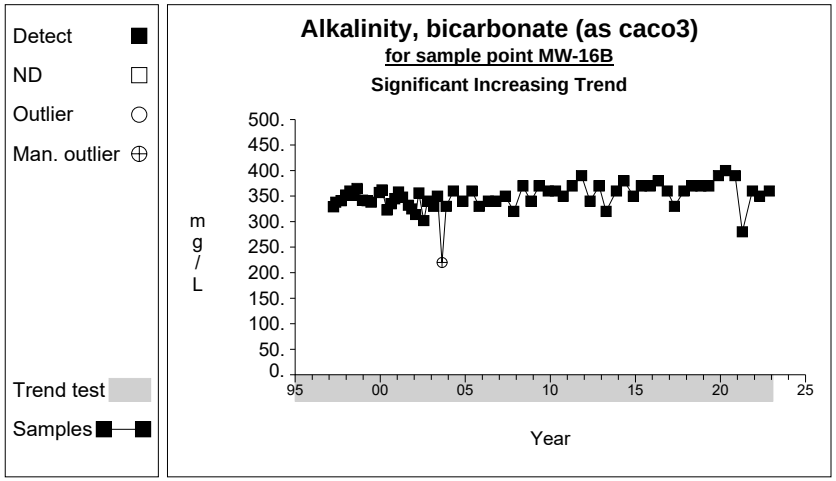
Graph 5



Graph 6

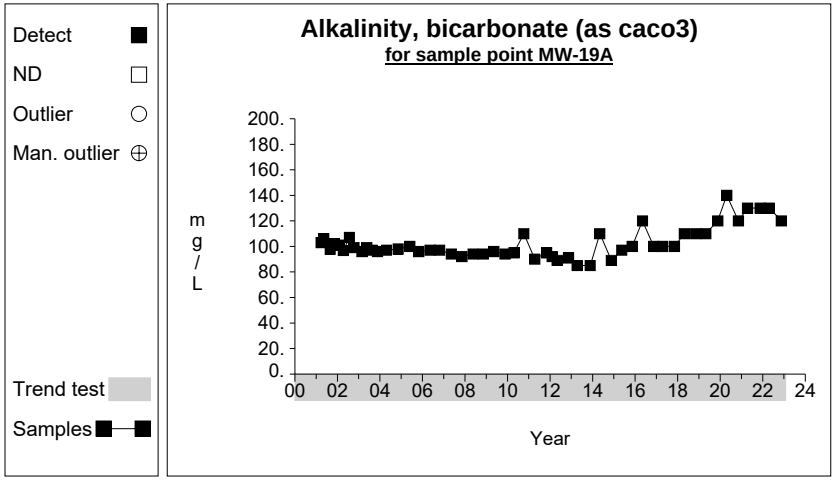


Graph 7

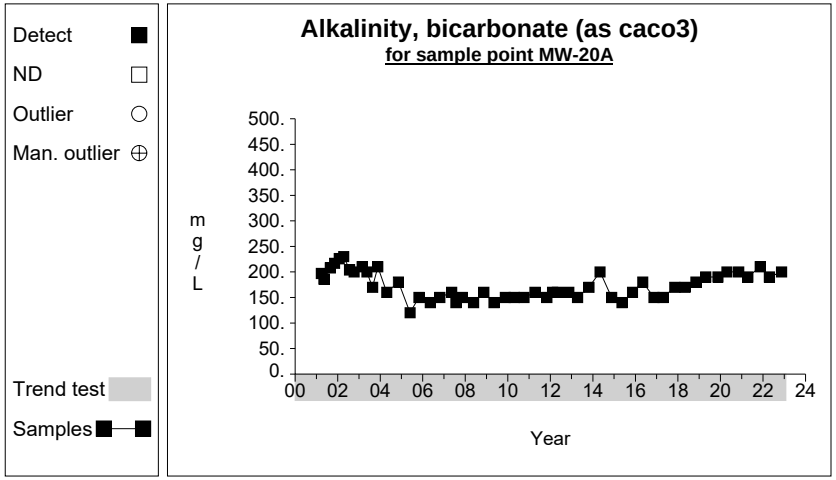


Graph 8

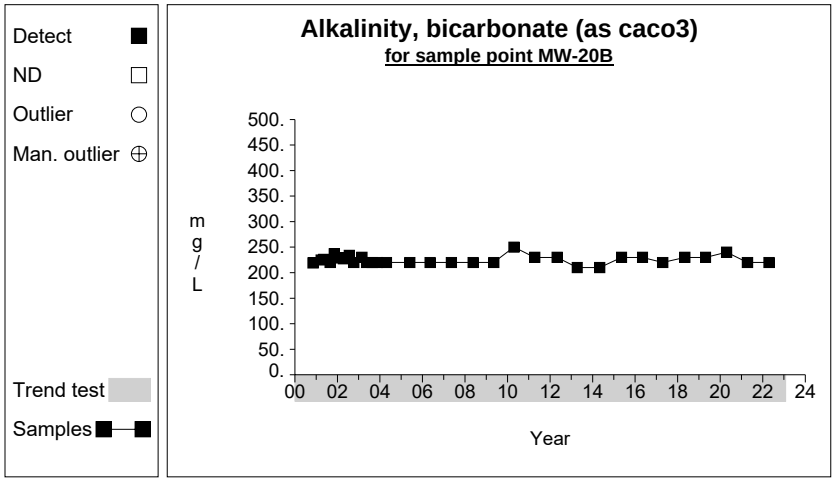
Time Series



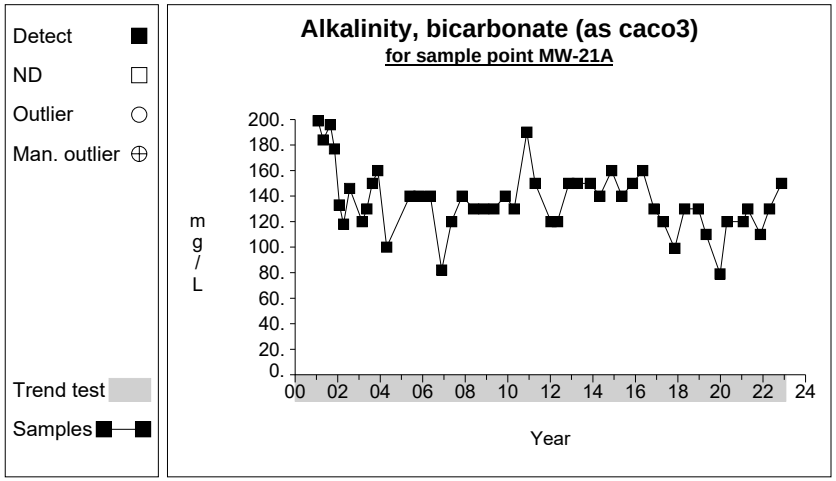
Graph 9



Graph 10

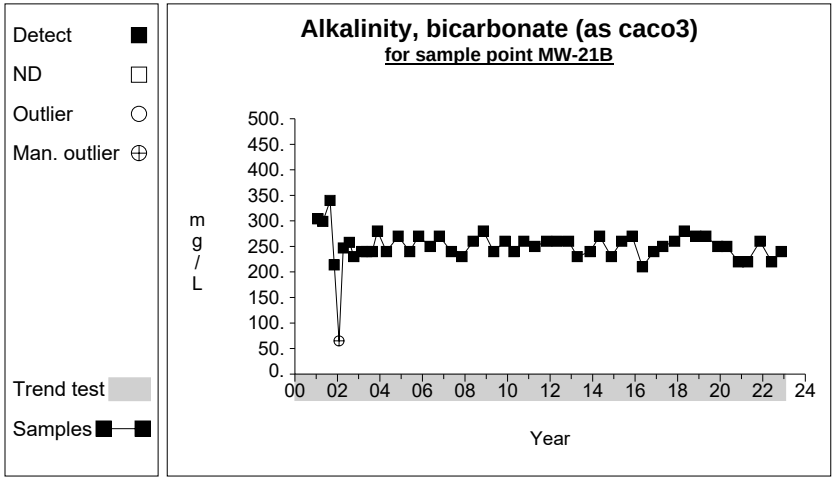


Graph 11

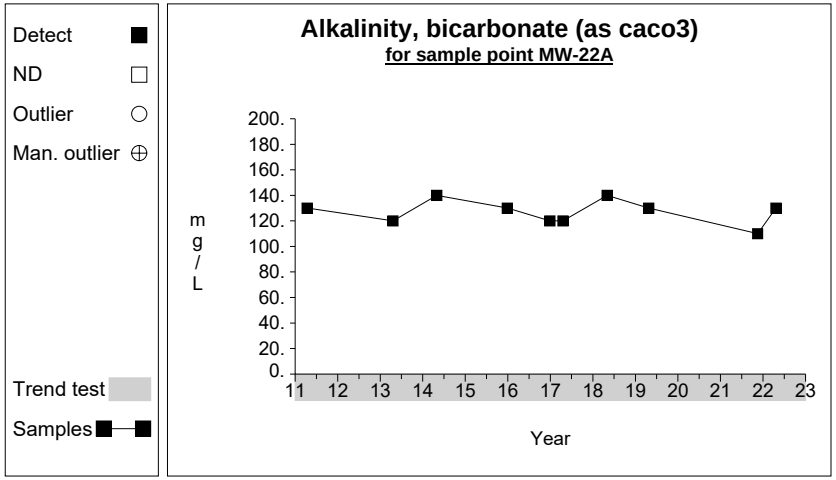


Graph 12

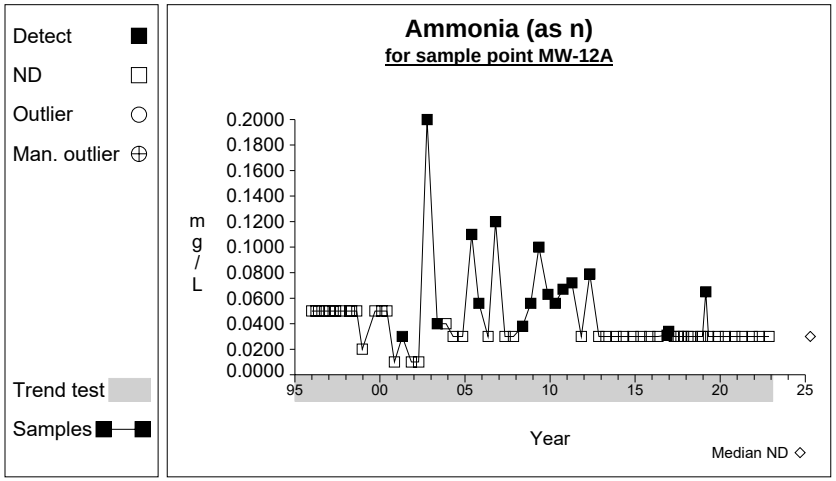
Time Series



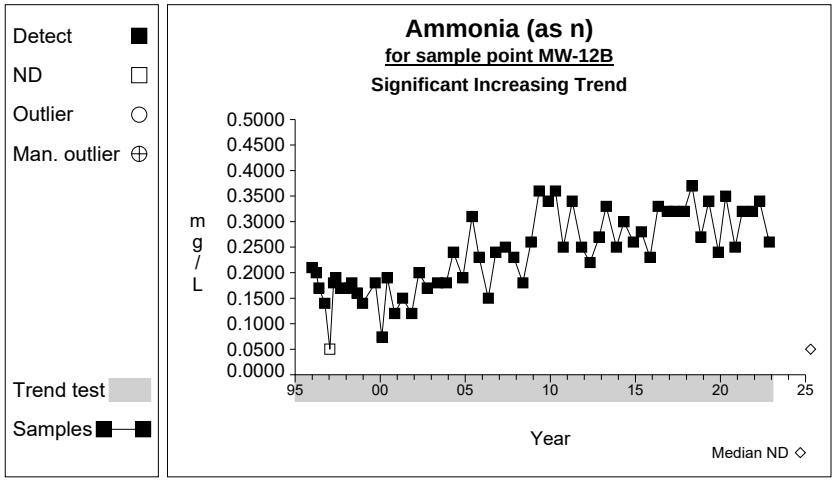
Graph 13



Graph 14

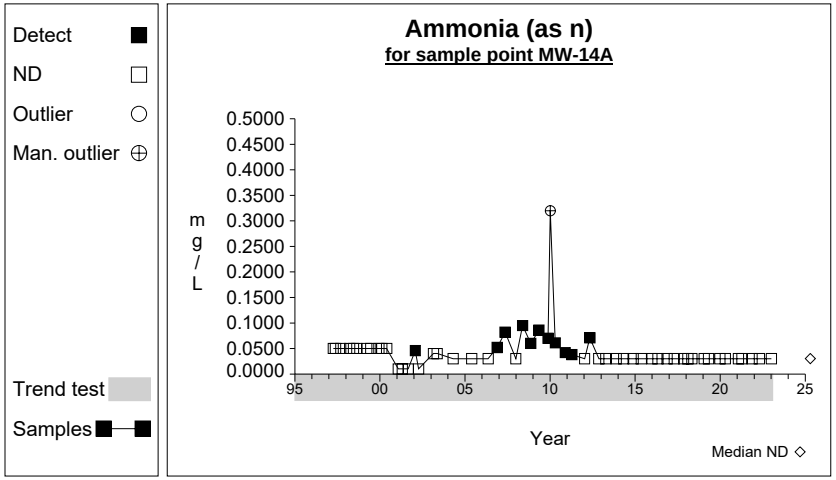


Graph 15

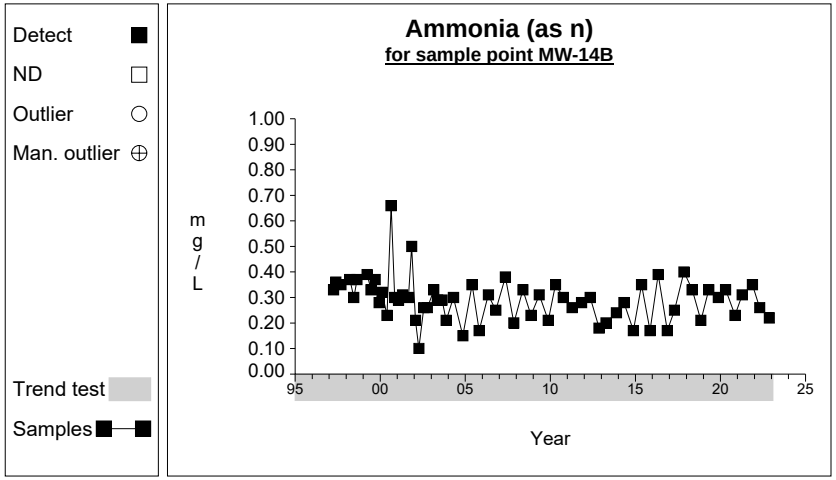


Graph 16

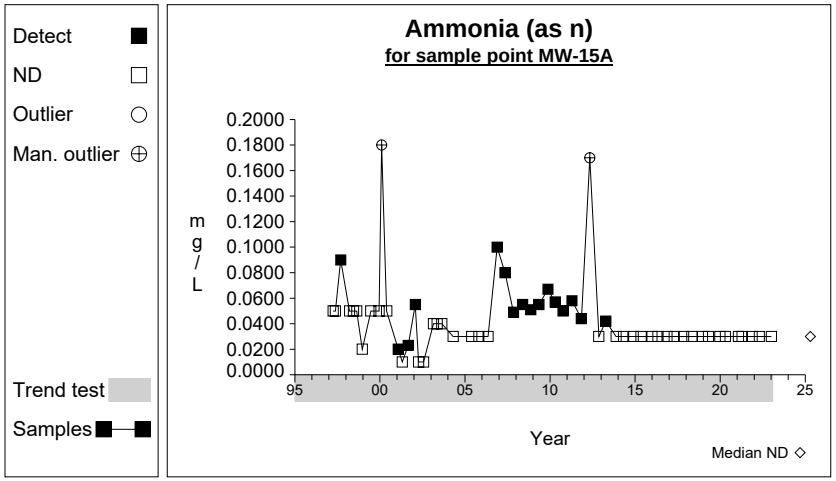
Time Series



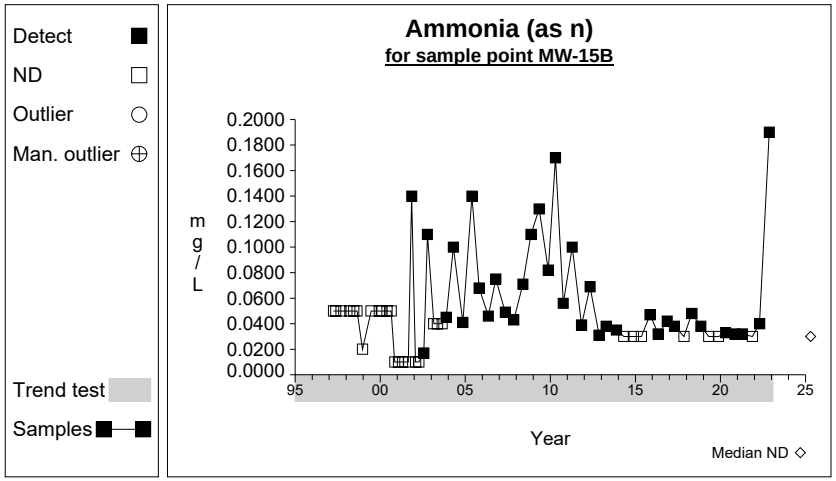
Graph 17



Graph 18

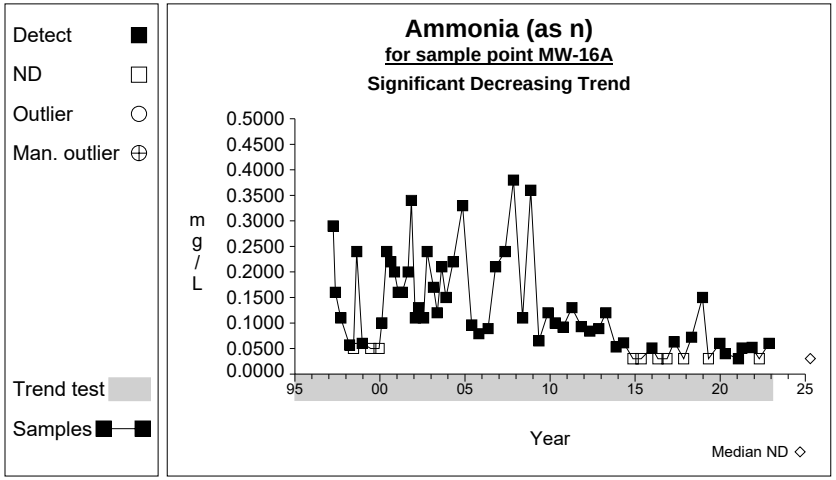


Graph 19

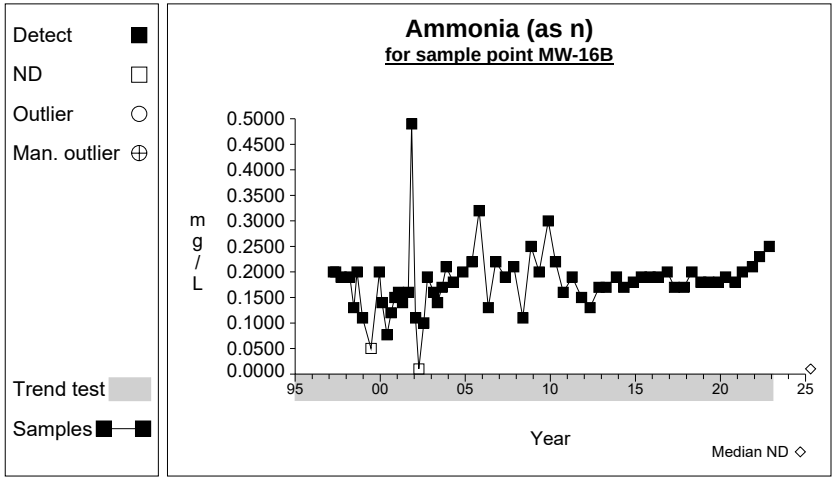


Graph 20

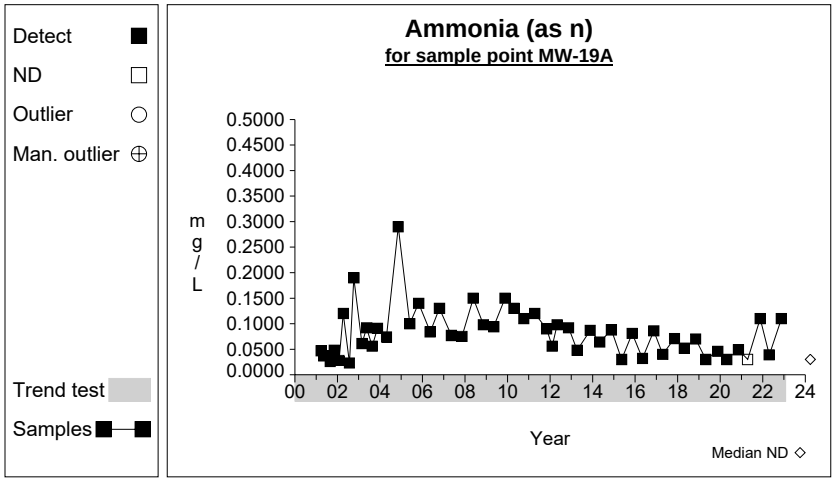
Time Series



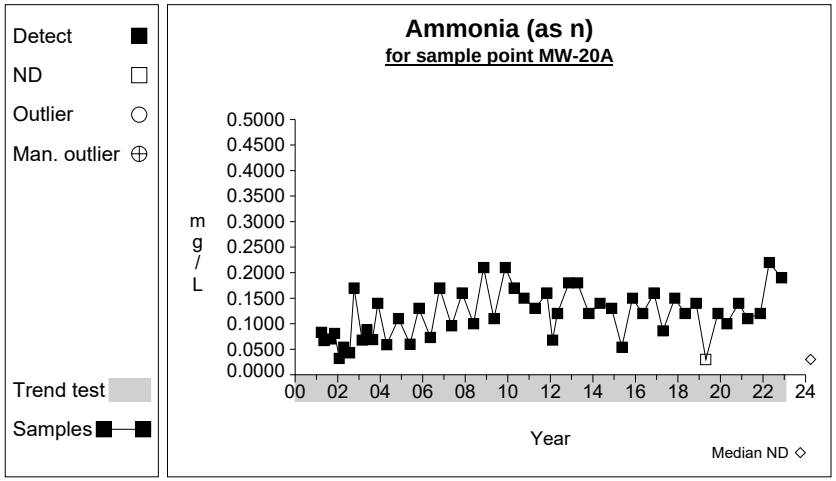
Graph 21



Graph 22

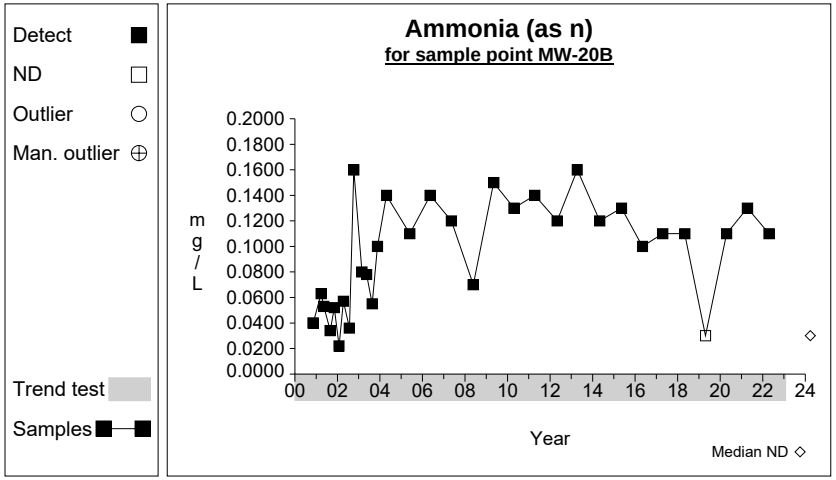


Graph 23

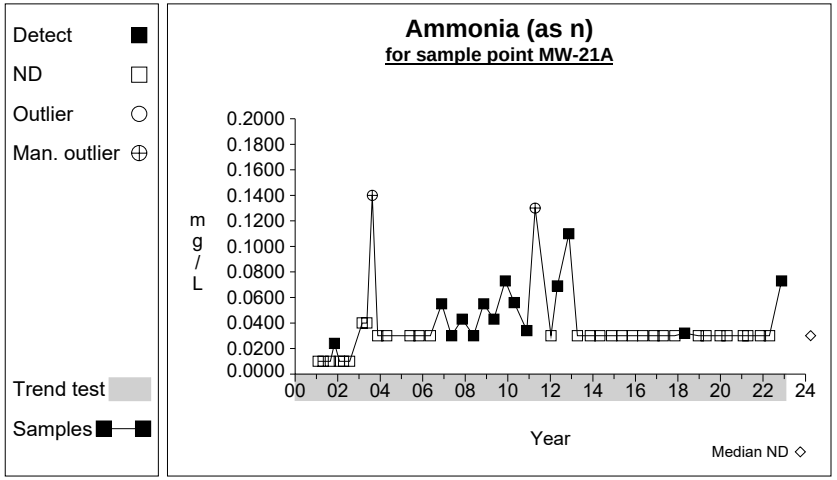


Graph 24

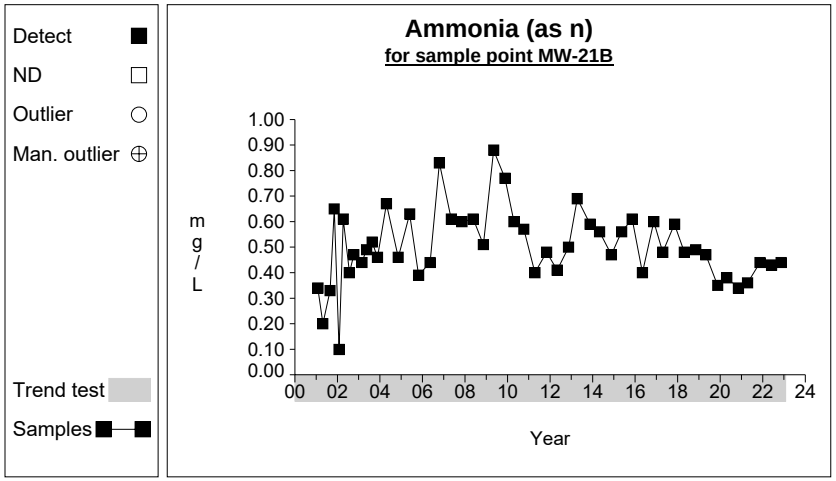
Time Series



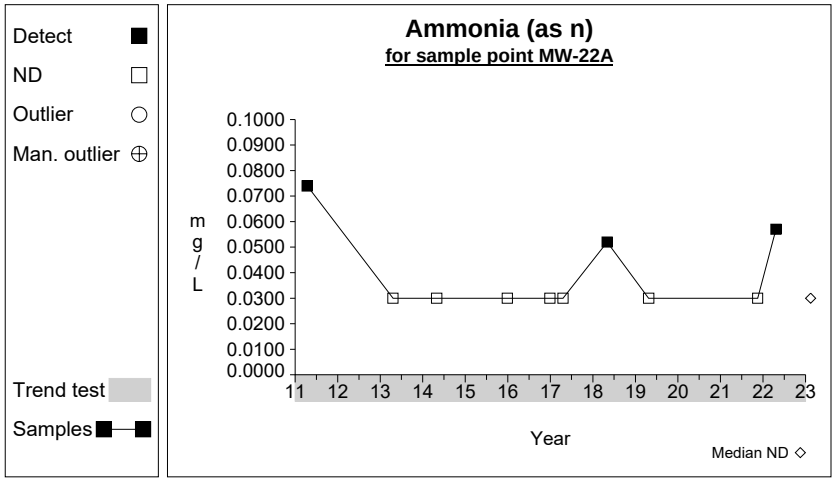
Graph 25



Graph 26

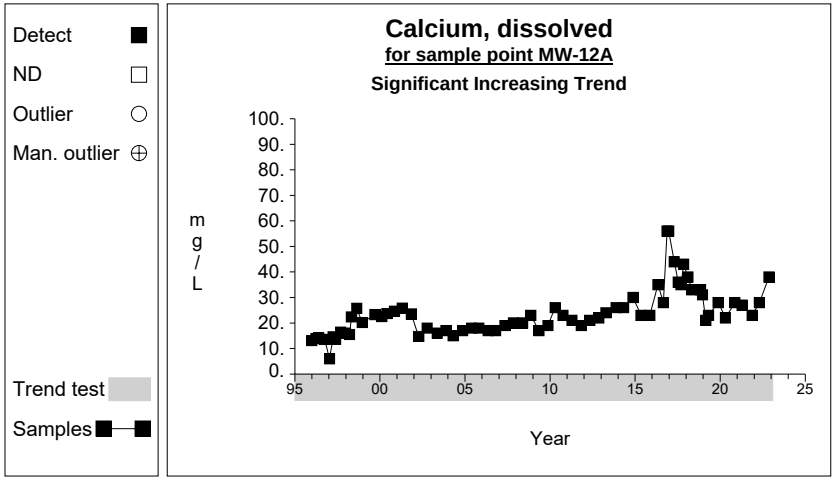


Graph 27

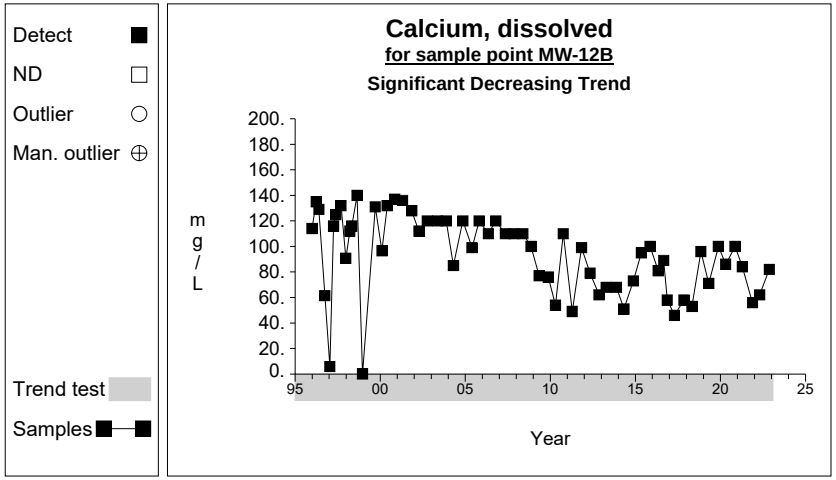


Graph 28

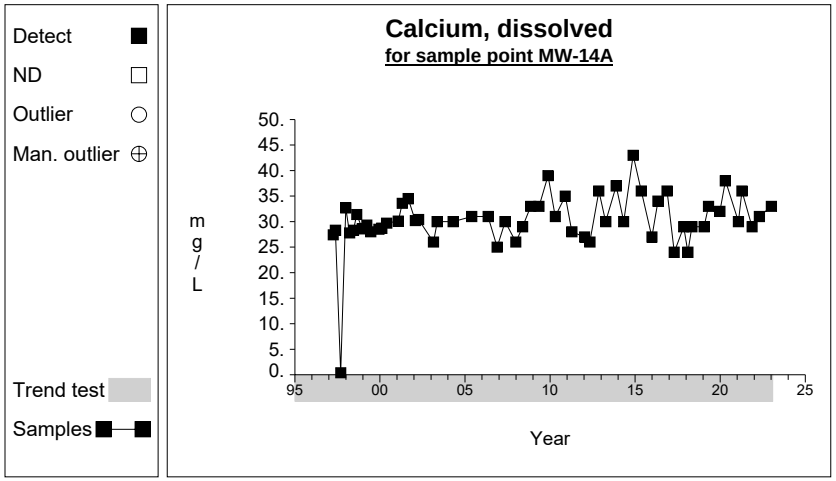
Time Series



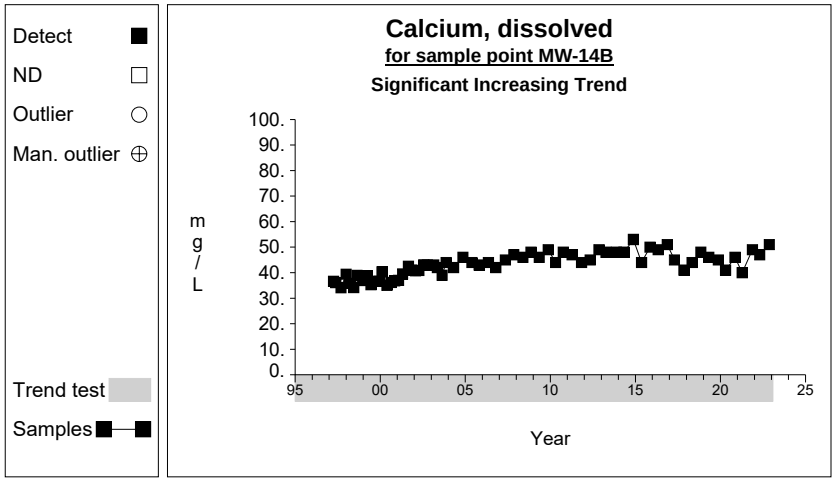
Graph 29



Graph 30

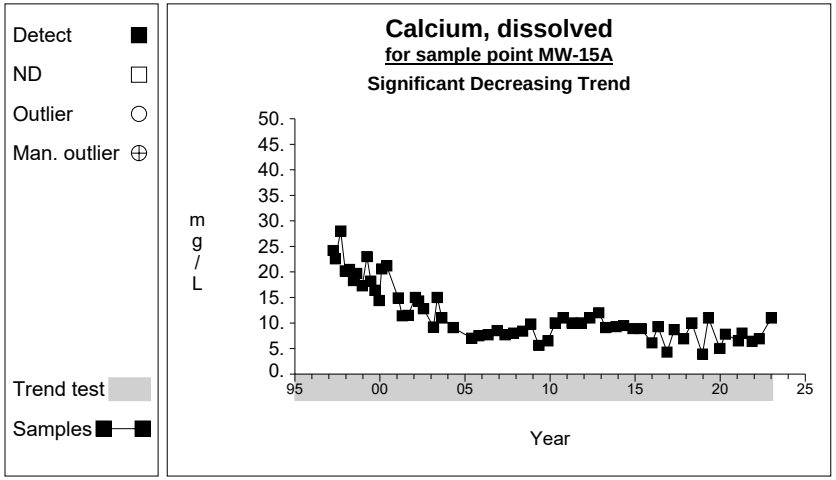


Graph 31

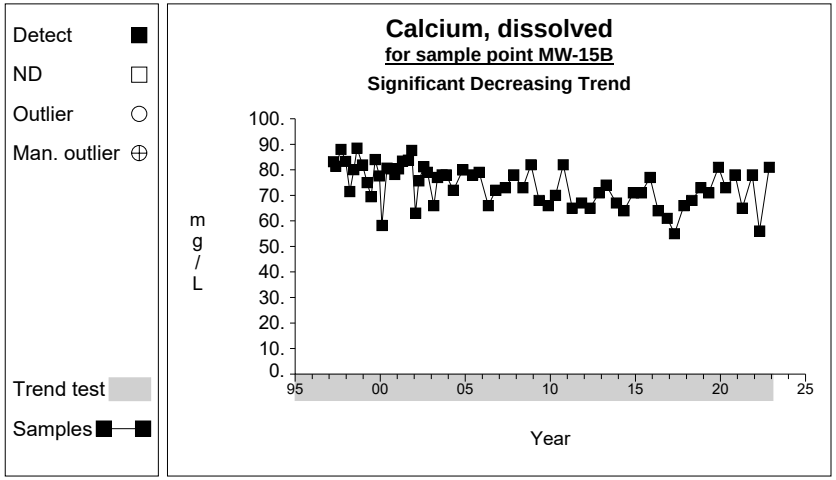


Graph 32

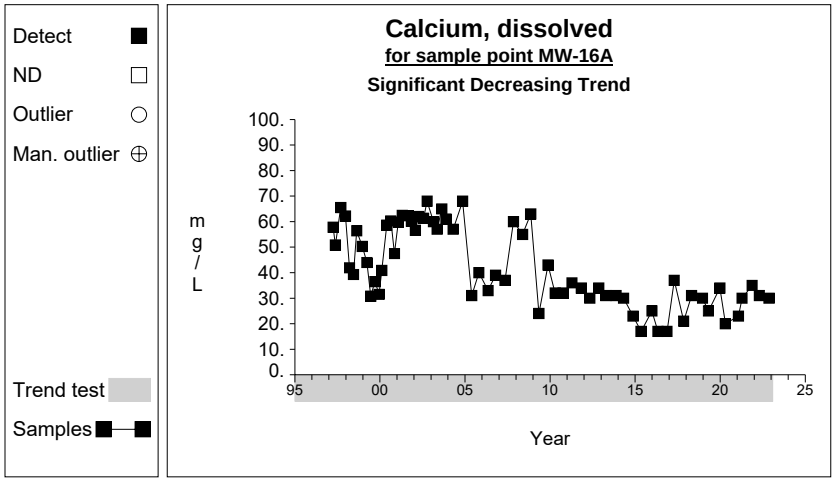
Time Series



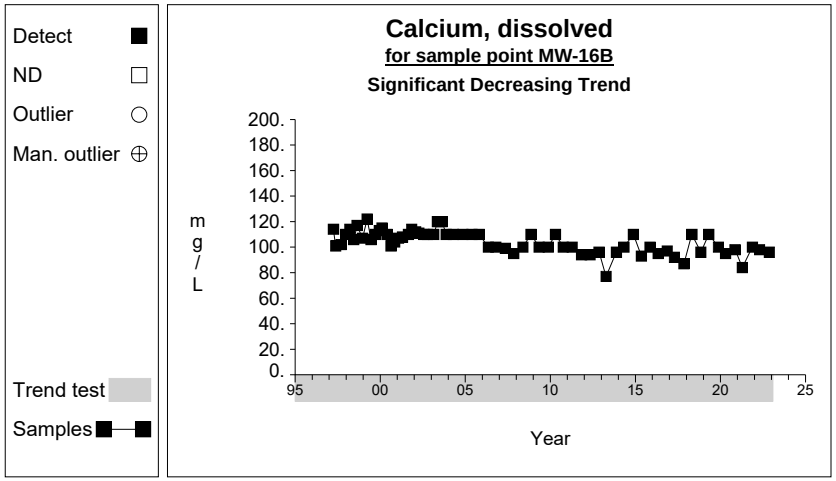
Graph 33



Graph 34

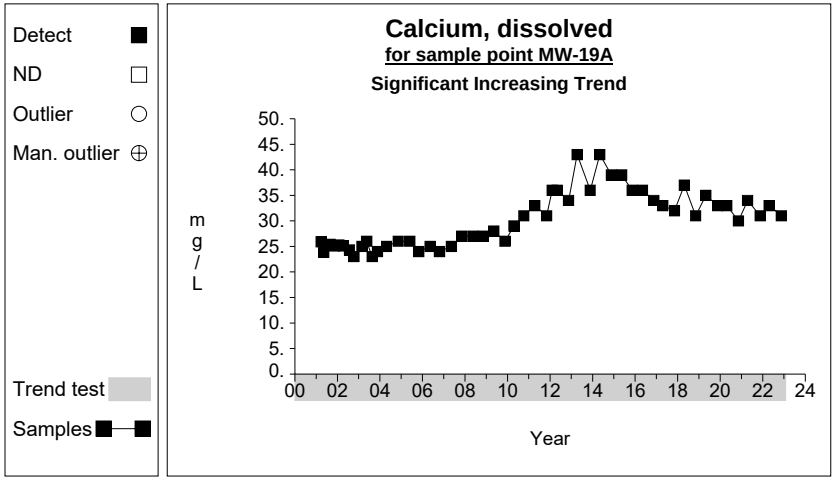


Graph 35

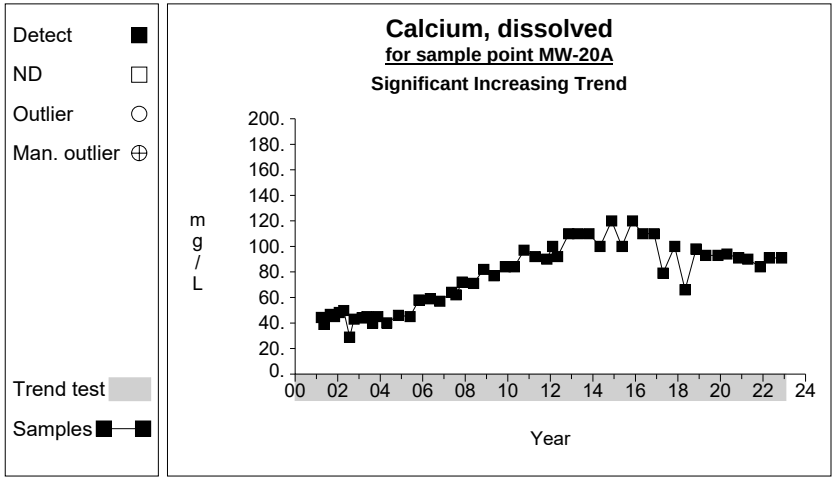


Graph 36

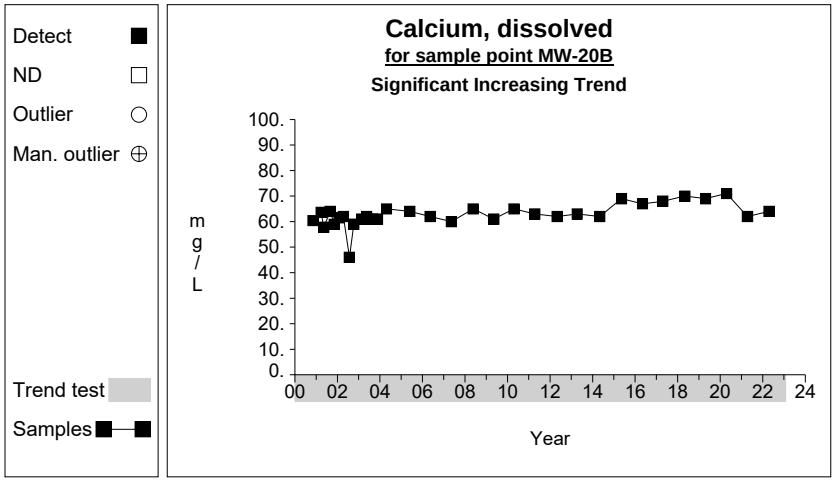
Time Series



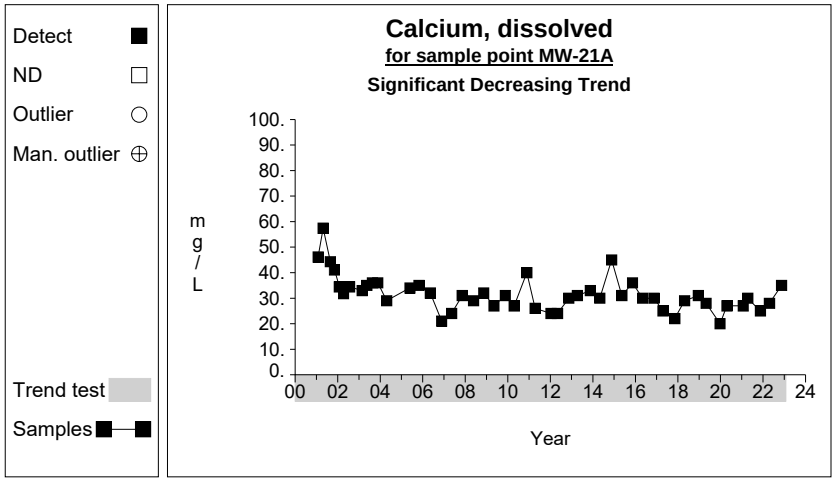
Graph 37



Graph 38

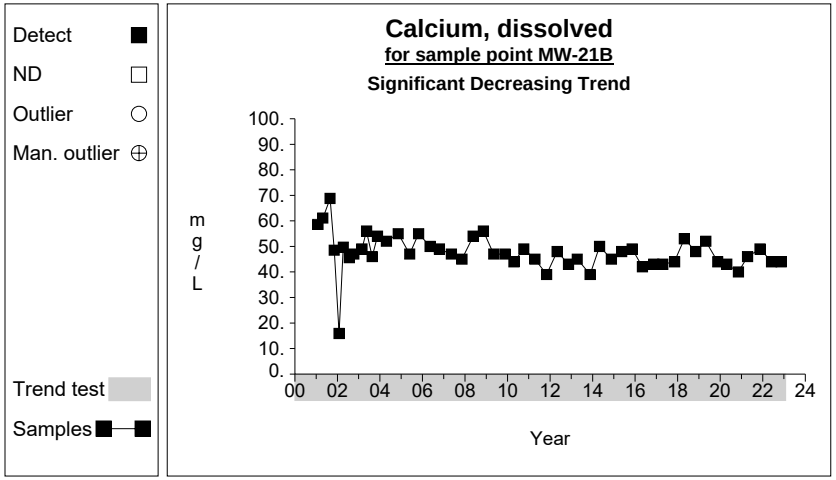


Graph 39

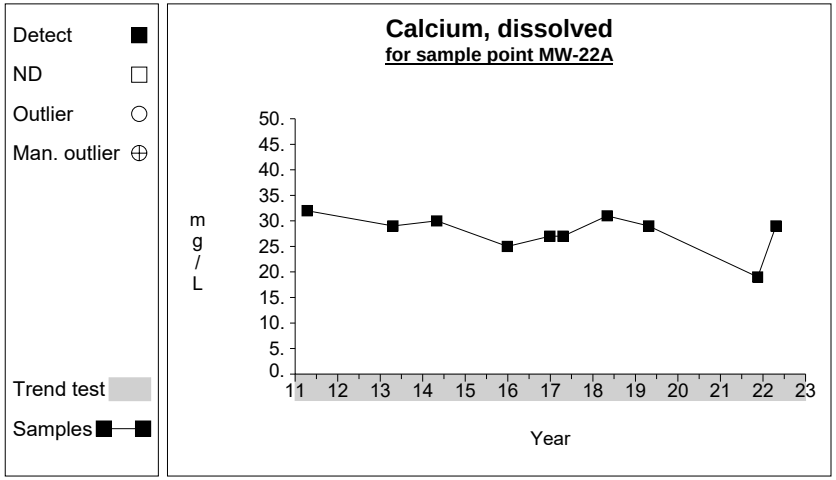


Graph 40

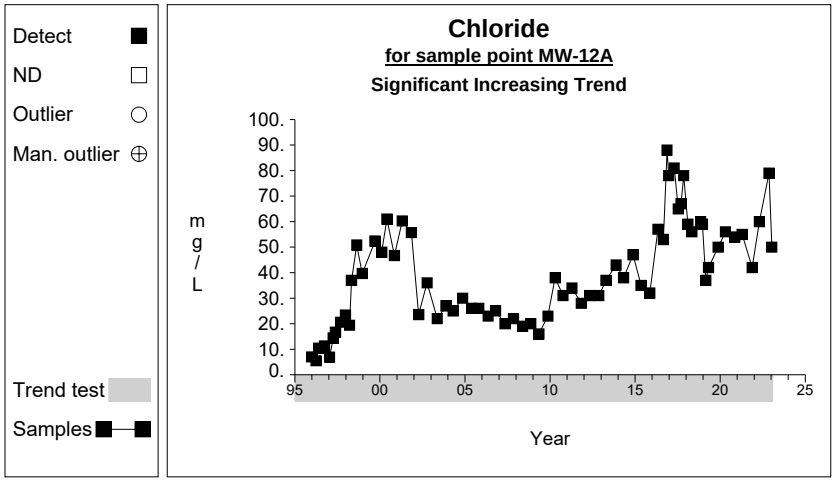
Time Series



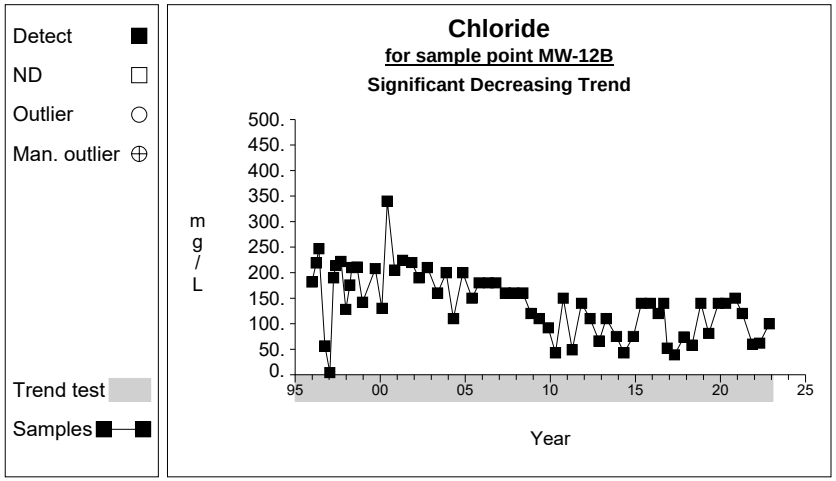
Graph 41



Graph 42

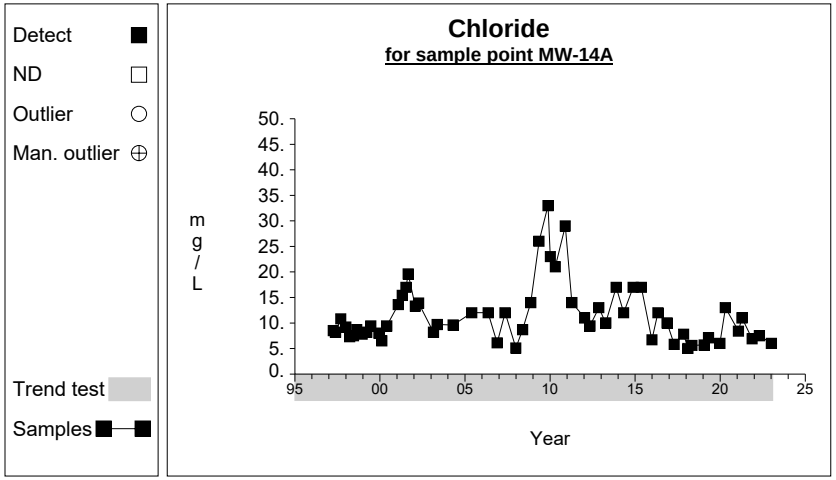


Graph 43

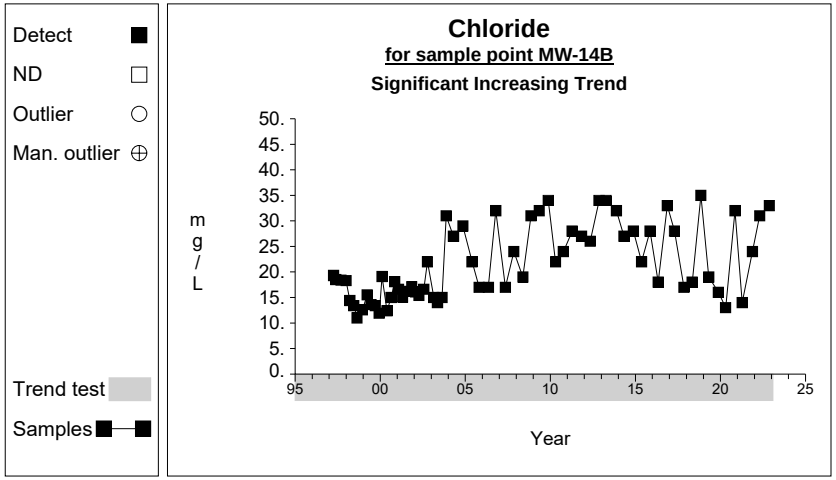


Graph 44

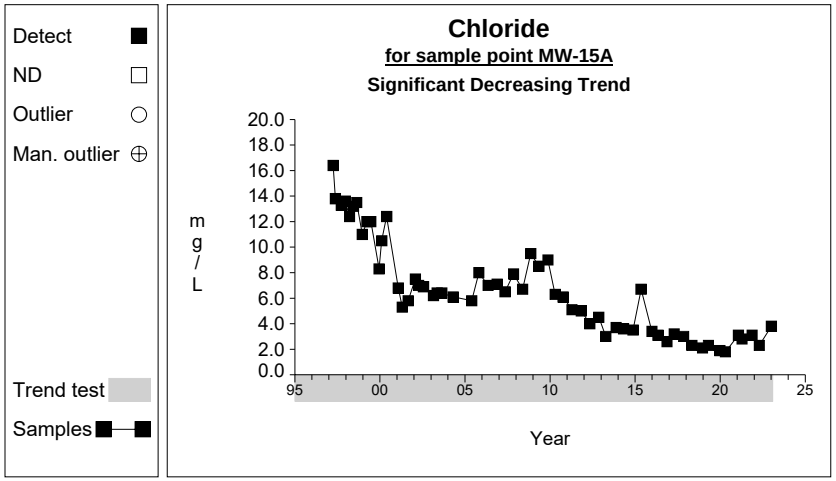
Time Series



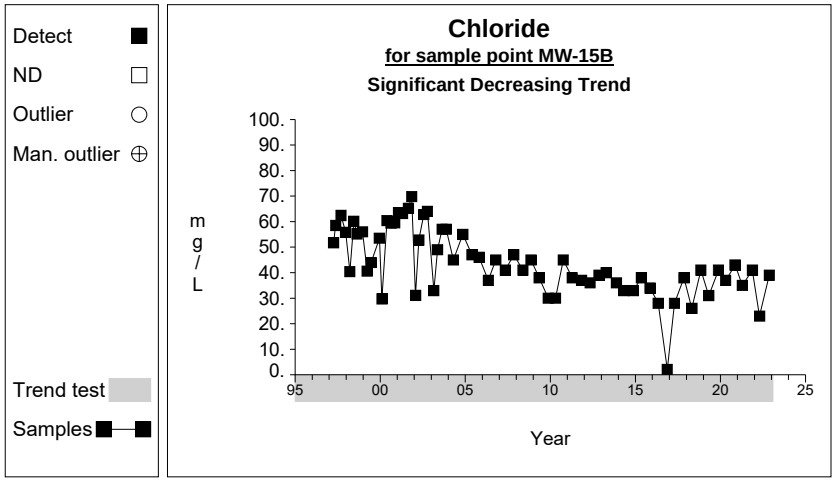
Graph 45



Graph 46

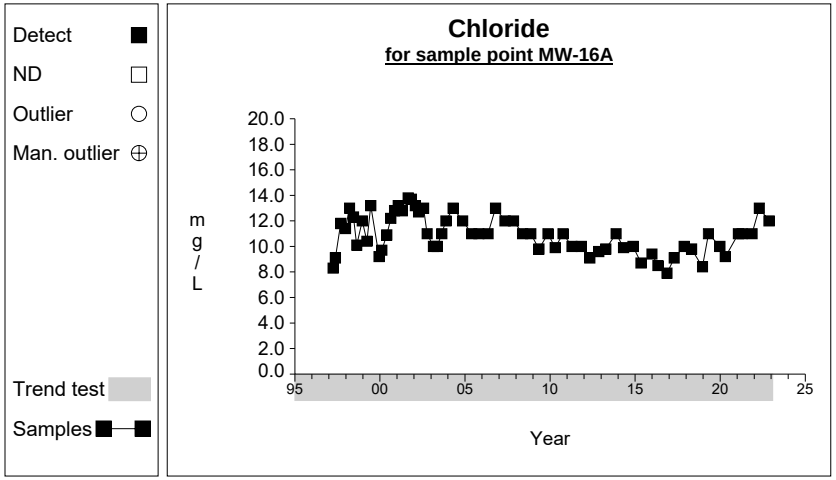


Graph 47

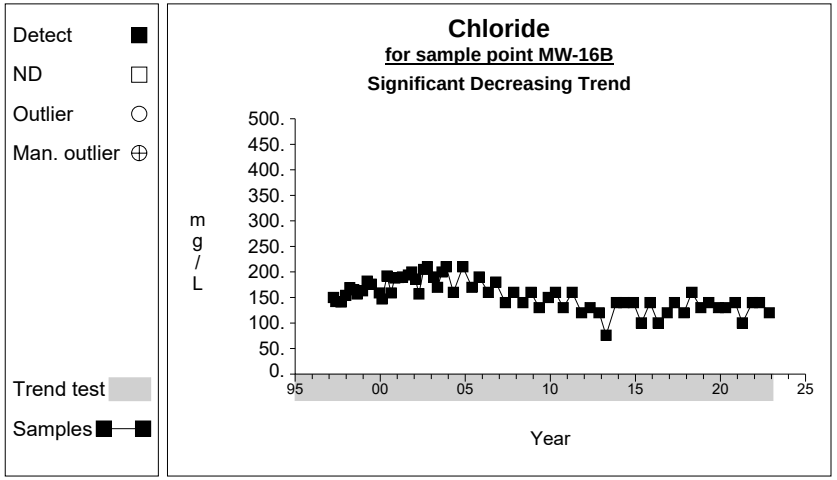


Graph 48

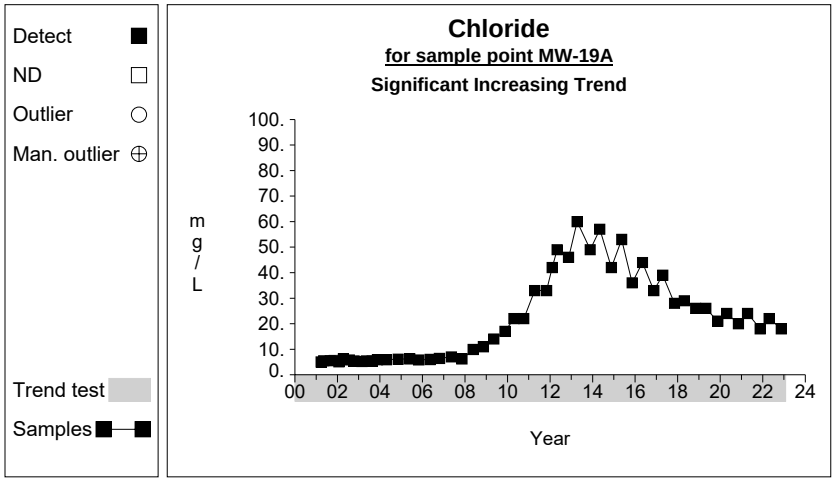
Time Series



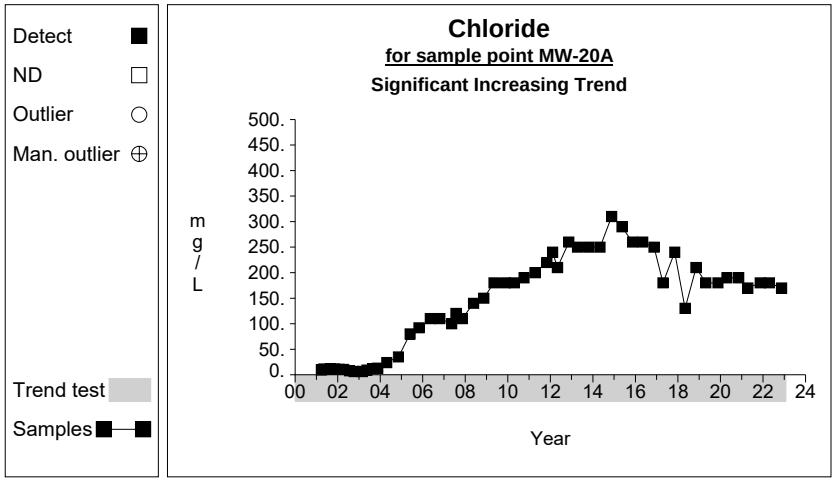
Graph 49



Graph 50

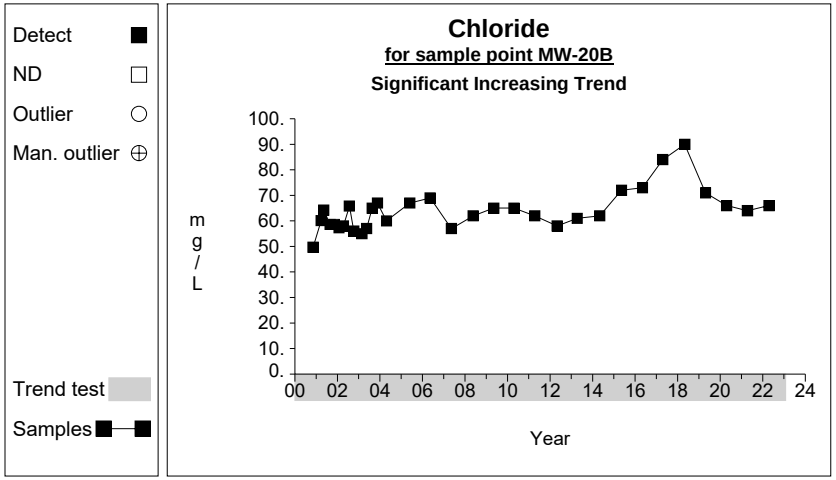


Graph 51

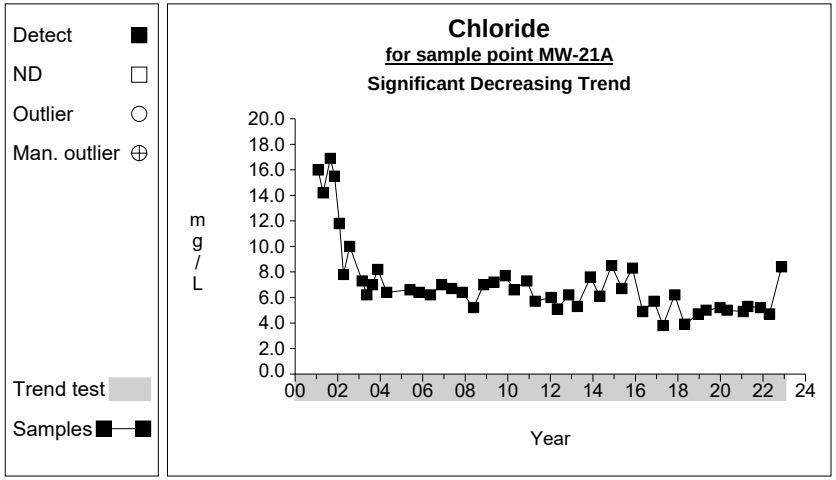


Graph 52

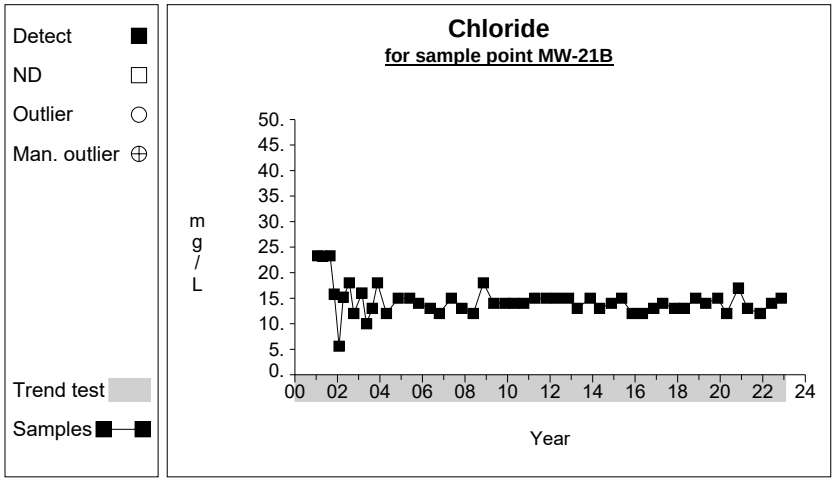
Time Series



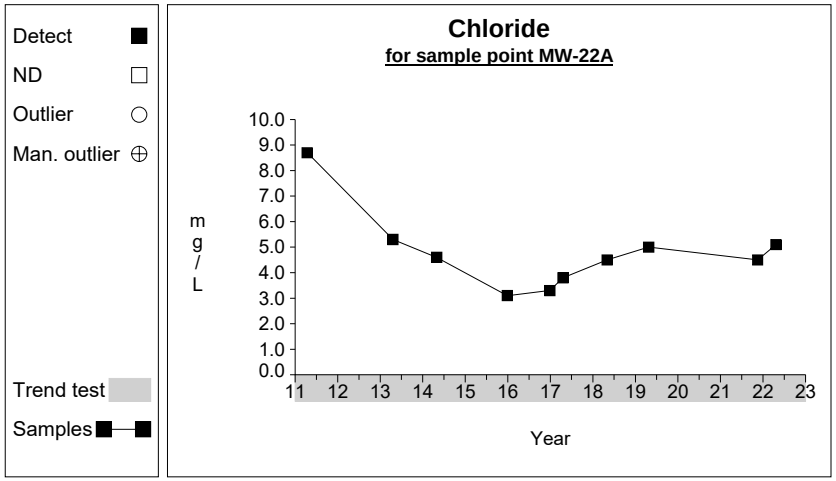
Graph 53



Graph 54

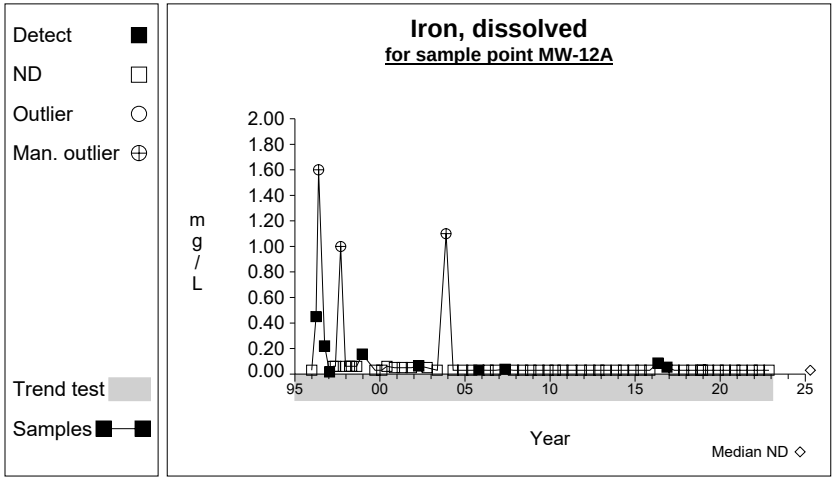


Graph 55

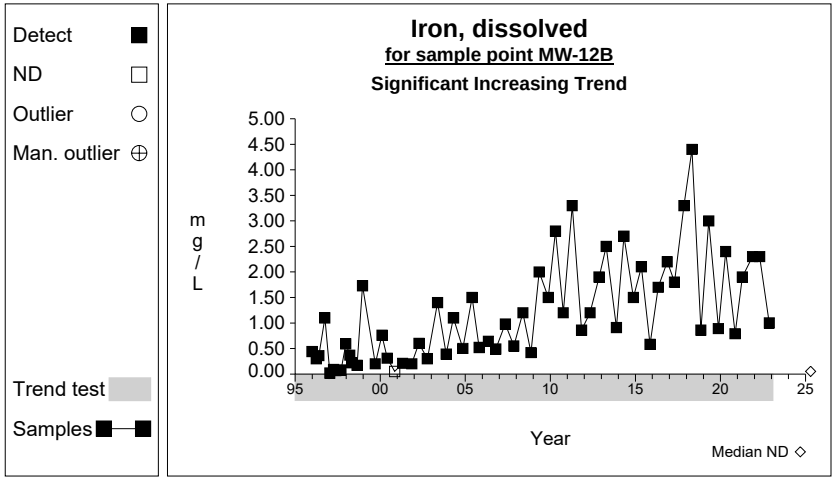


Graph 56

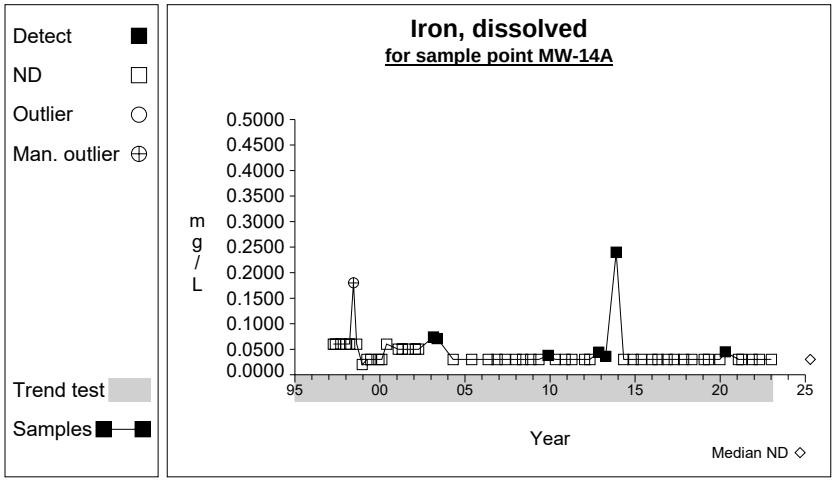
Time Series



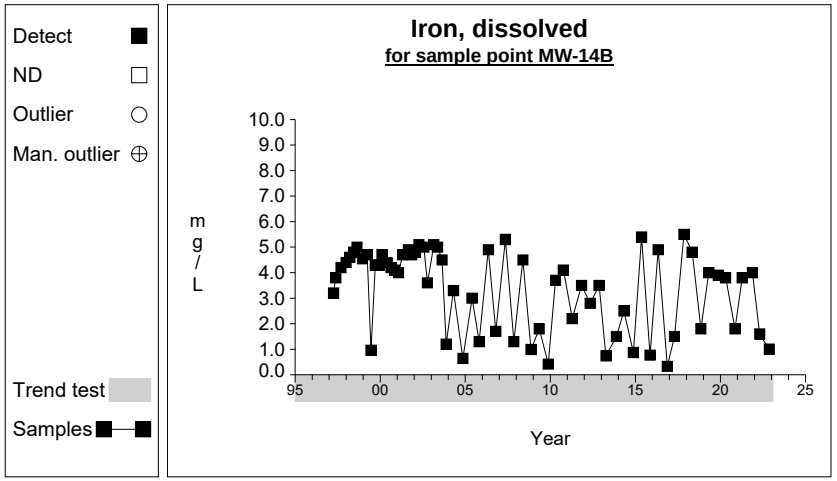
Graph 57



Graph 58

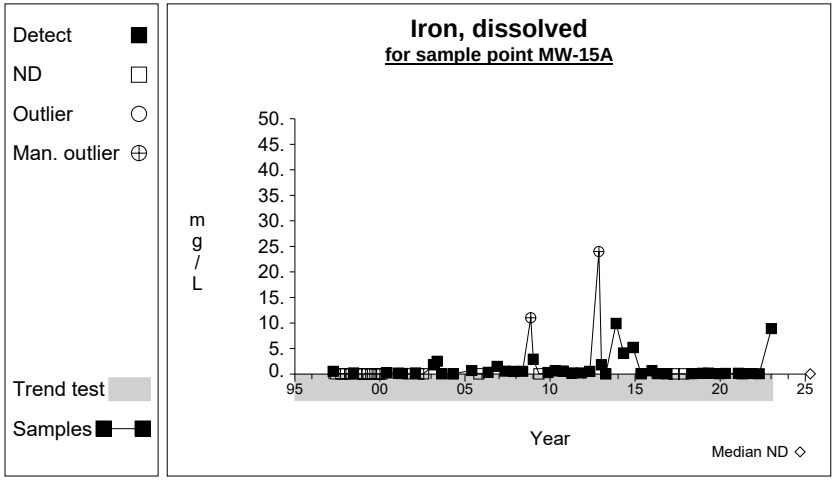


Graph 59

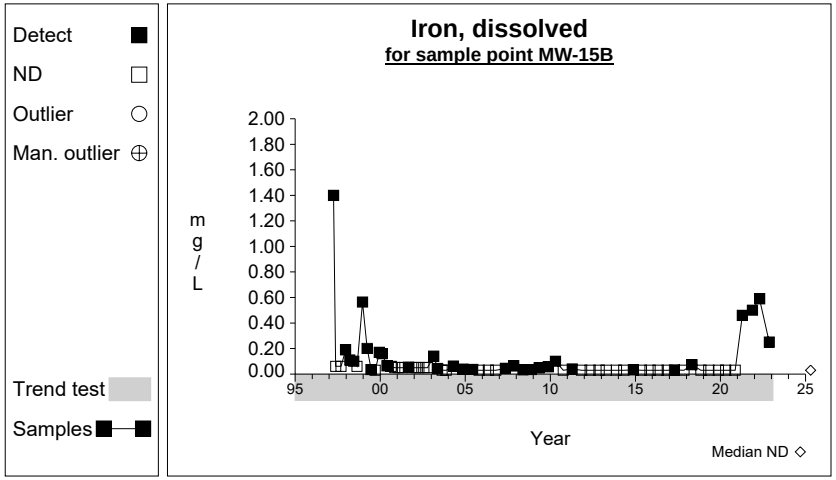


Graph 60

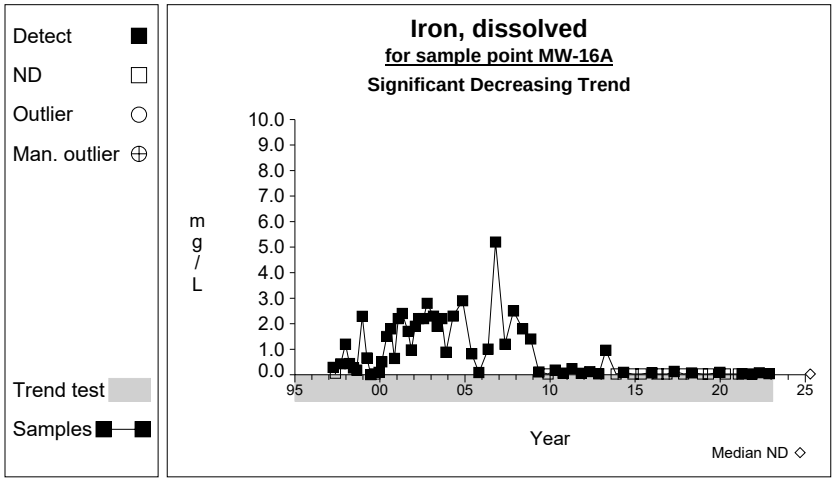
Time Series



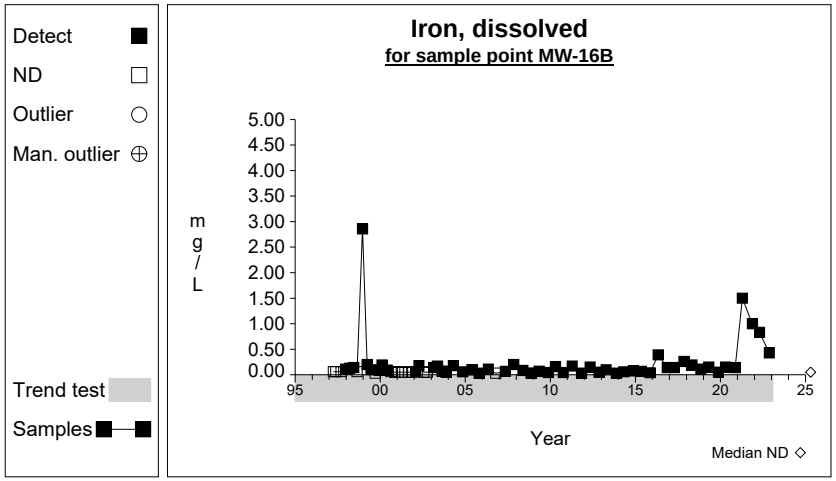
Graph 61



Graph 62

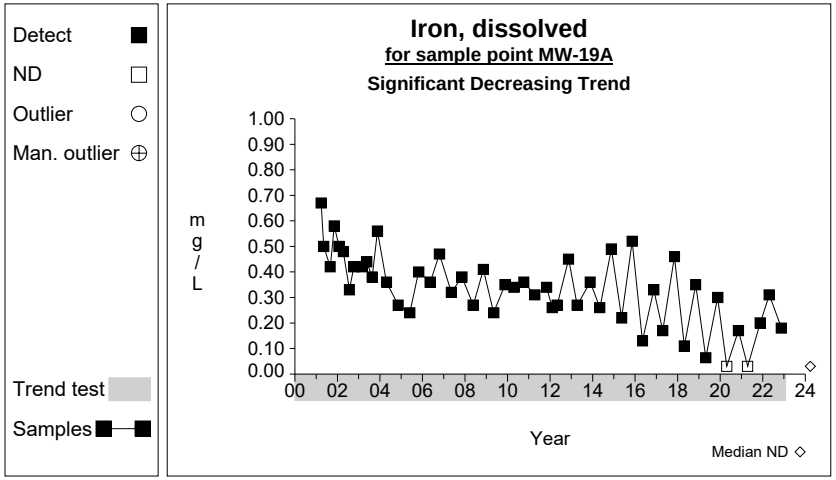


Graph 63

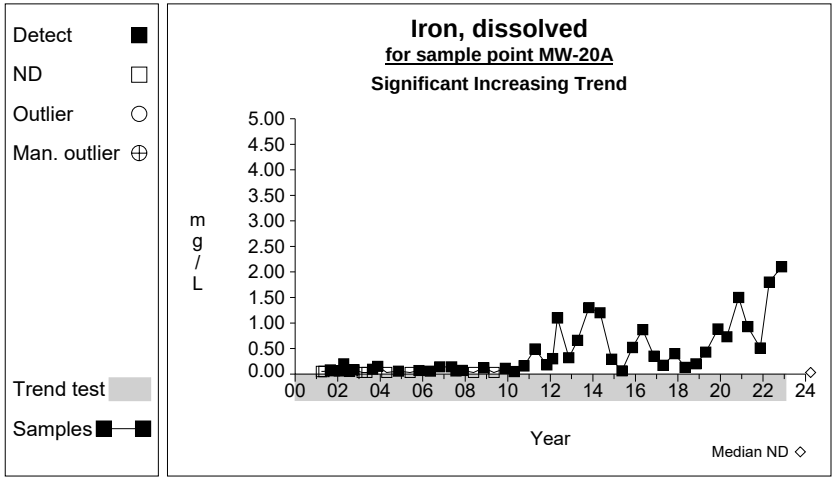


Graph 64

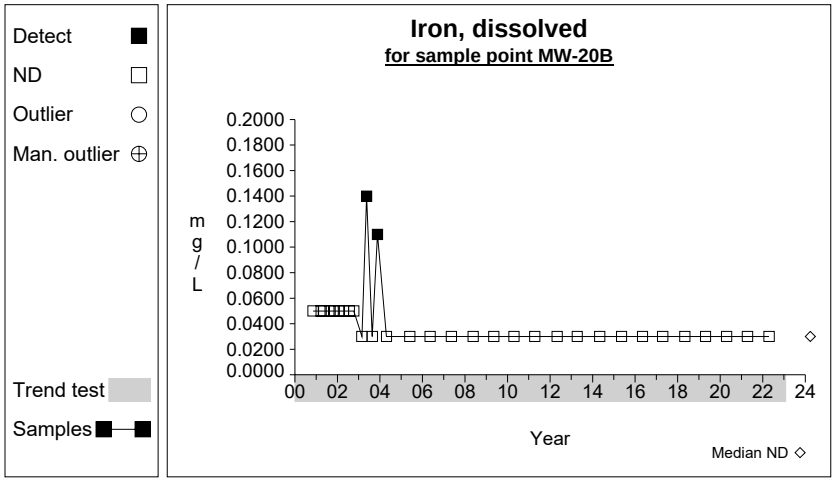
Time Series



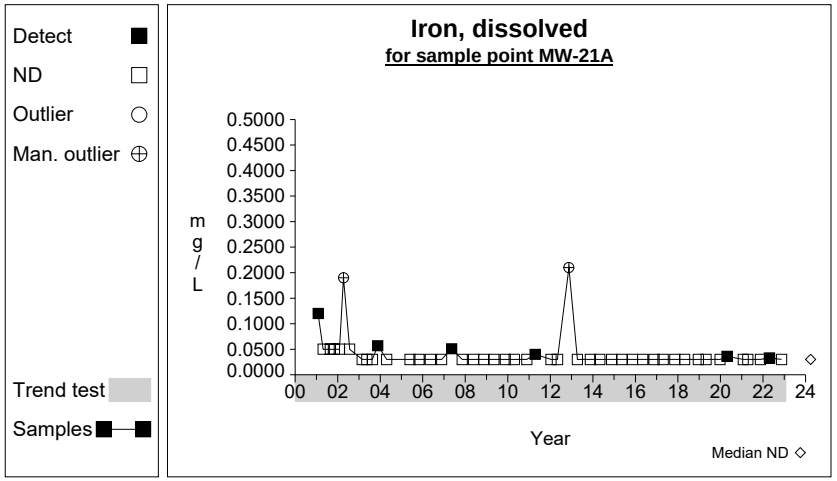
Graph 65



Graph 66

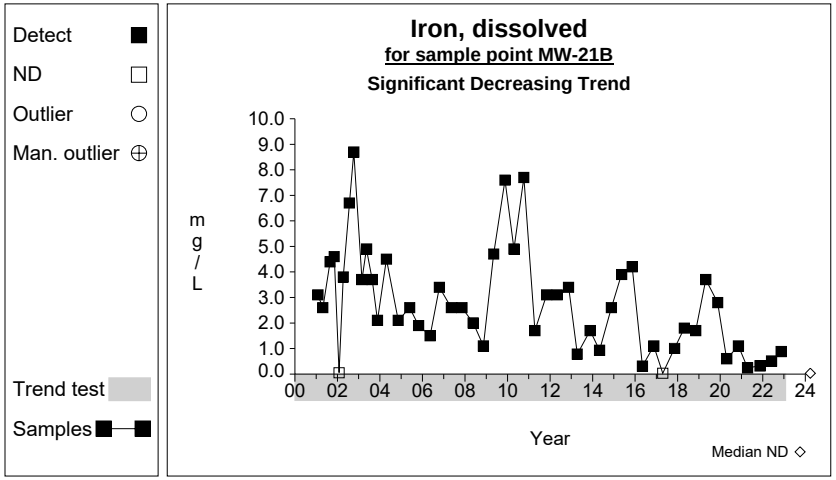


Graph 67

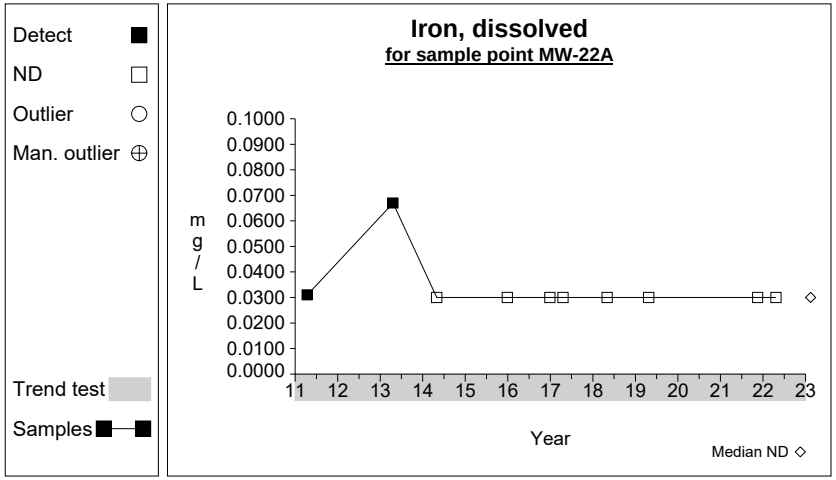


Graph 68

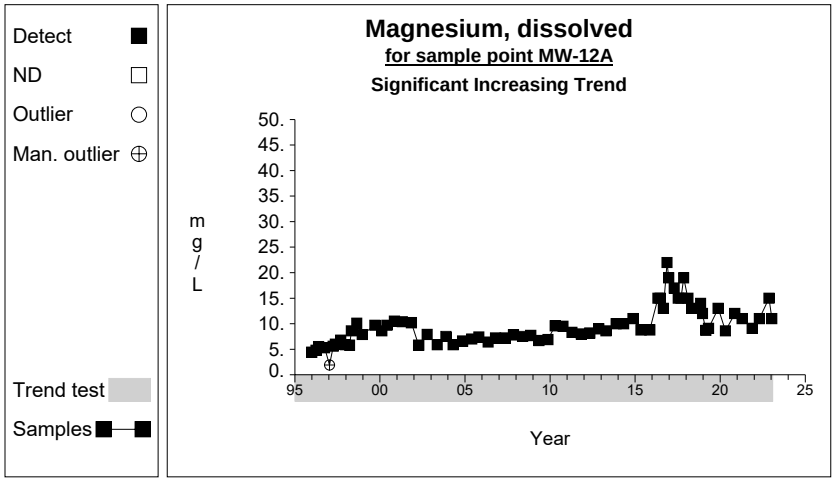
Time Series



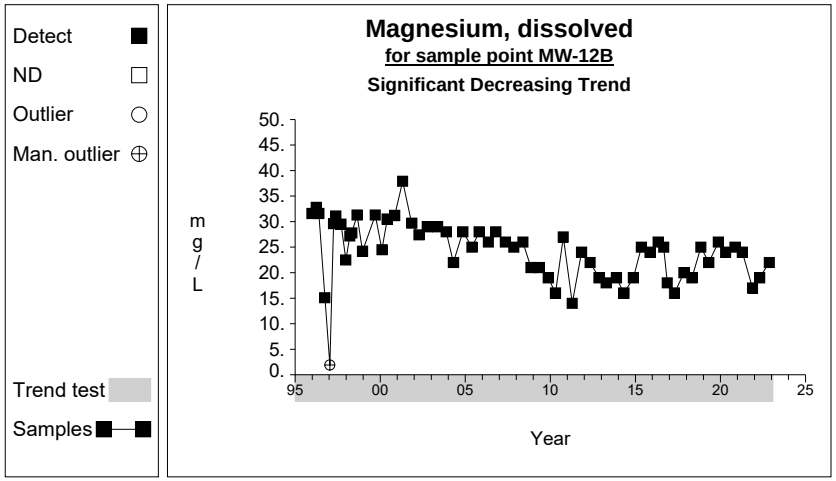
Graph 69



Graph 70

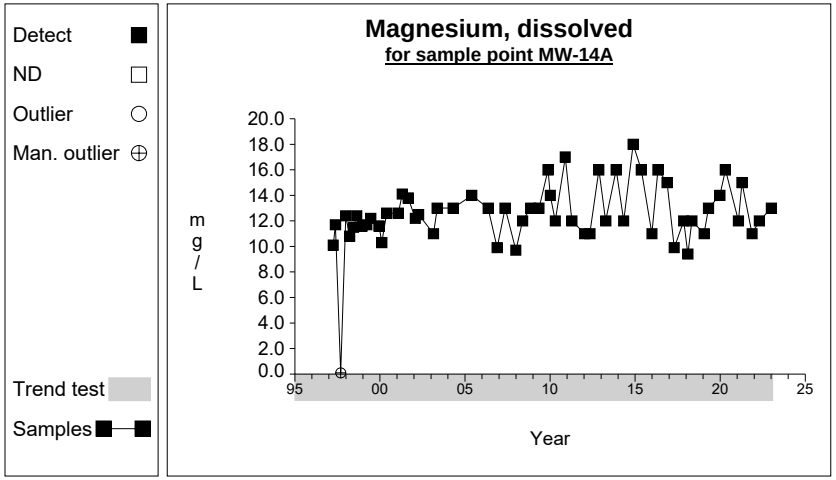


Graph 71

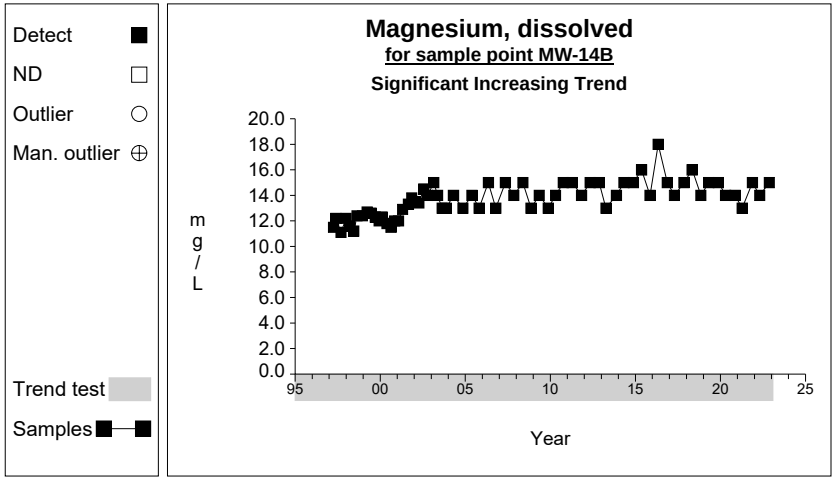


Graph 72

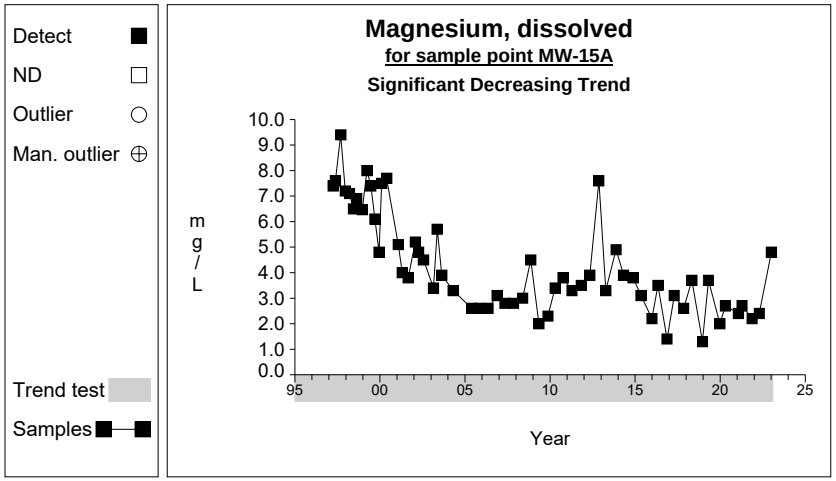
Time Series



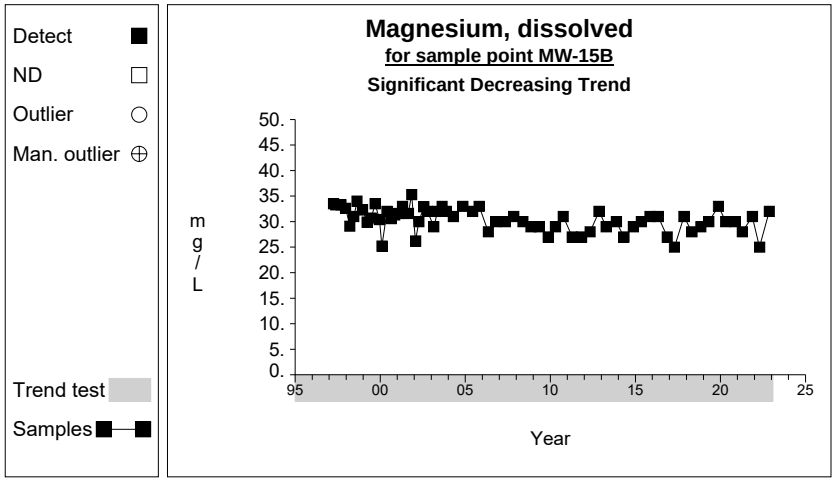
Graph 73



Graph 74

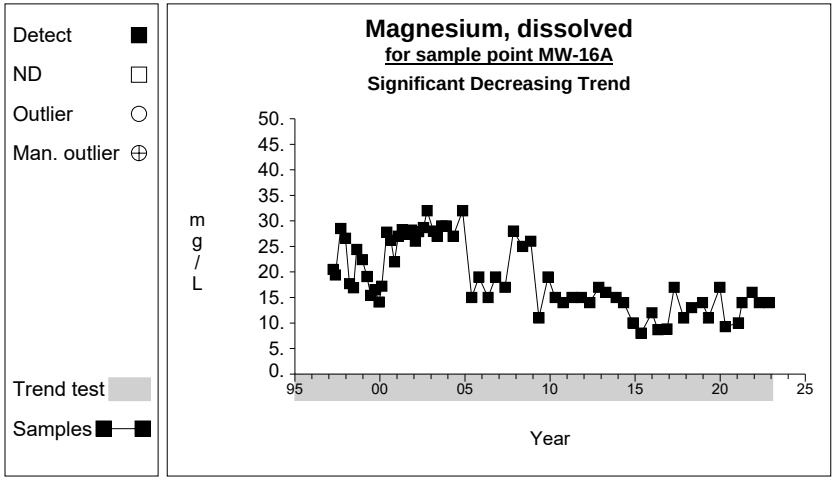


Graph 75

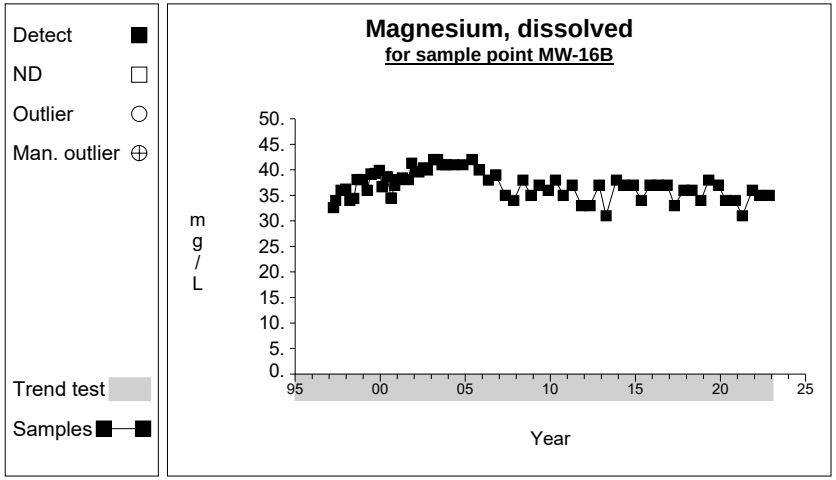


Graph 76

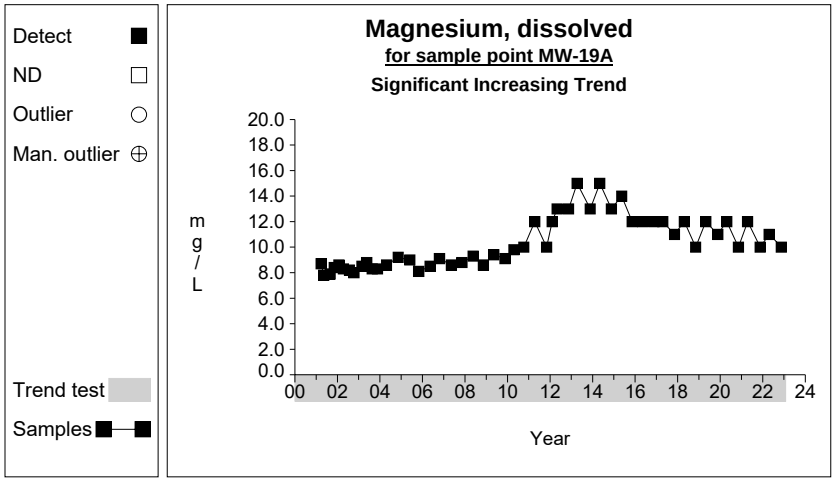
Time Series



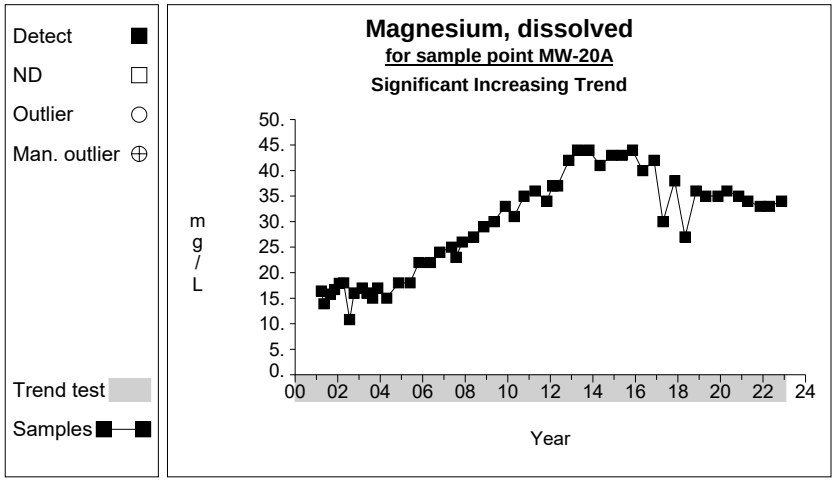
Graph 77



Graph 78

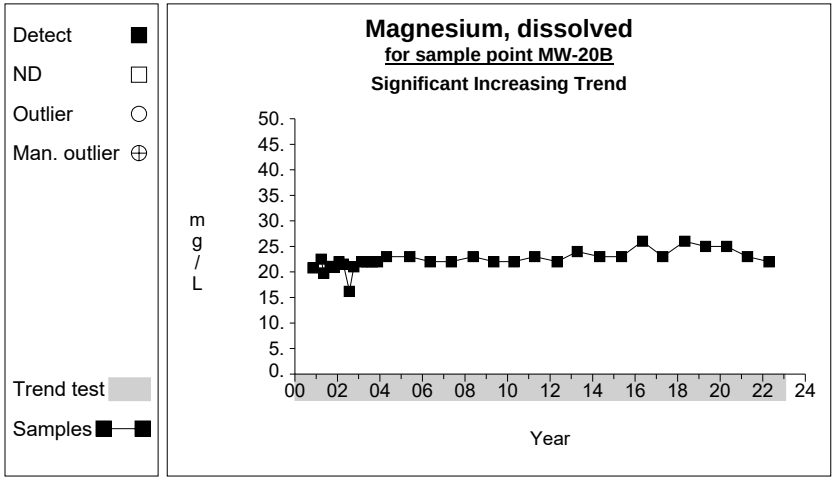


Graph 79

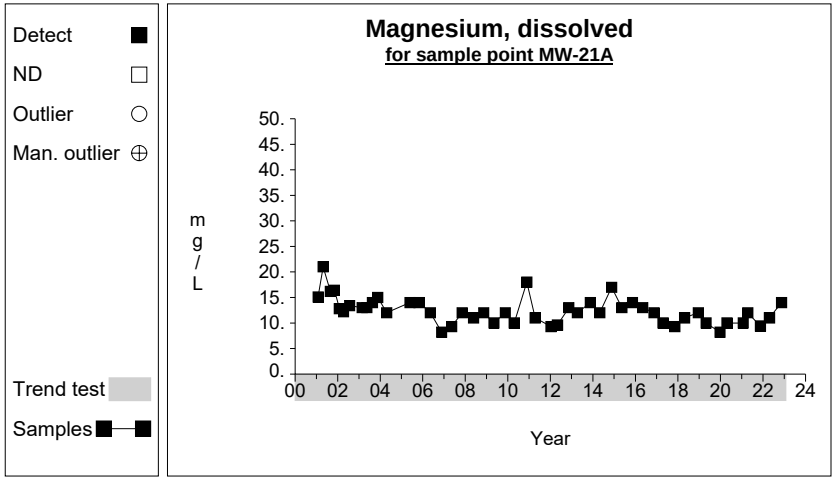


Graph 80

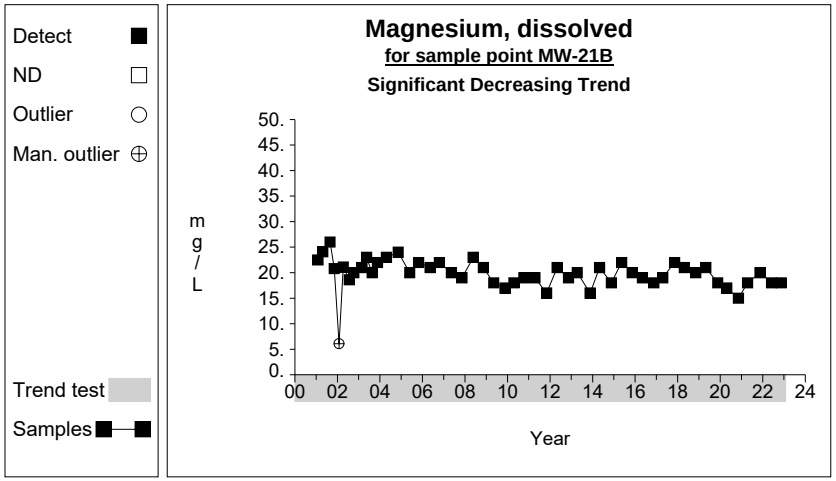
Time Series



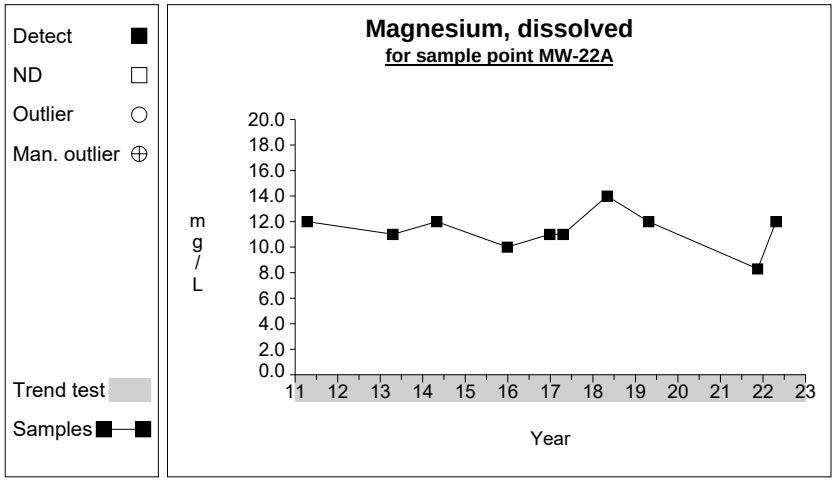
Graph 81



Graph 82

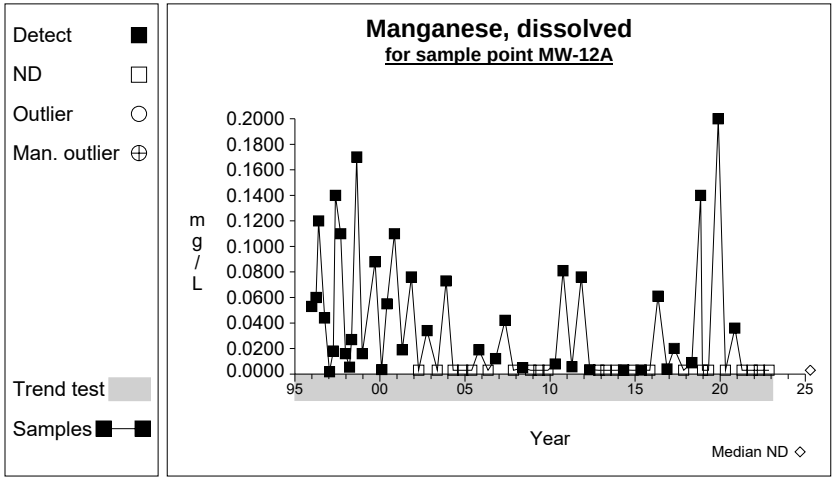


Graph 83

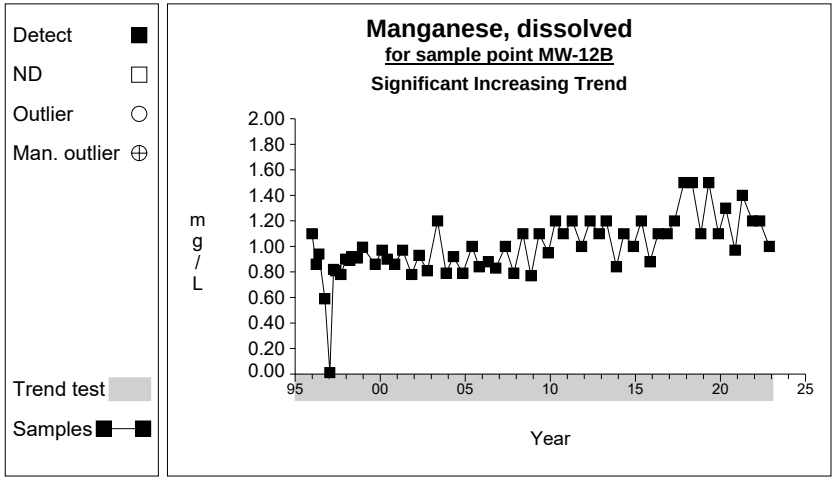


Graph 84

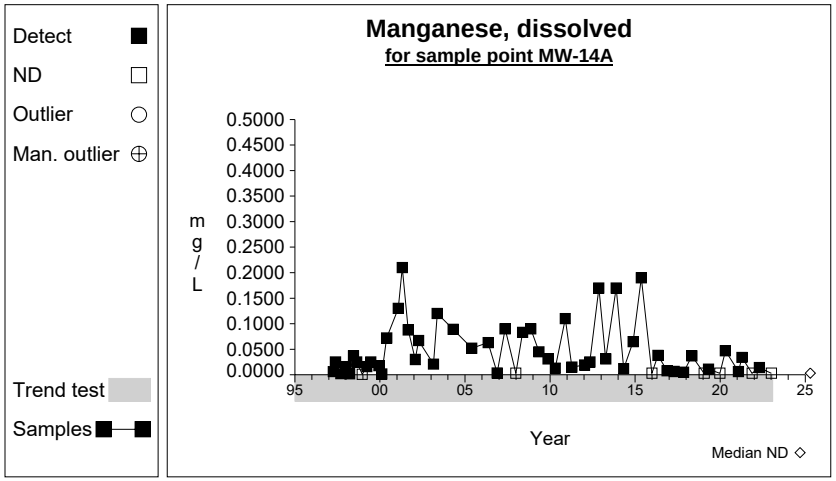
Time Series



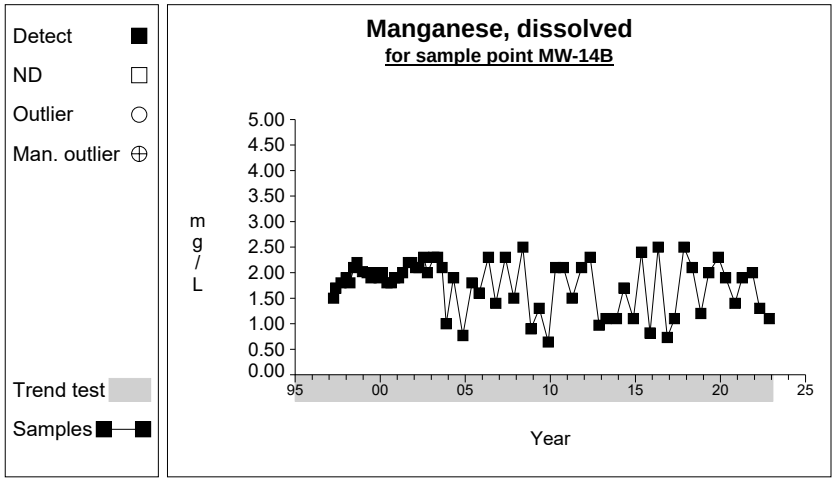
Graph 85



Graph 86

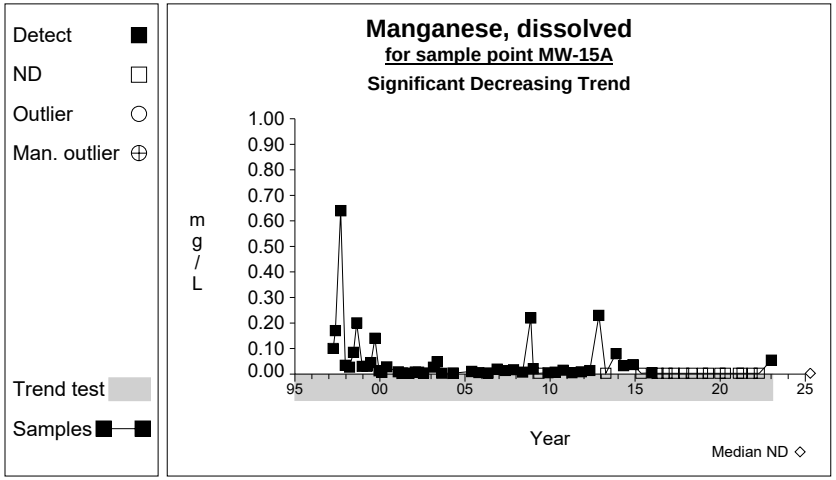


Graph 87

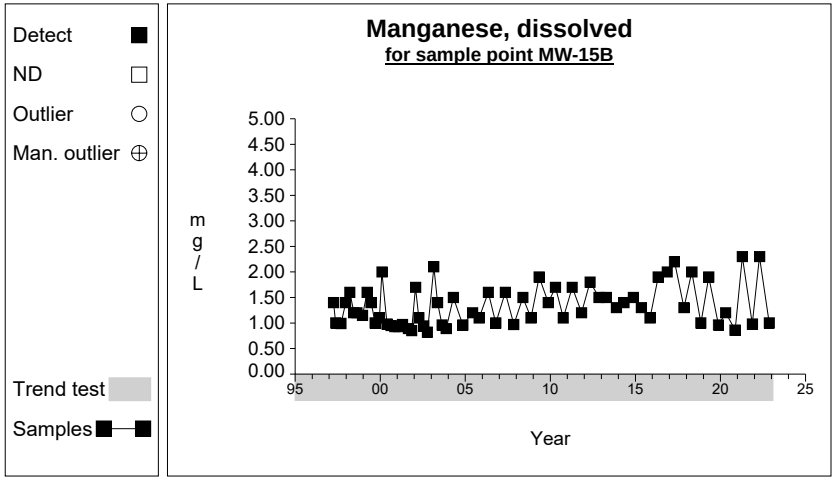


Graph 88

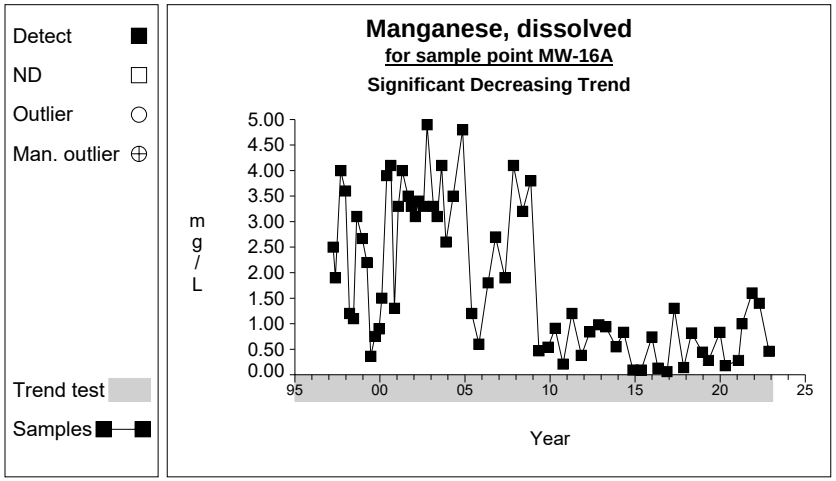
Time Series



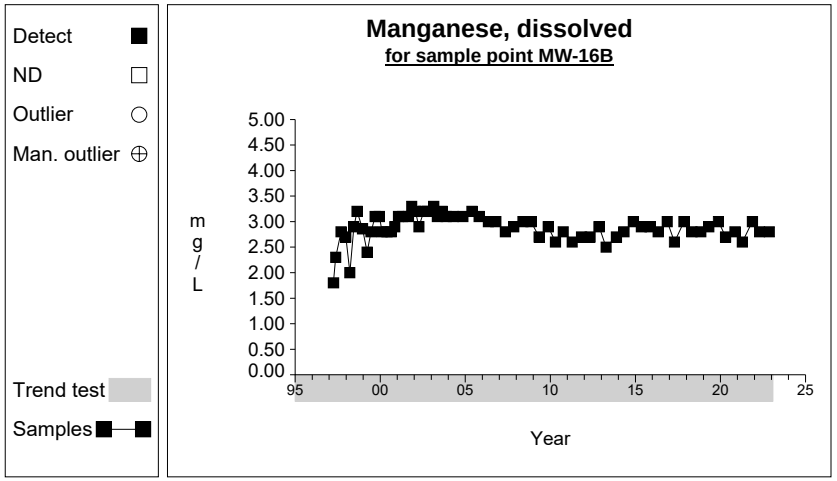
Graph 89



Graph 90

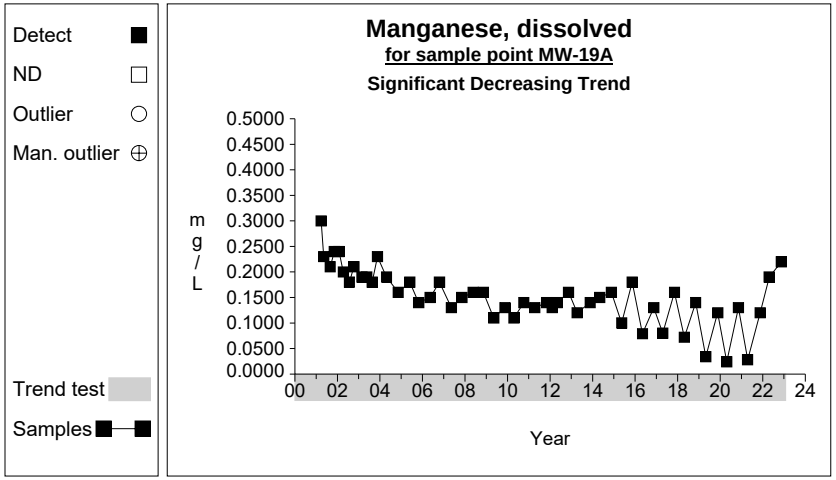


Graph 91

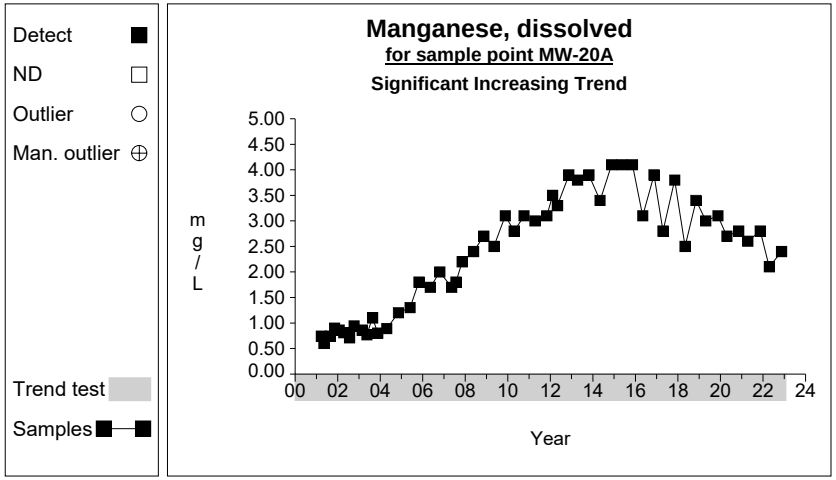


Graph 92

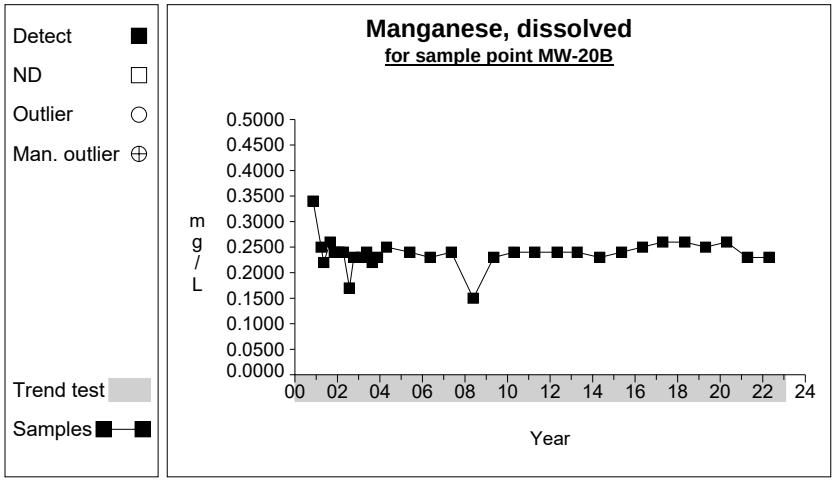
Time Series



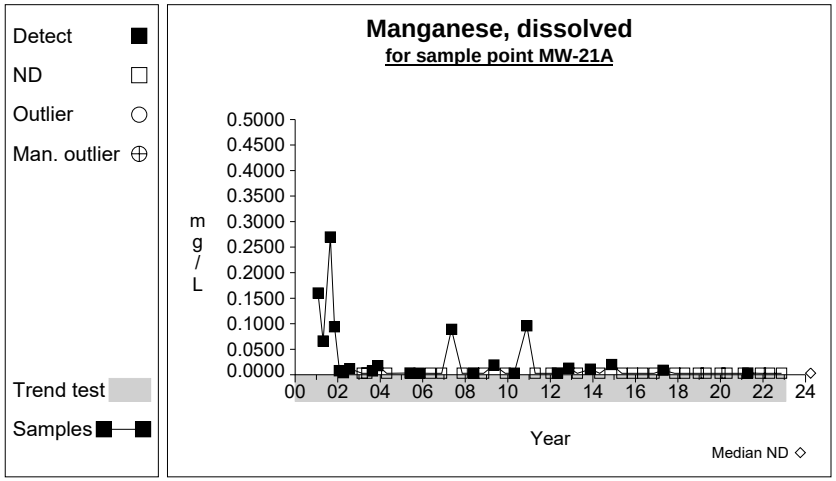
Graph 93



Graph 94

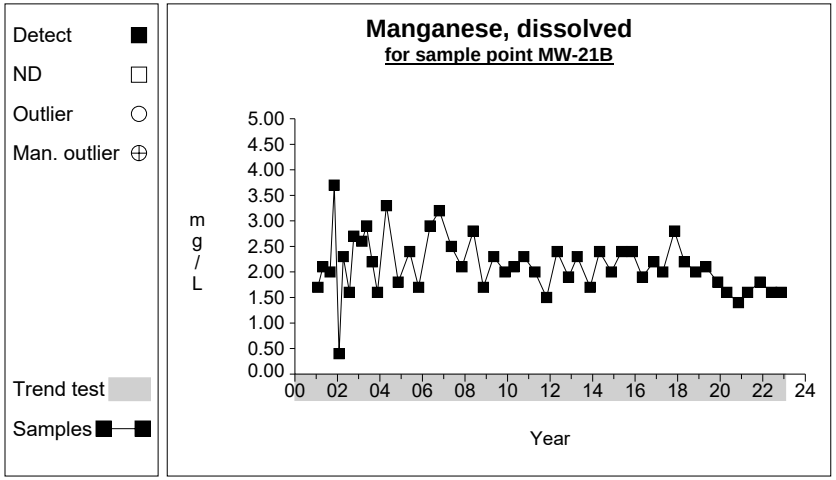


Graph 95

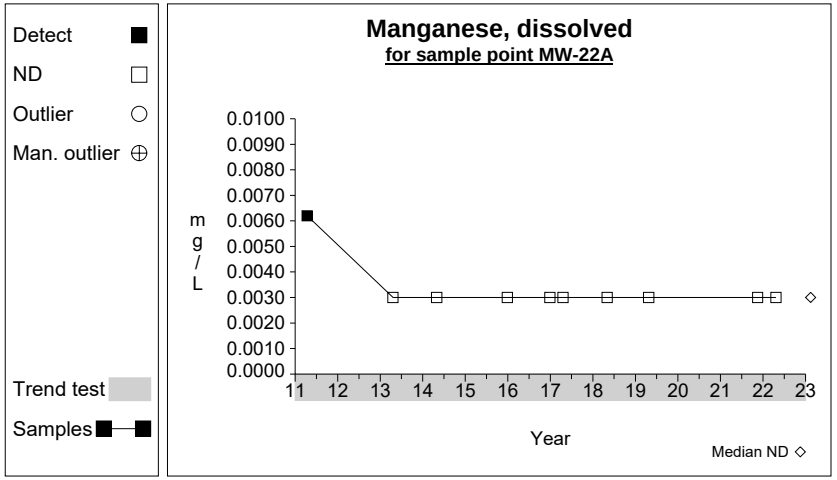


Graph 96

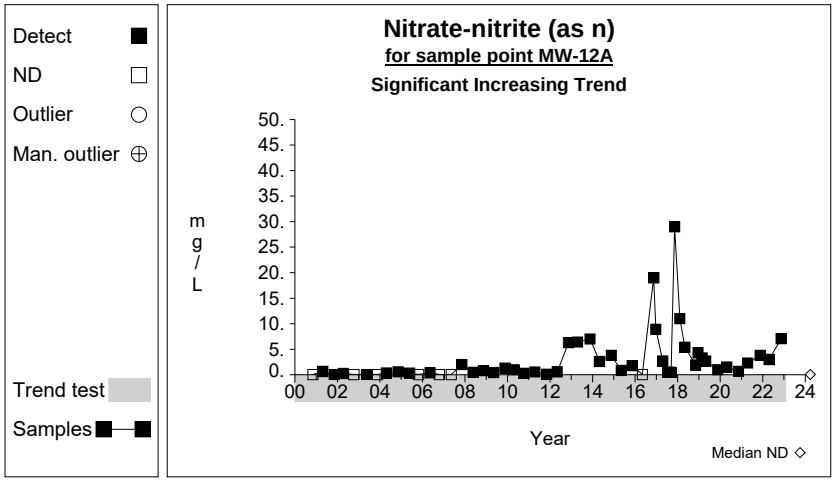
Time Series



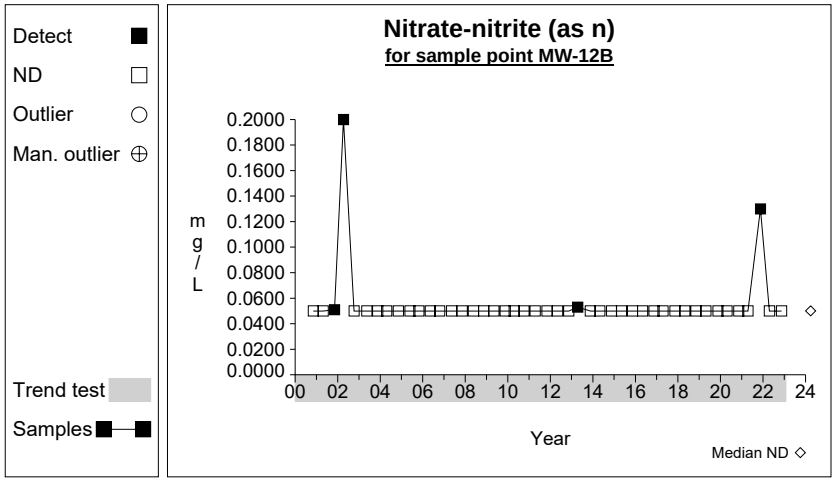
Graph 97



Graph 98

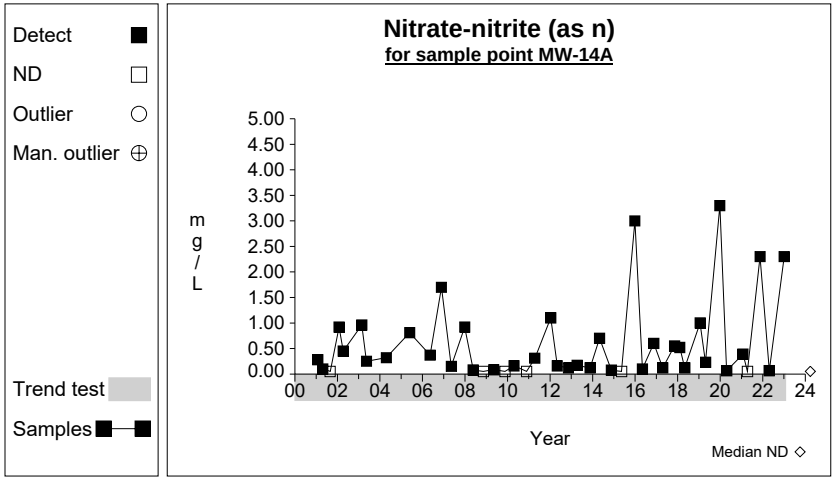


Graph 99

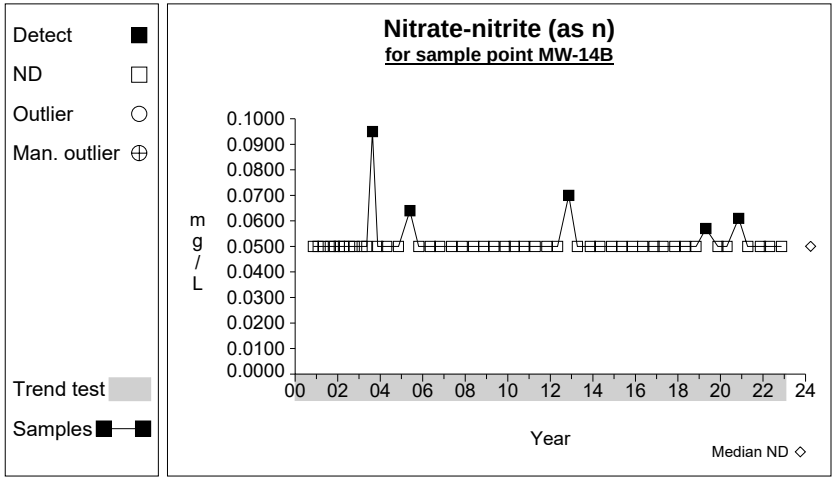


Graph 100

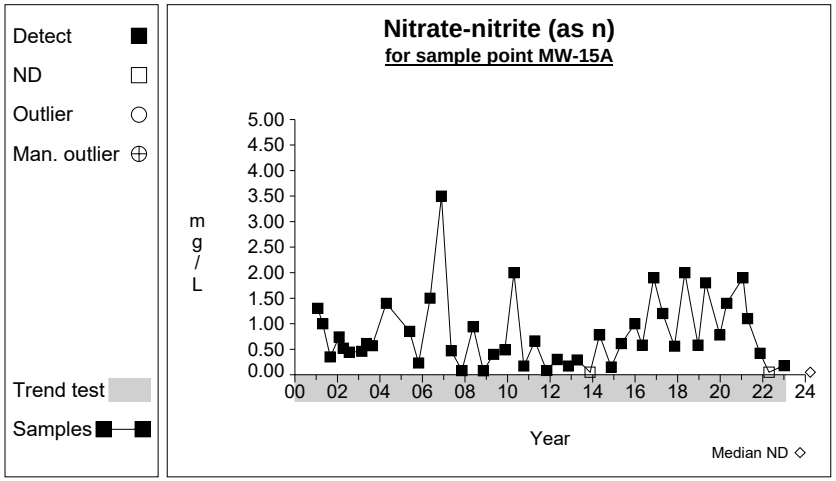
Time Series



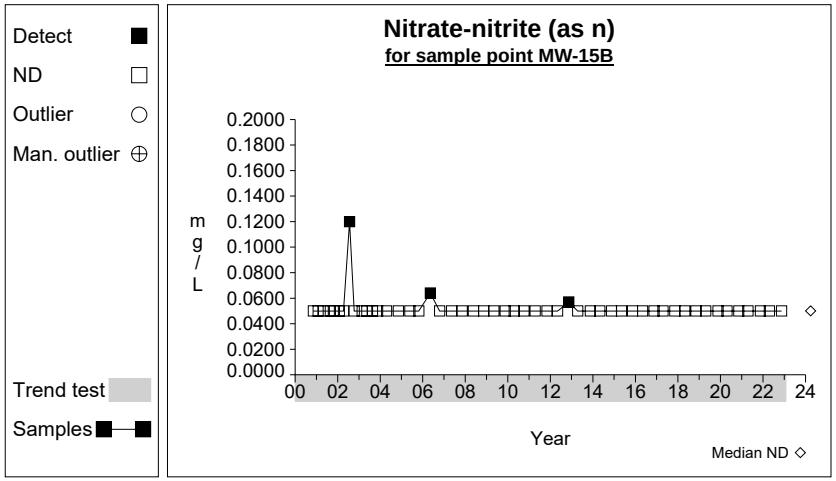
Graph 101



Graph 102

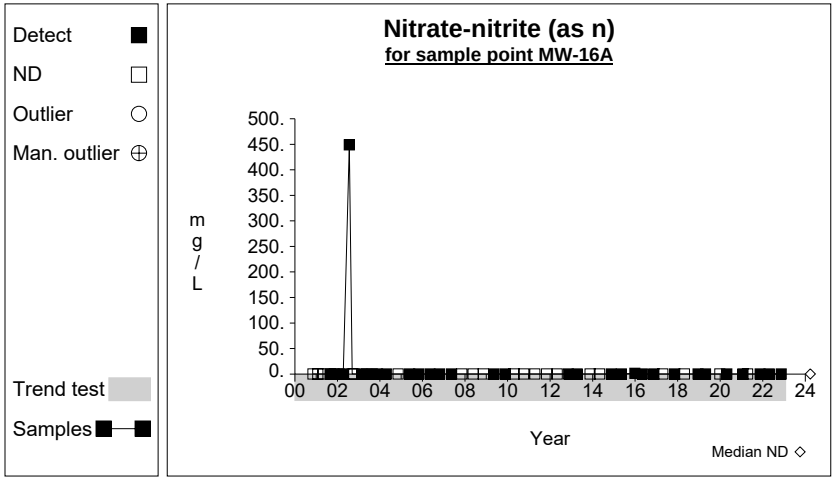


Graph 103

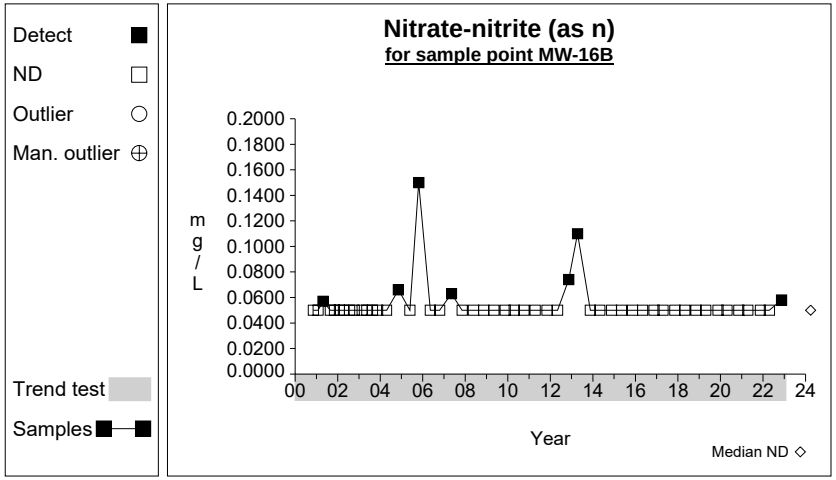


Graph 104

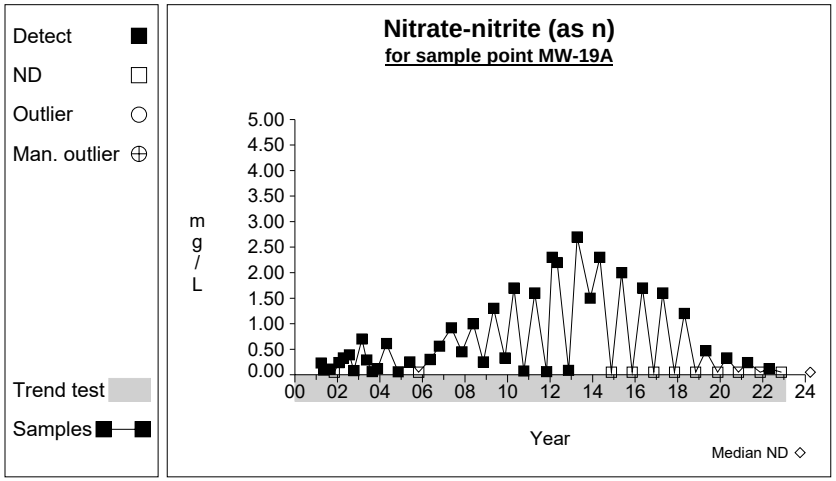
Time Series



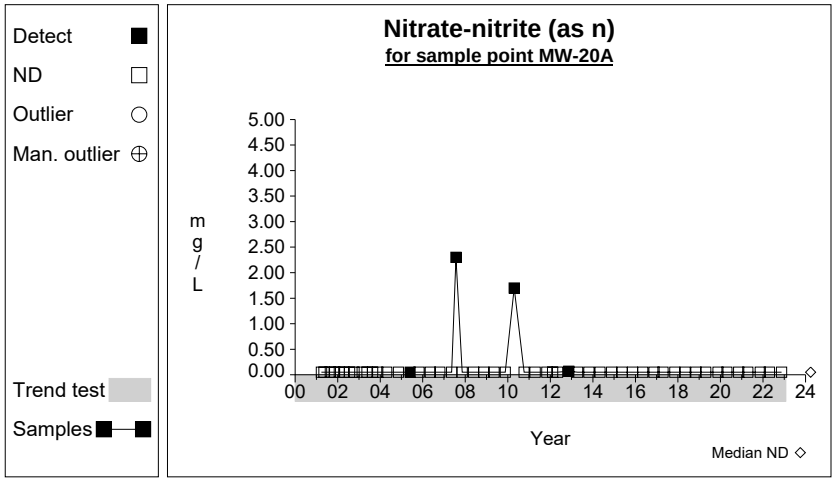
Graph 105



Graph 106

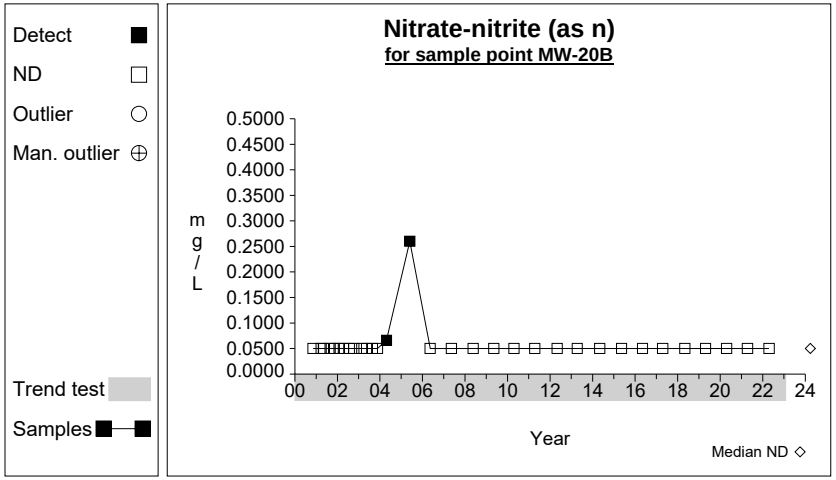


Graph 107

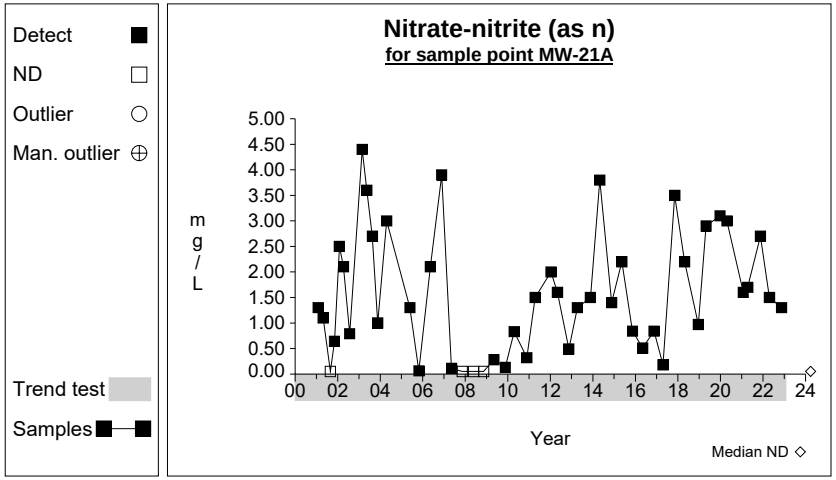


Graph 108

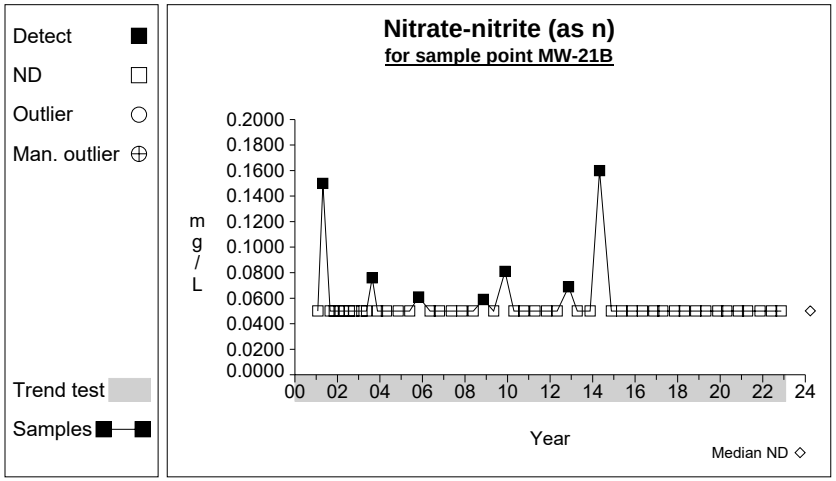
Time Series



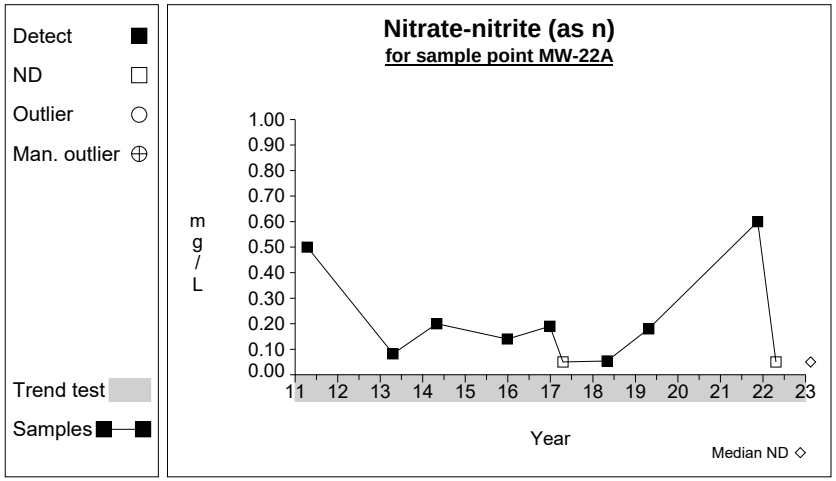
Graph 109



Graph 110

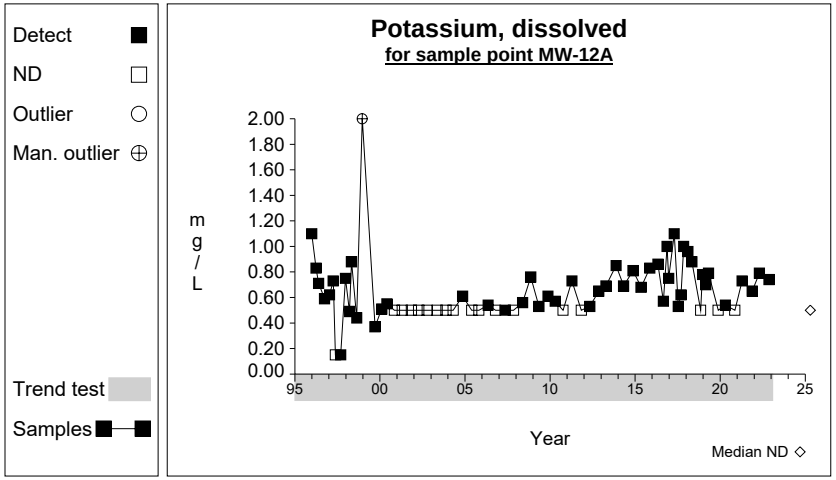


Graph 111

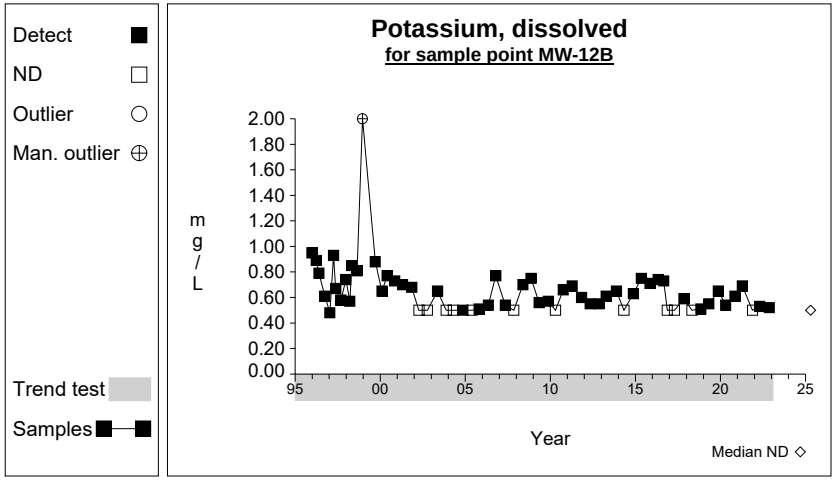


Graph 112

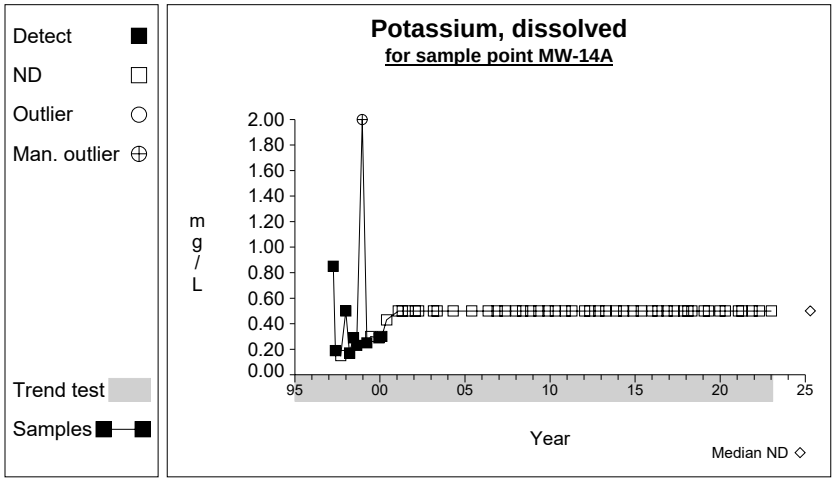
Time Series



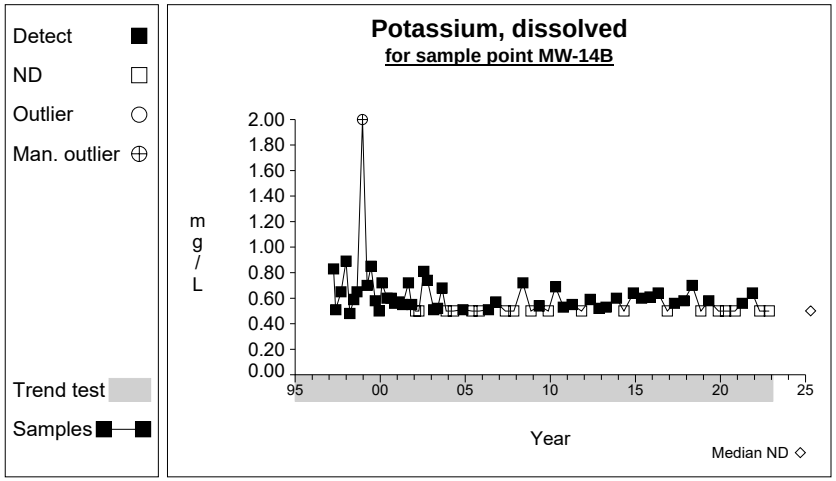
Graph 113



Graph 114

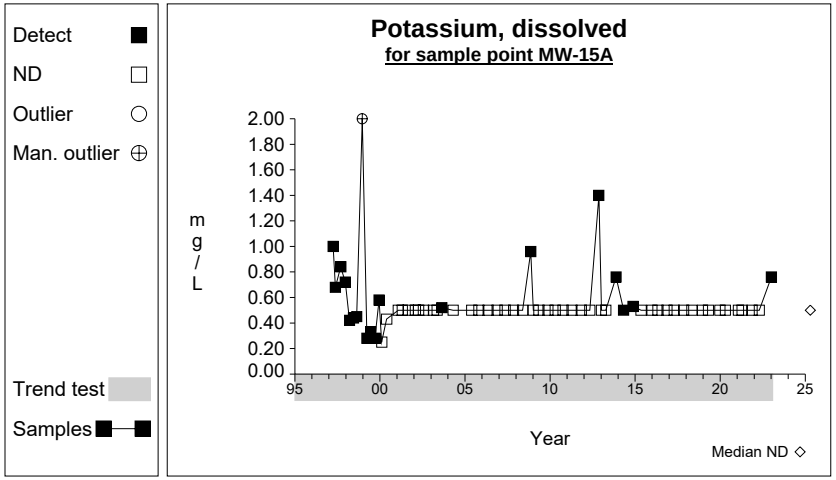


Graph 115

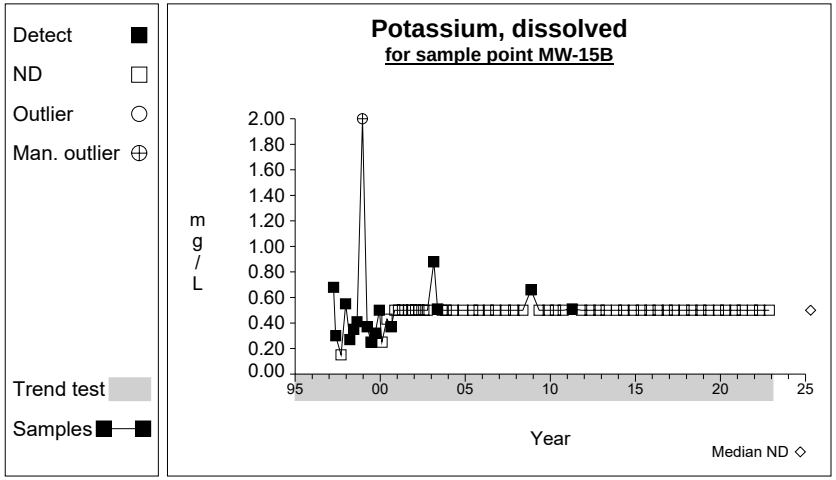


Graph 116

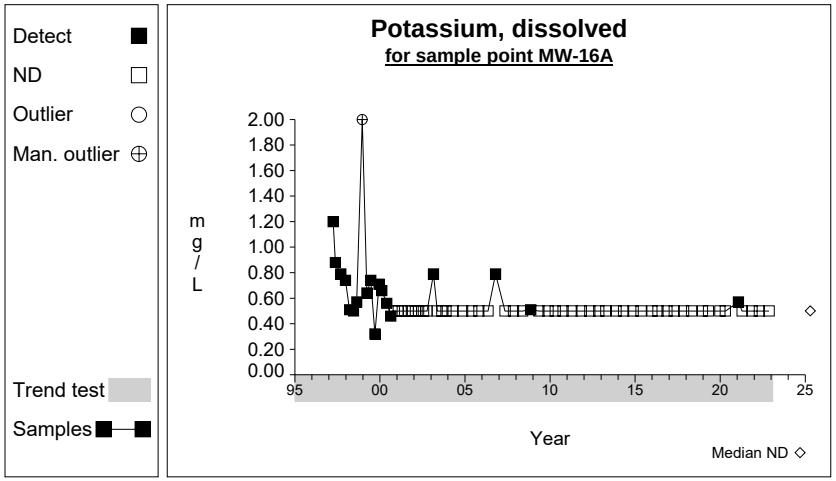
Time Series



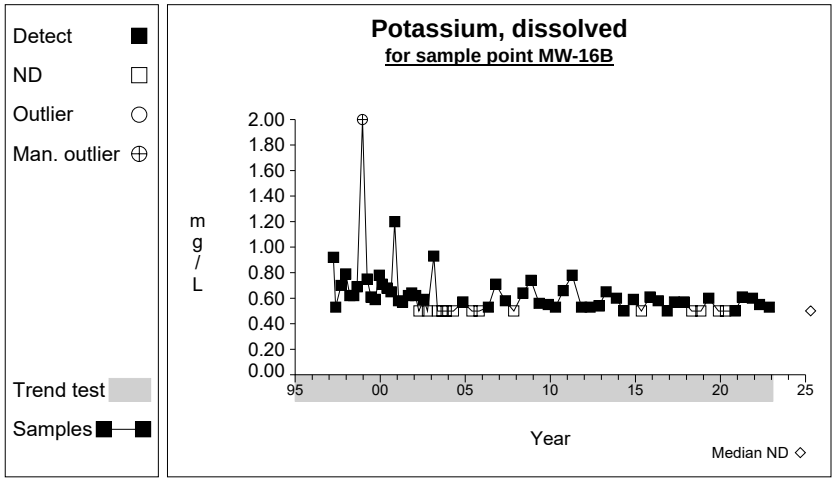
Graph 117



Graph 118

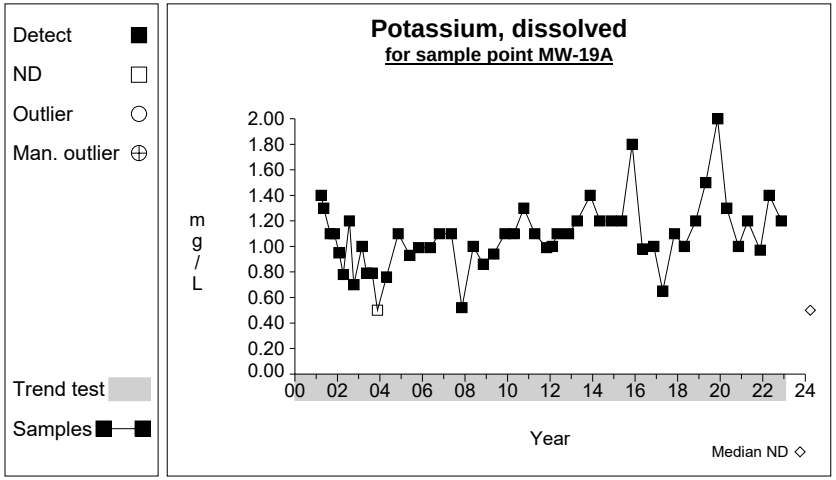


Graph 119

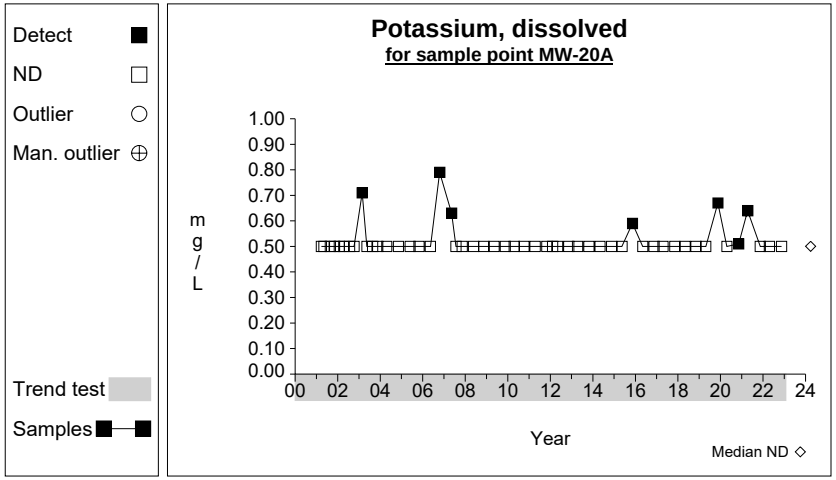


Graph 120

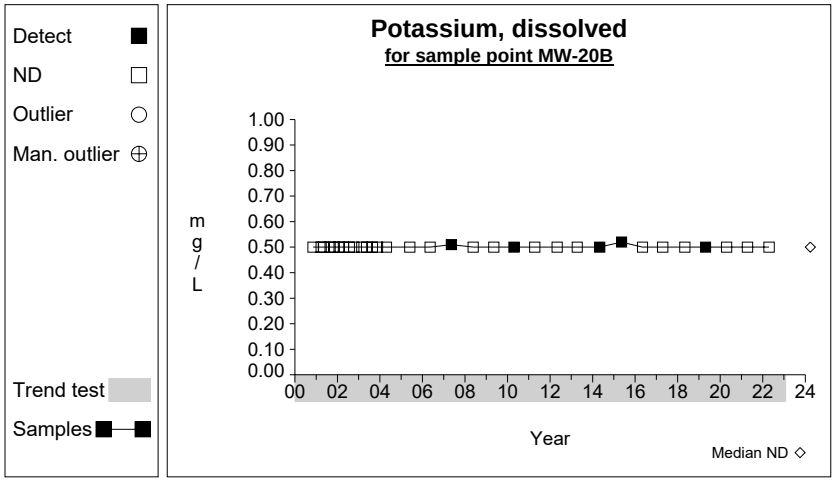
Time Series



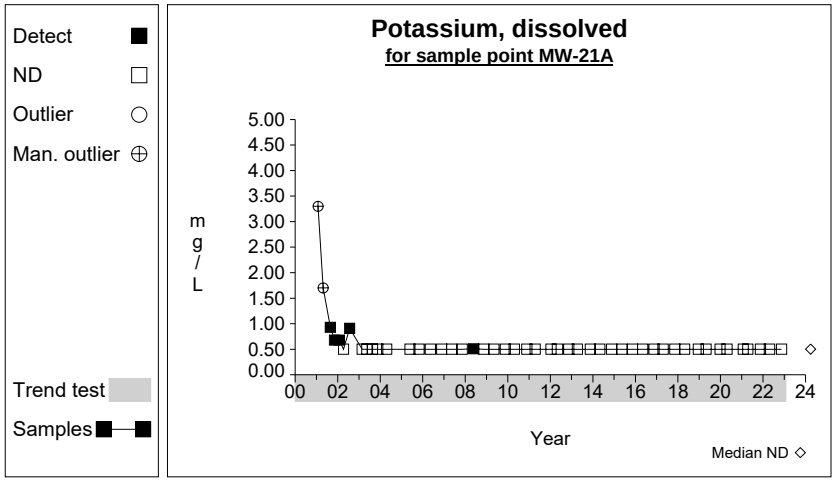
Graph 121



Graph 122

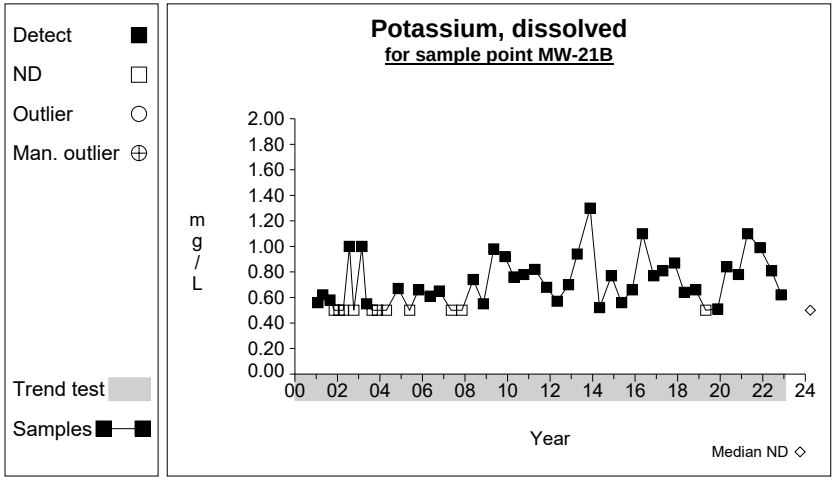


Graph 123

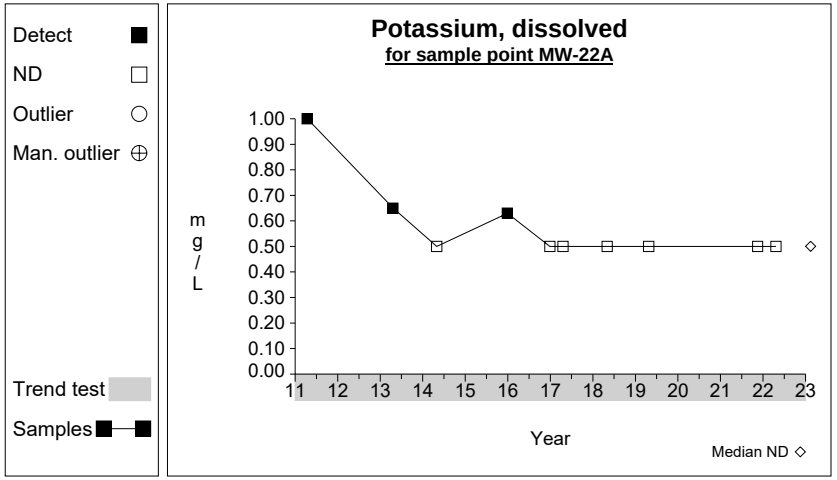


Graph 124

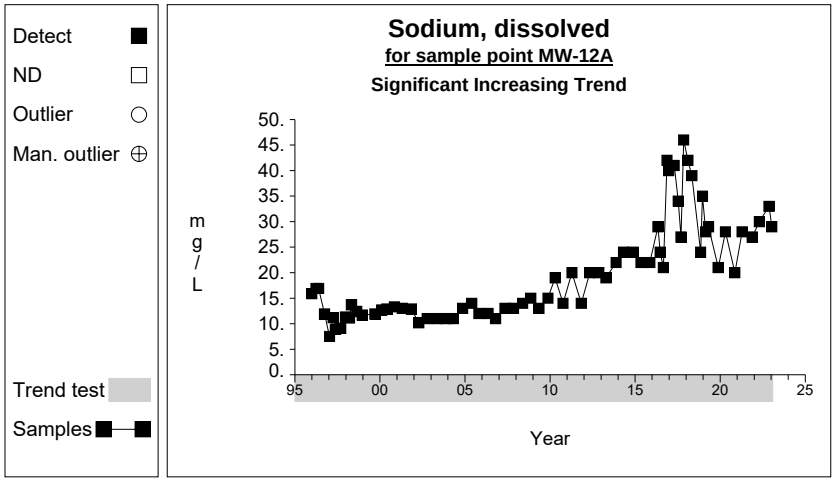
Time Series



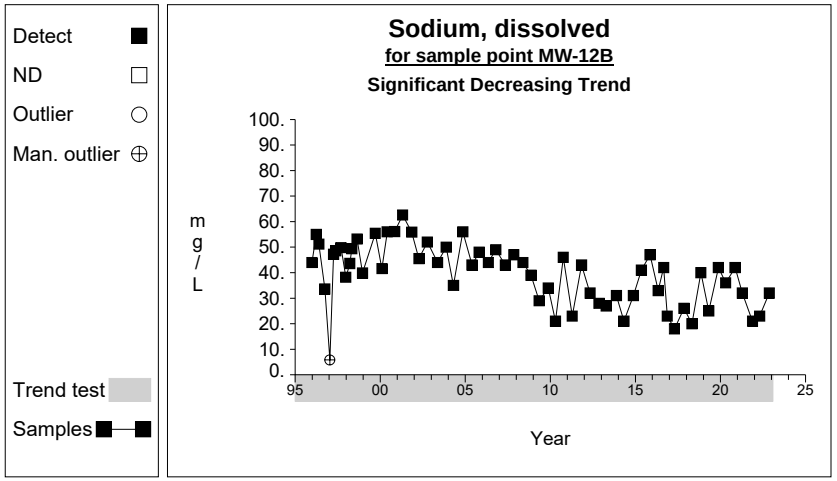
Graph 125



Graph 126

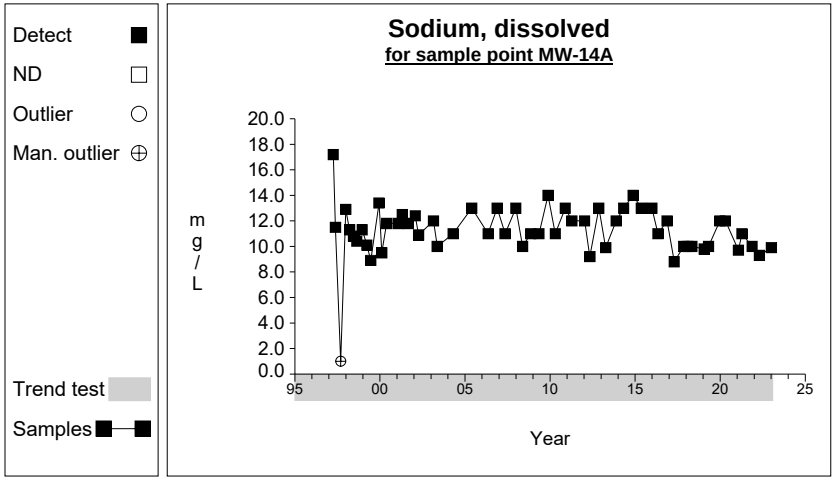


Graph 127

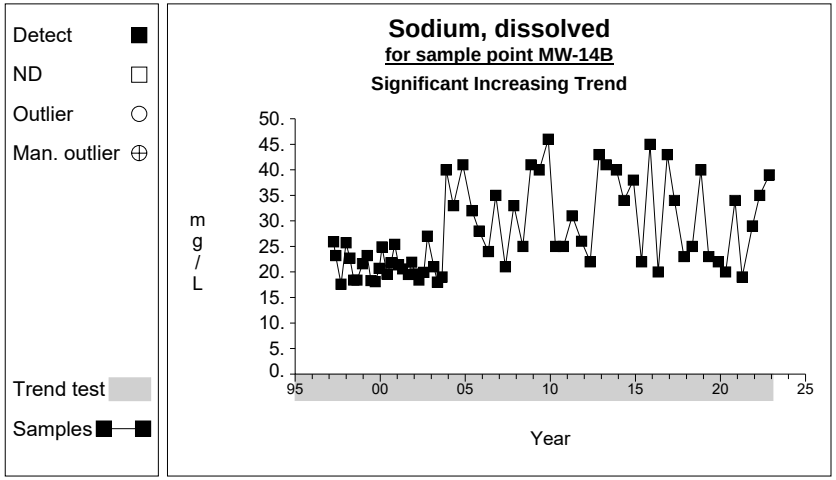


Graph 128

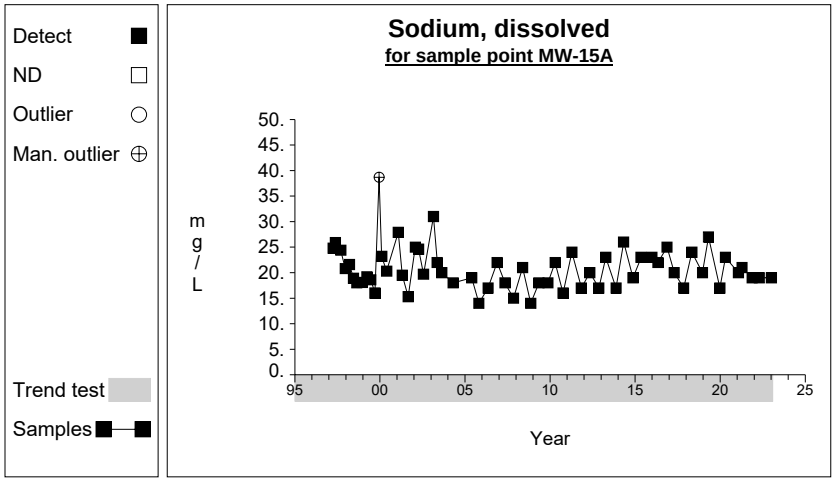
Time Series



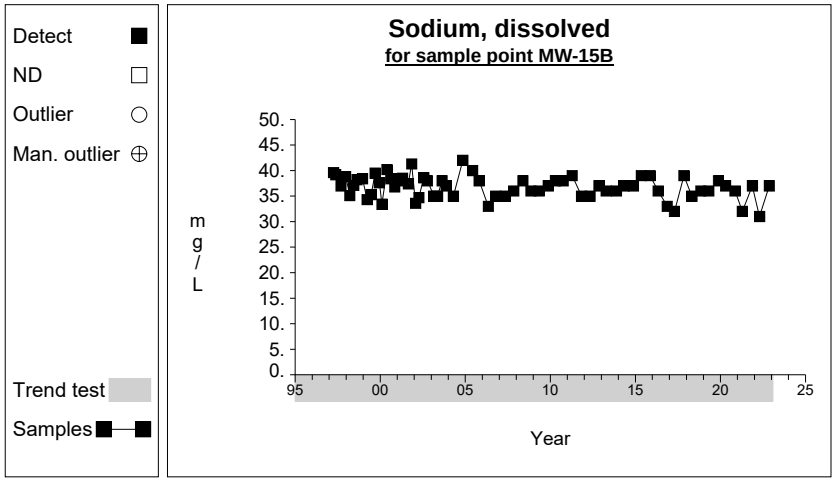
Graph 129



Graph 130

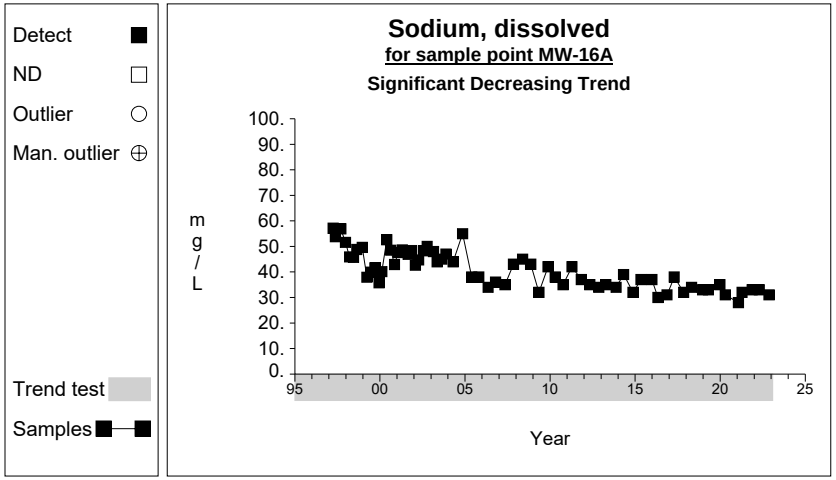


Graph 131

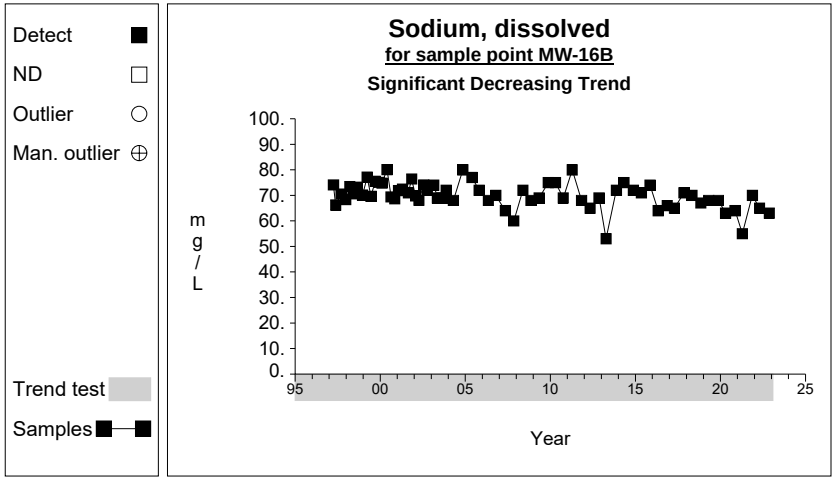


Graph 132

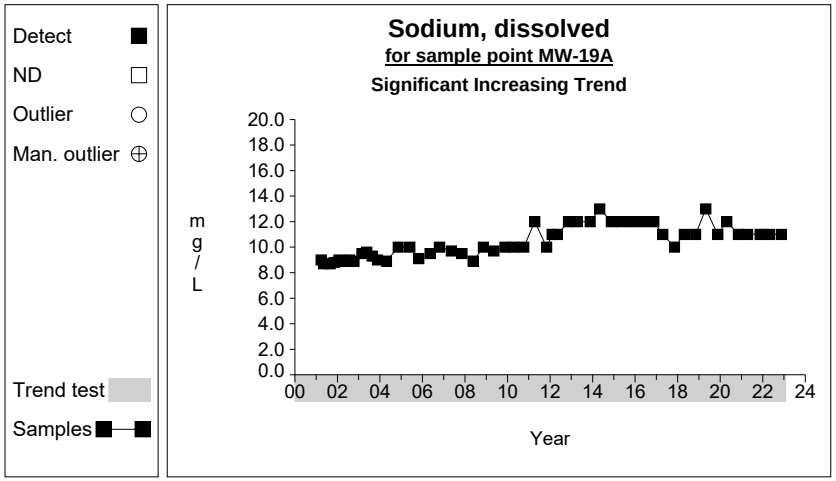
Time Series



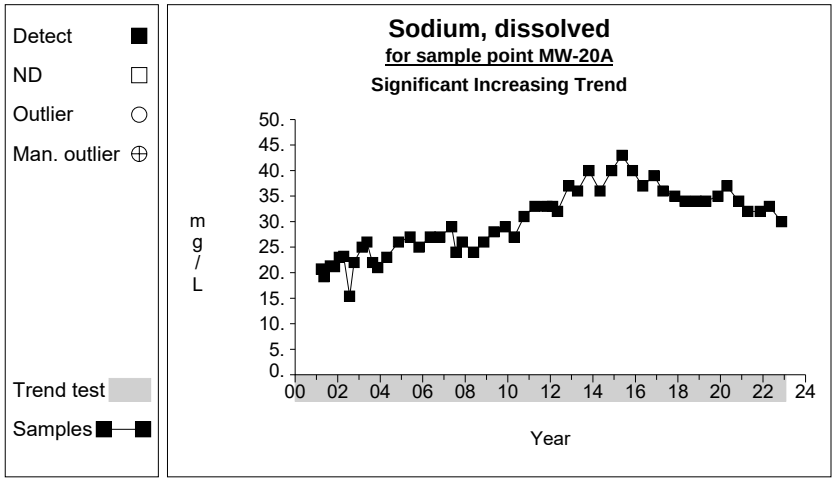
Graph 133



Graph 134

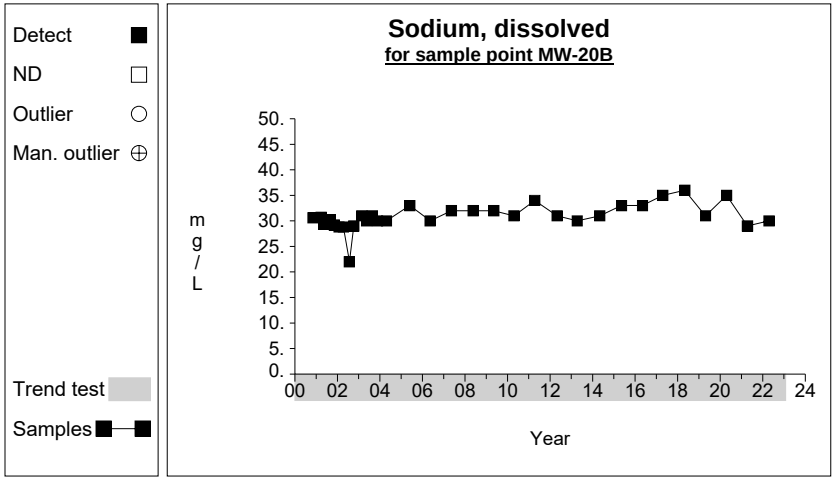


Graph 135

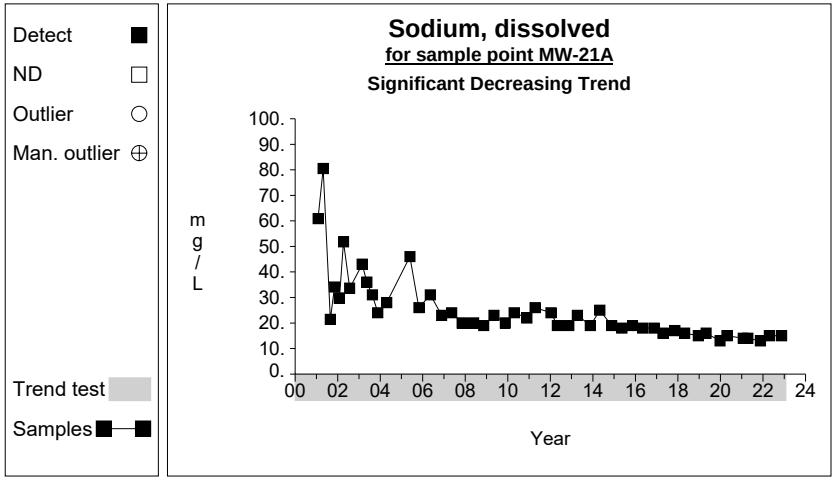


Graph 136

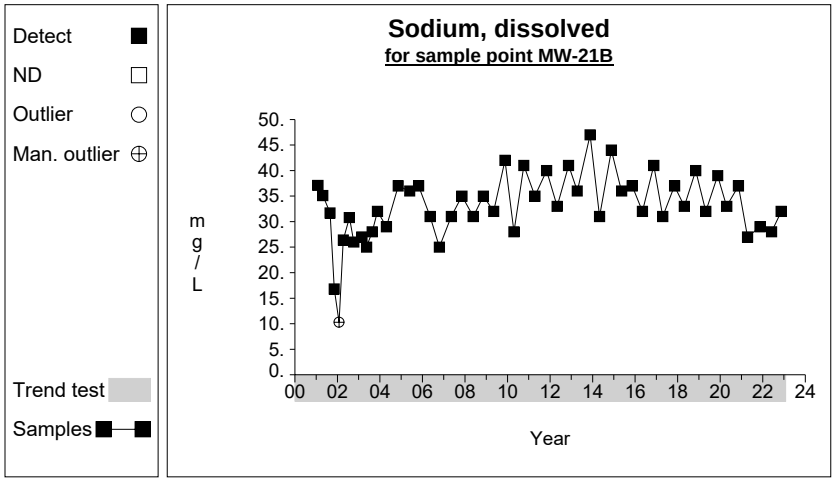
Time Series



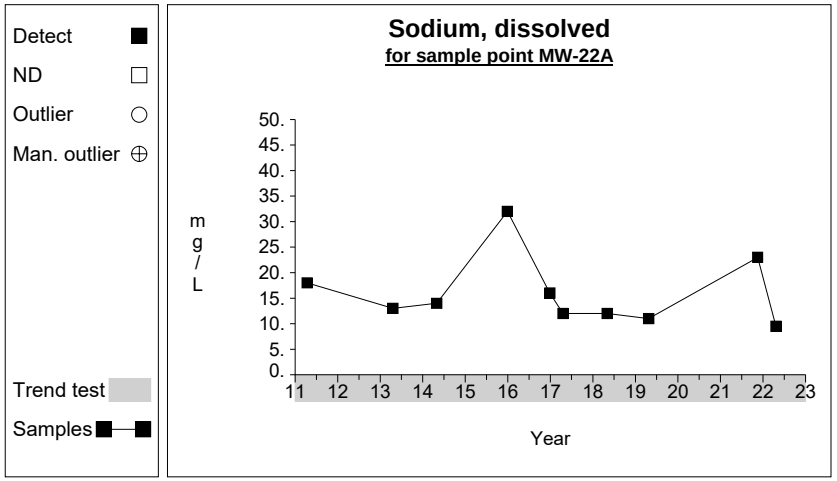
Graph 137



Graph 138

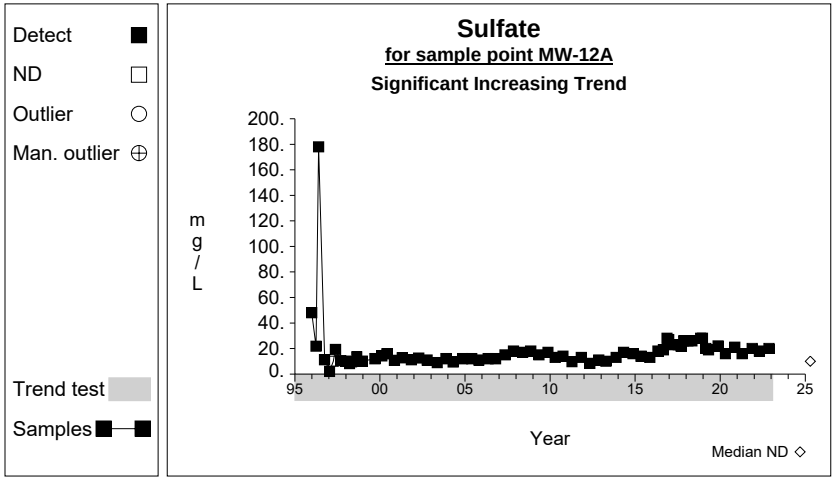


Graph 139



Graph 140

Time Series



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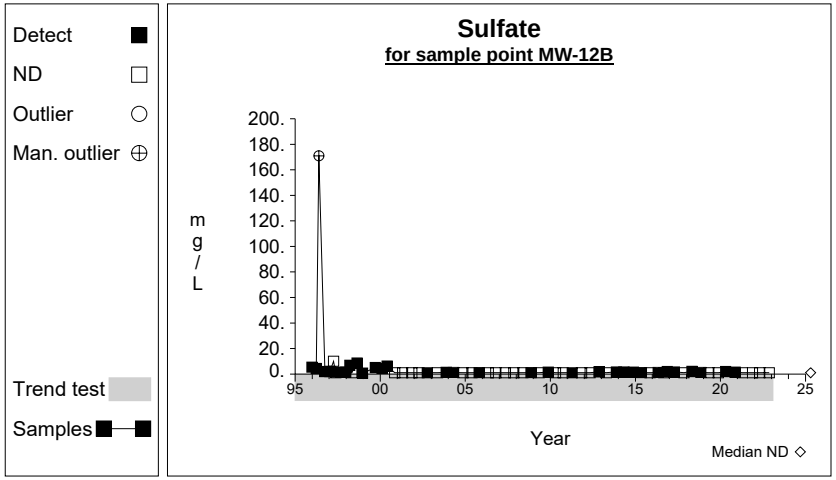

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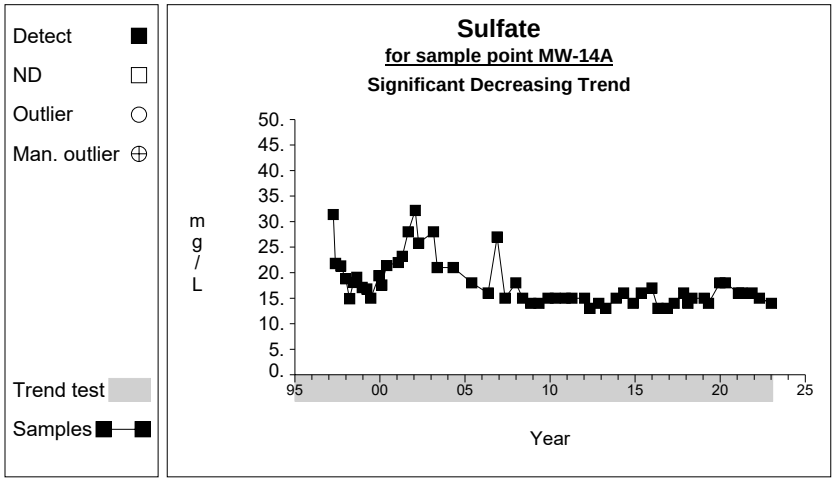

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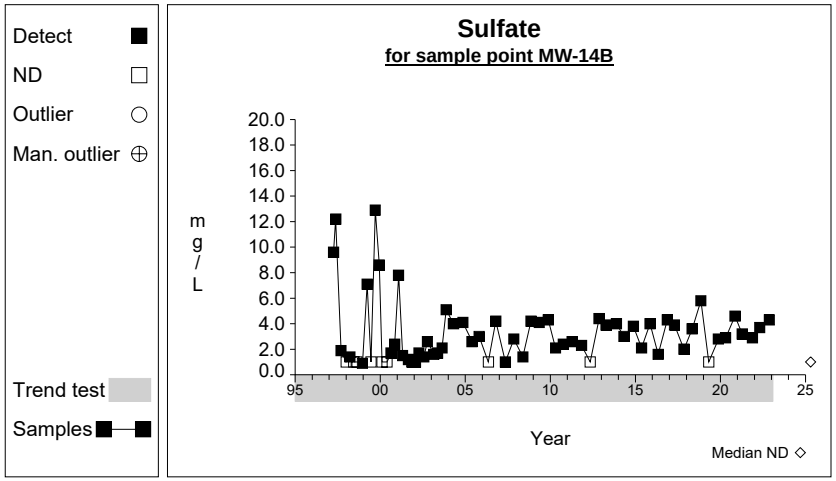
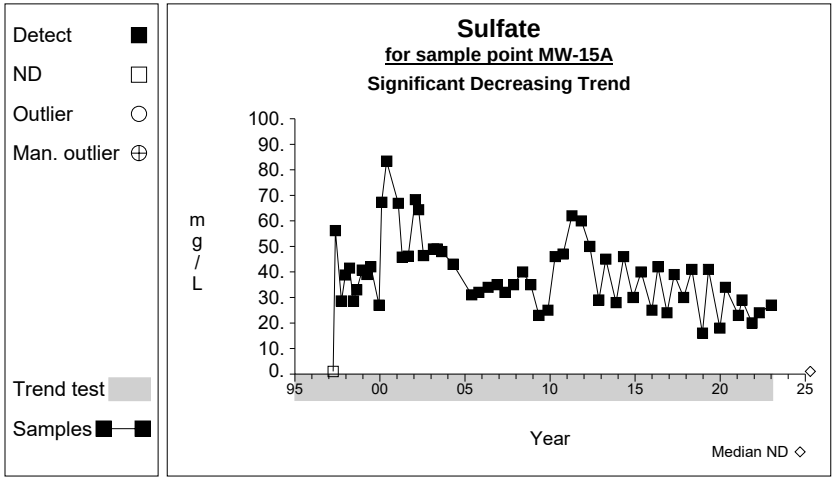


Graph 144

Time Series



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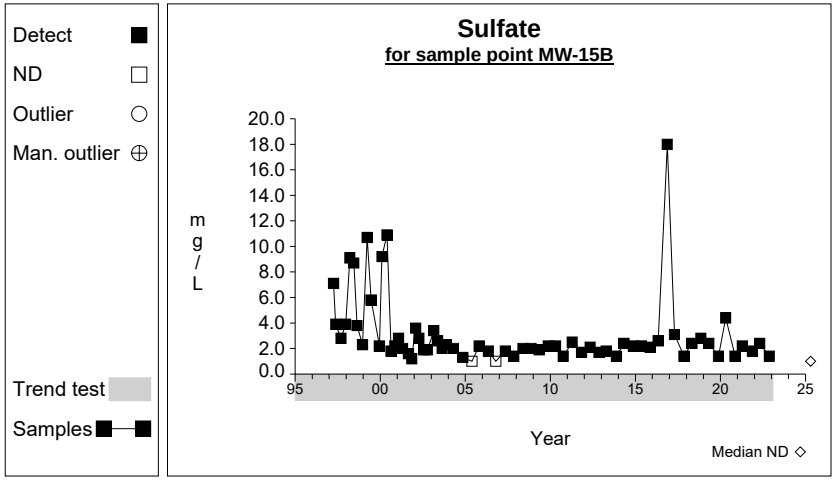
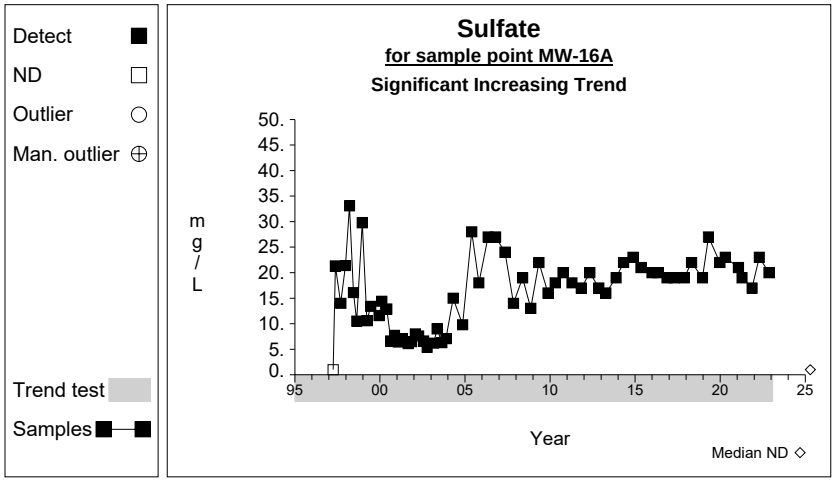
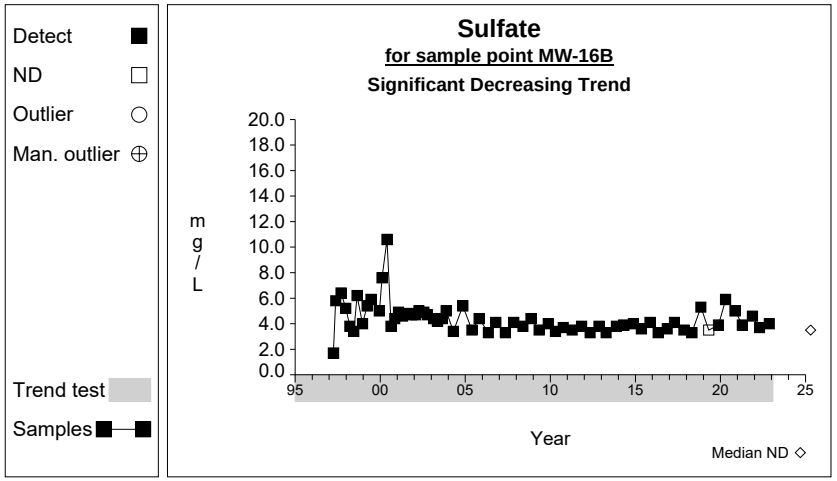


Graph 146

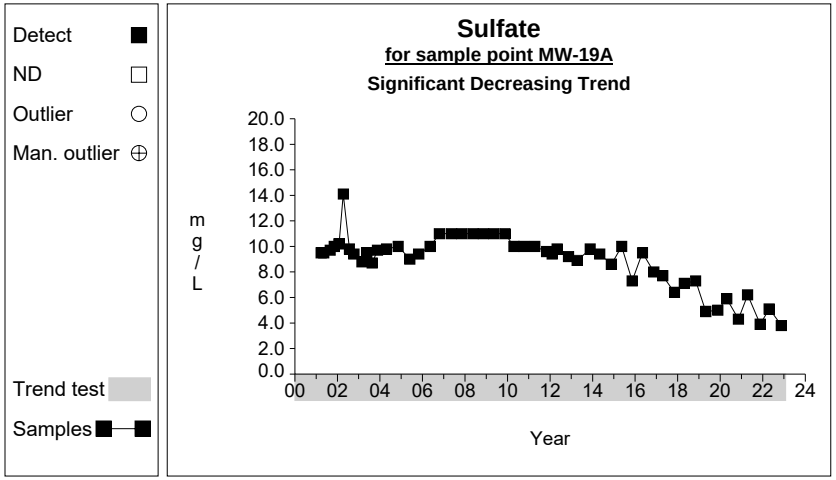


Graph 147

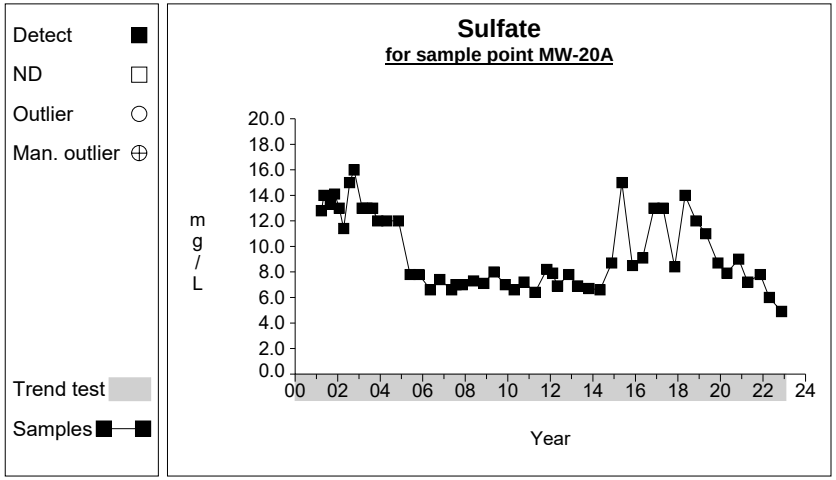


Graph 148

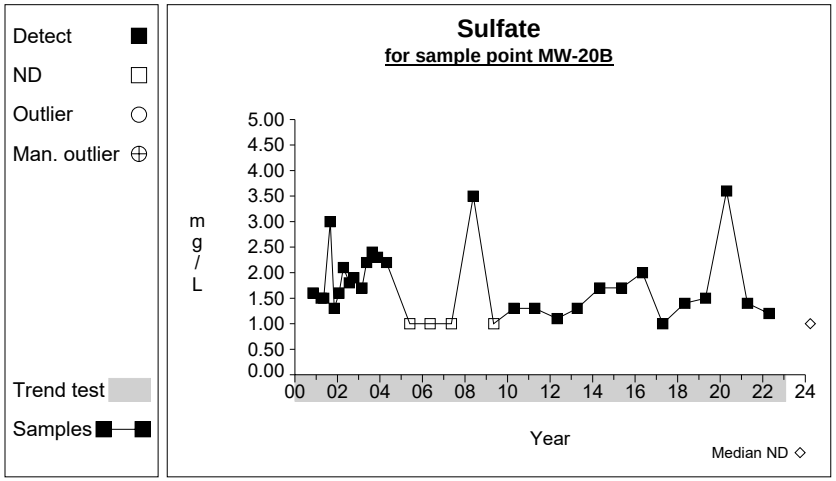
Time Series



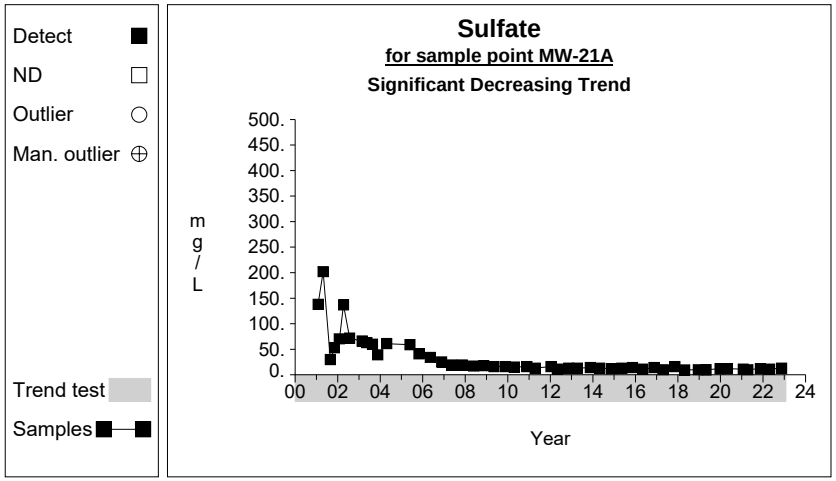
Graph 149



Graph 150

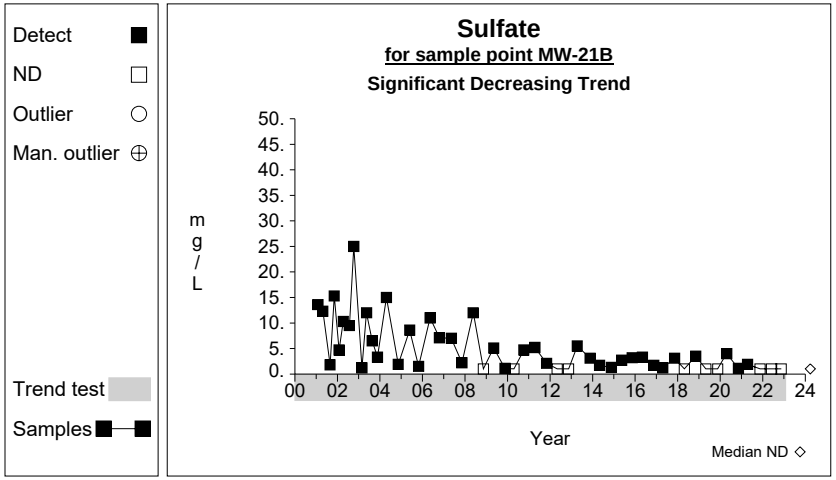


Graph 151

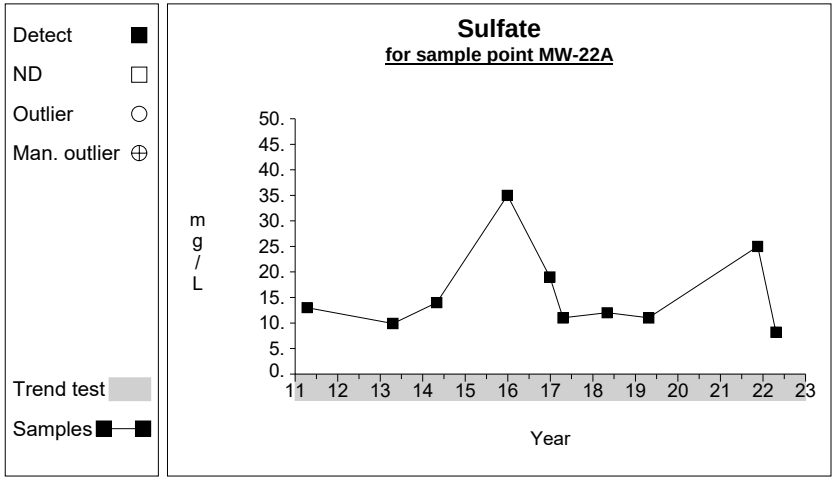


Graph 152

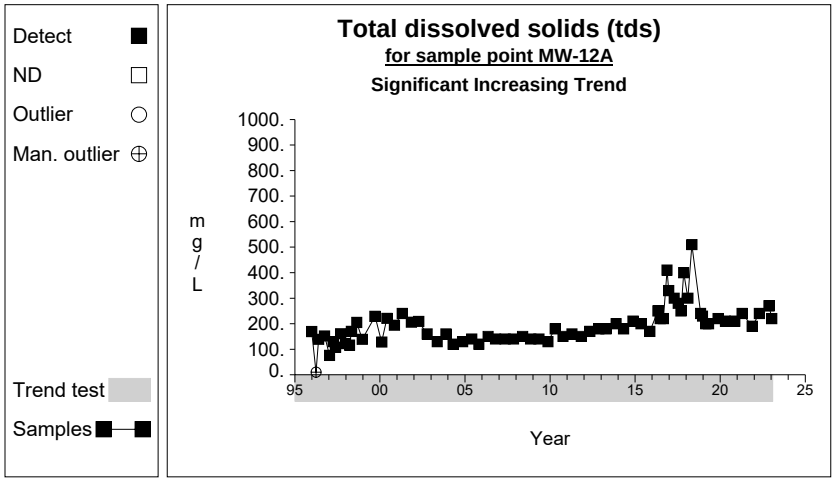
Time Series



Graph 153



Graph 154



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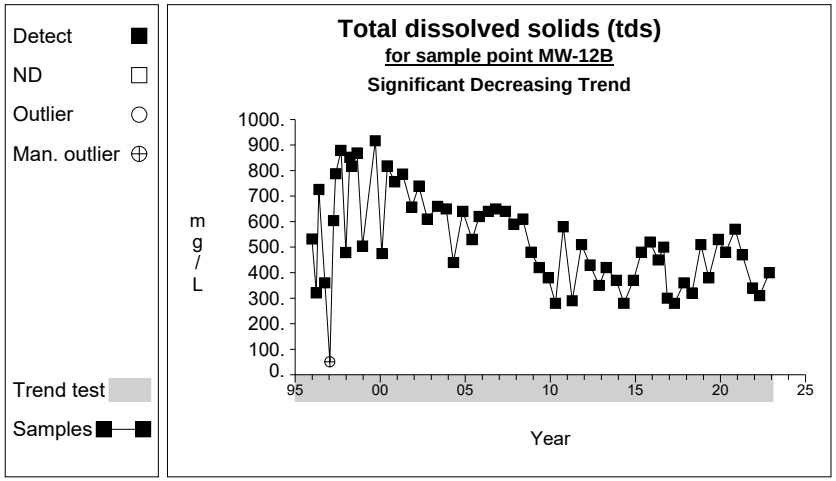
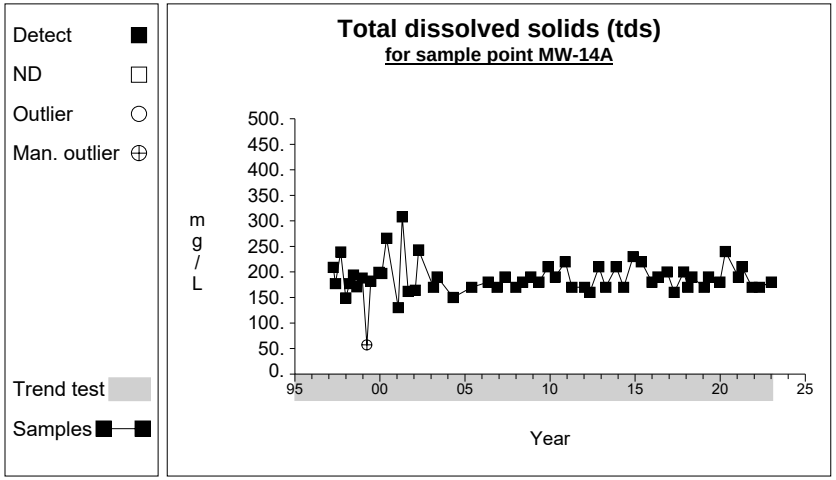
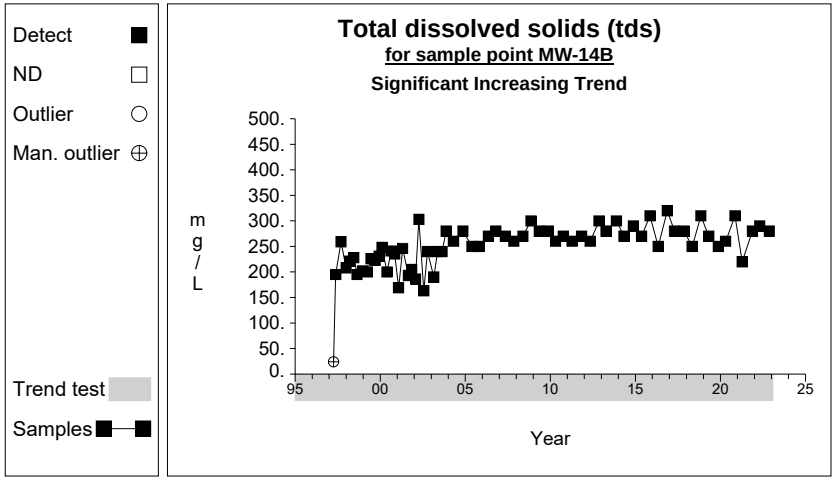


Graph 156

Time Series



Graph 157



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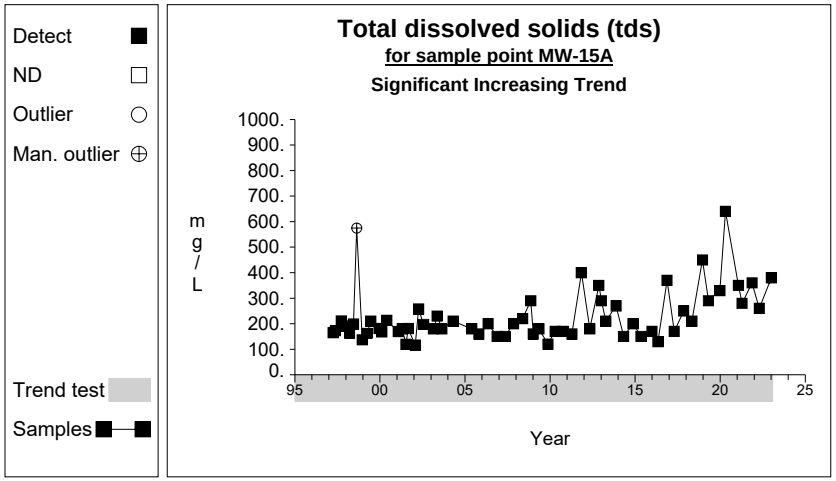

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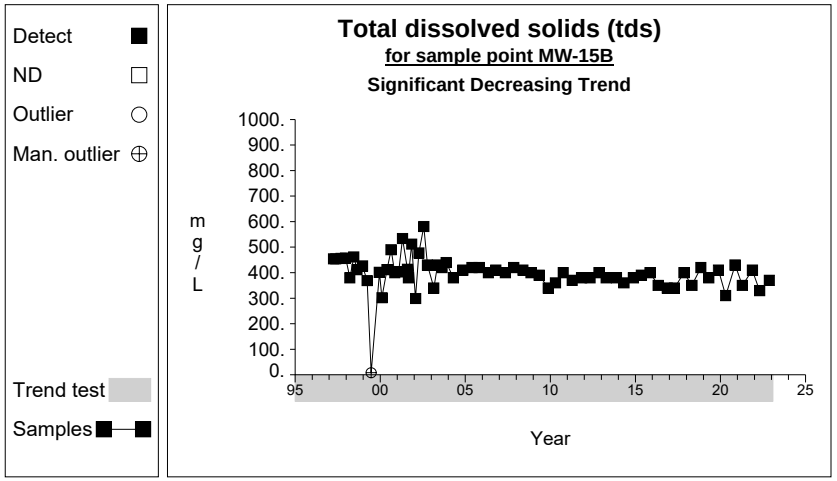
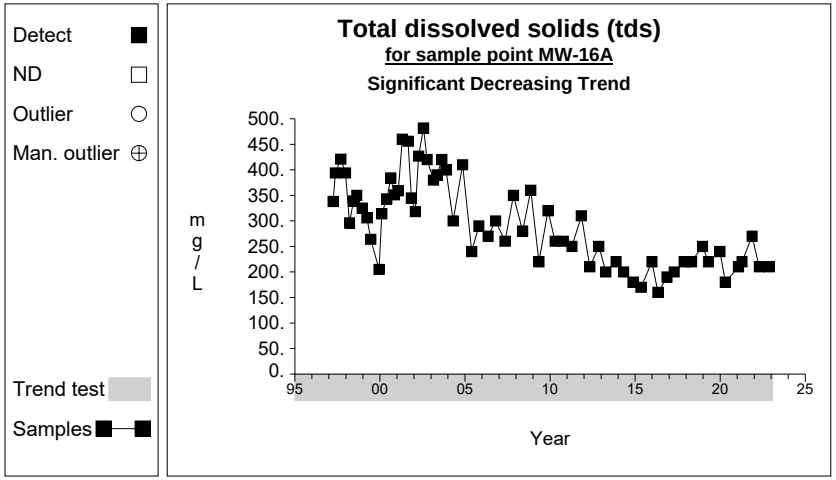


Graph 160

Time Series



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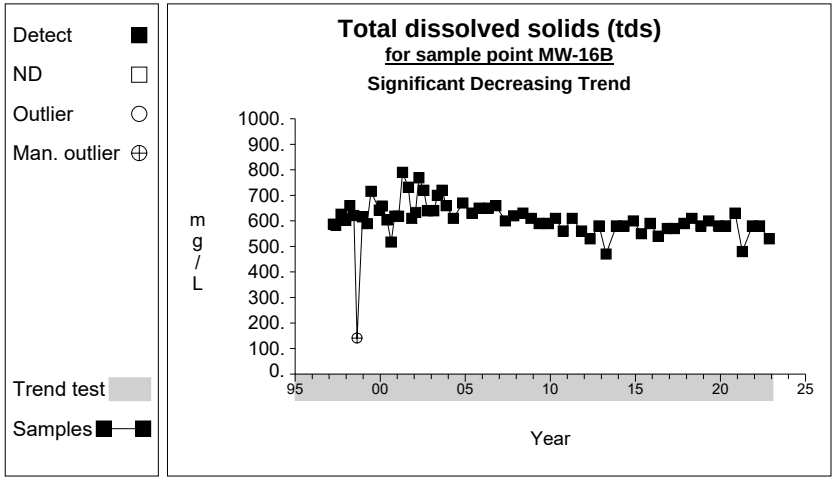

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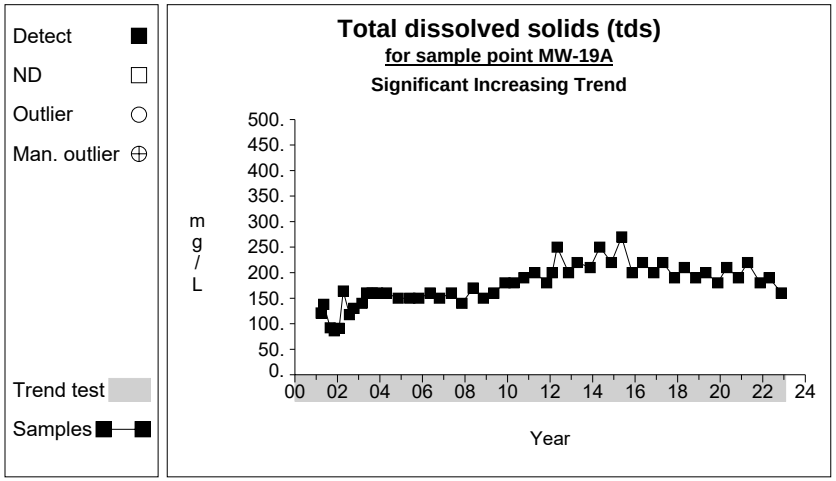

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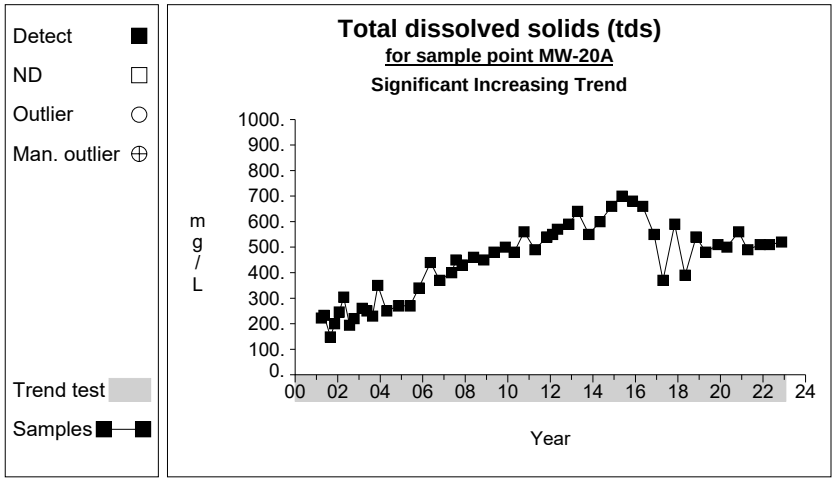
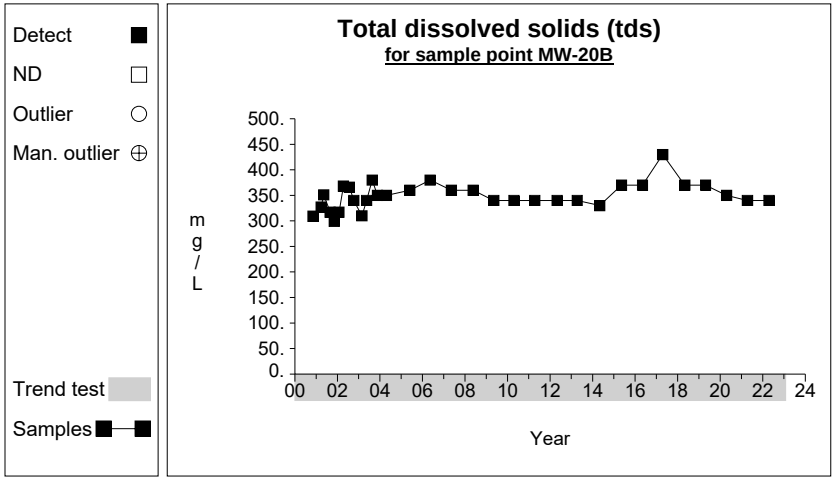


Graph 164

Time Series



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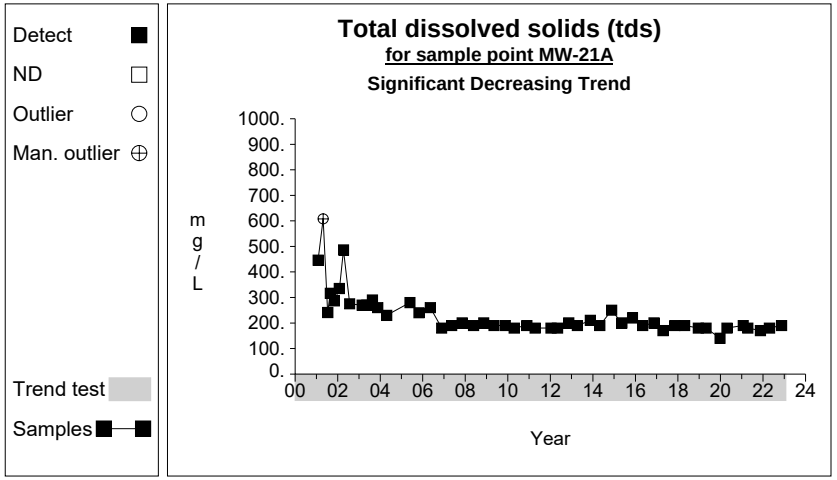
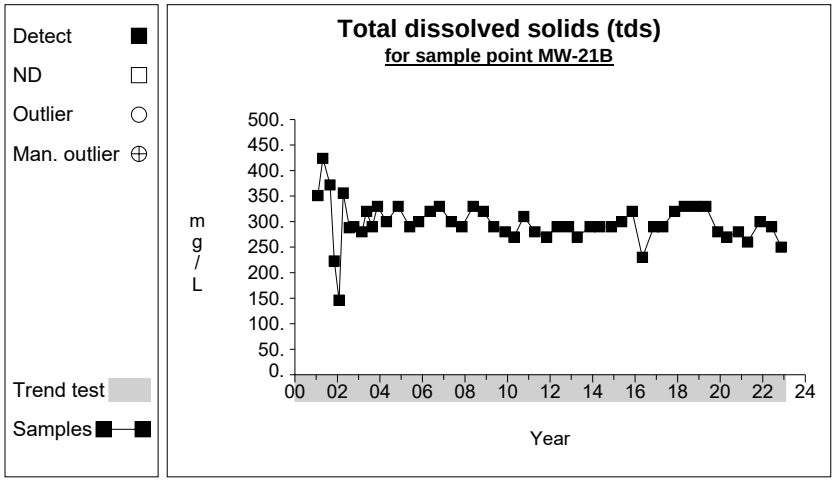


Graph 166



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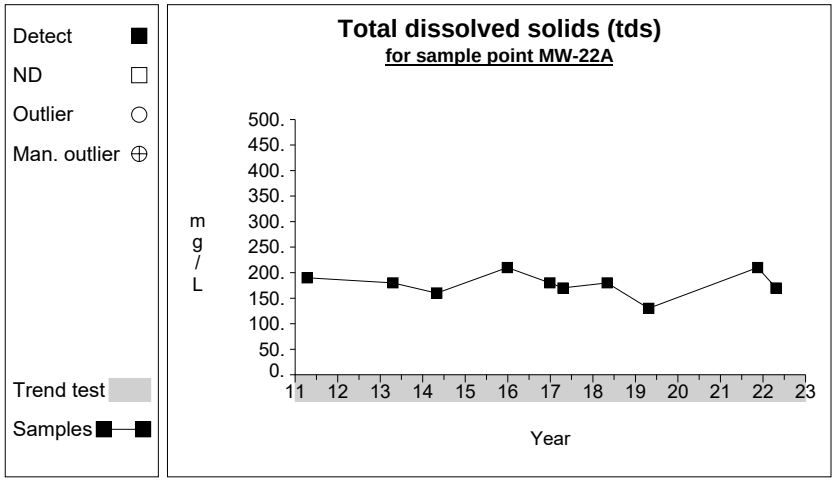
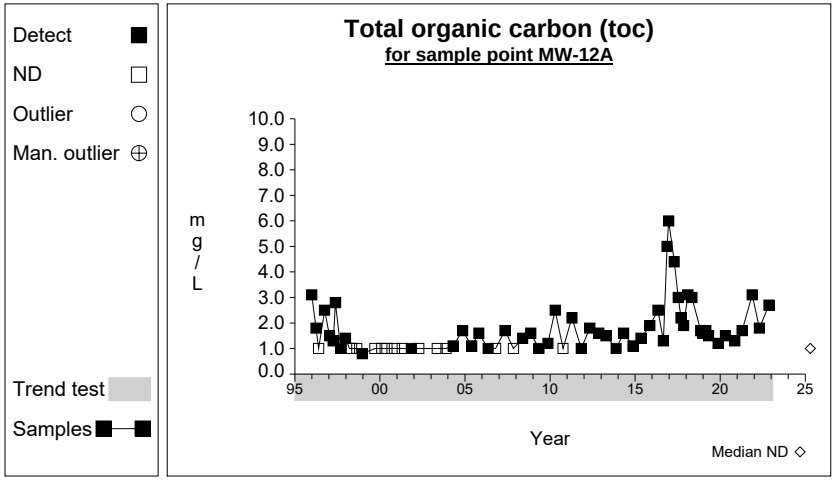


Graph 168

Time Series



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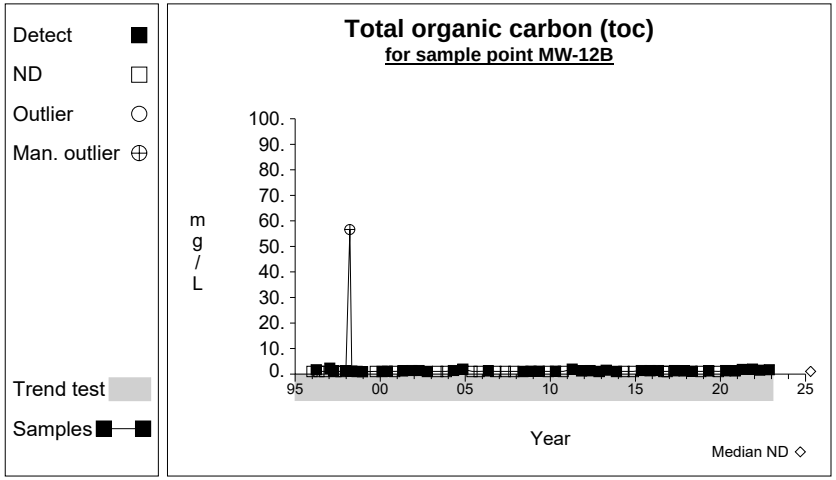

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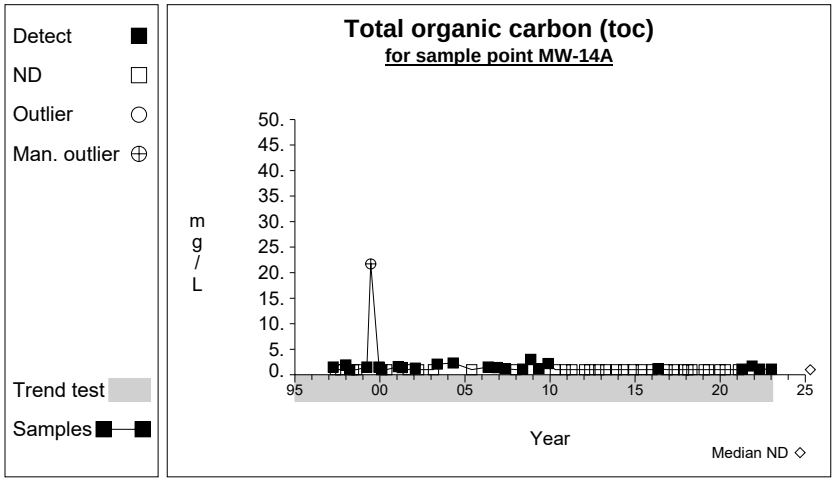

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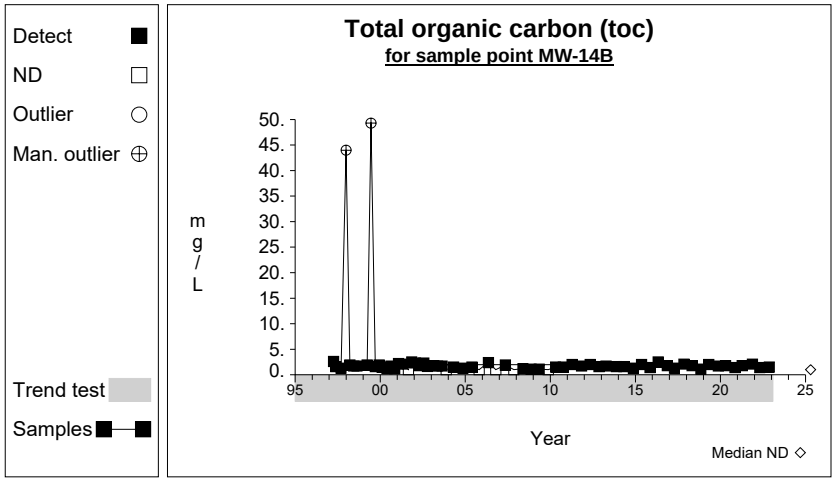
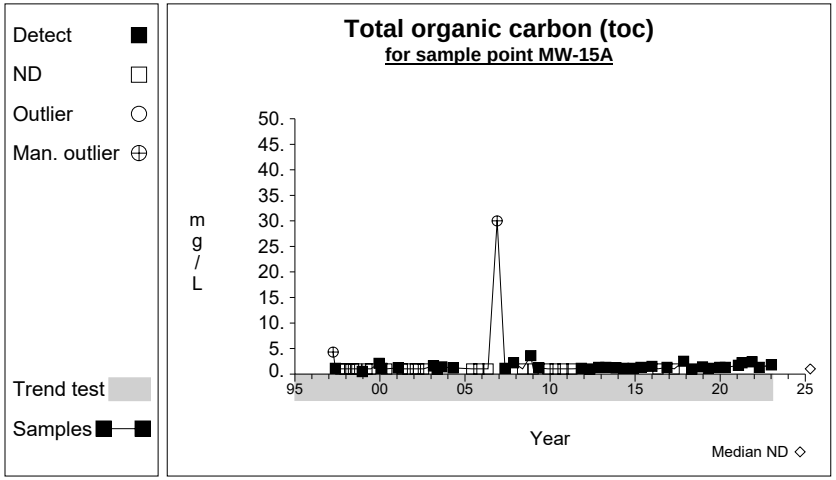


Graph 172

Time Series



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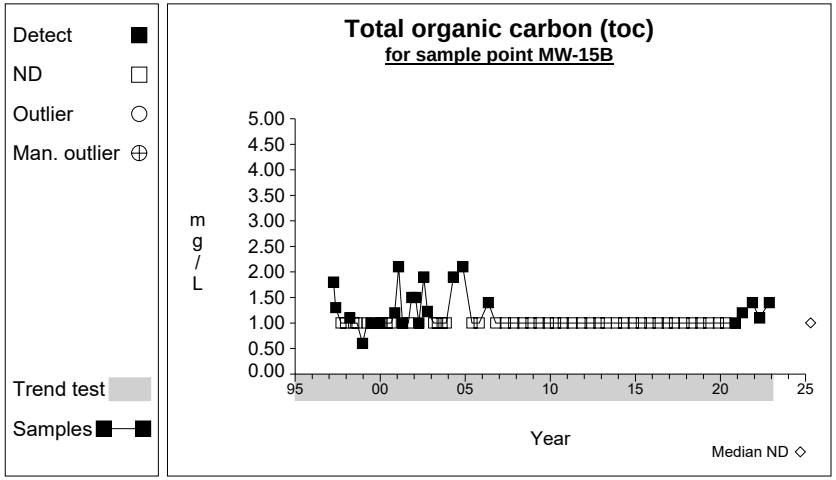

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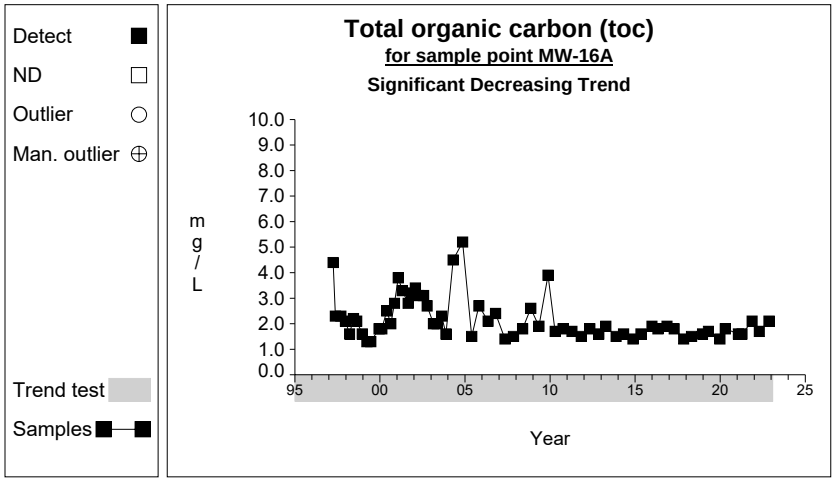

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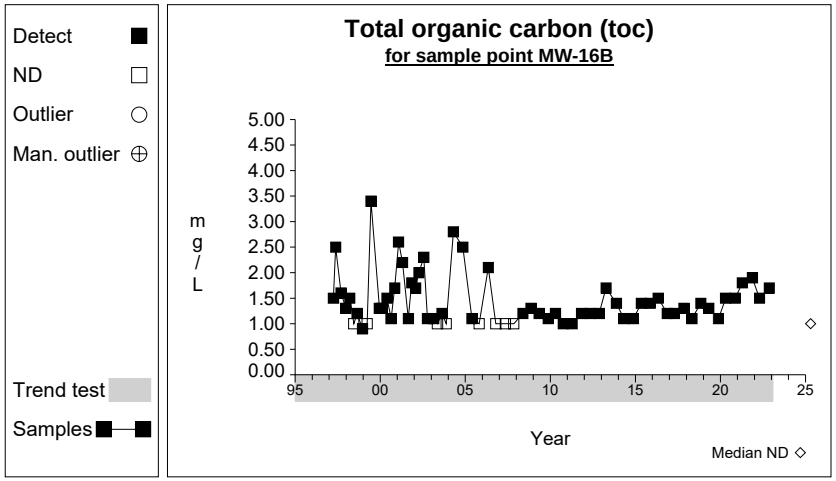
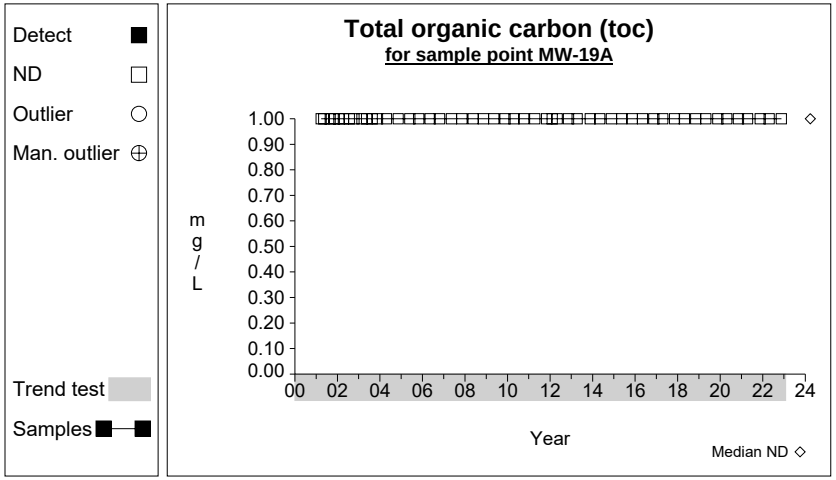


Graph 176

Time Series



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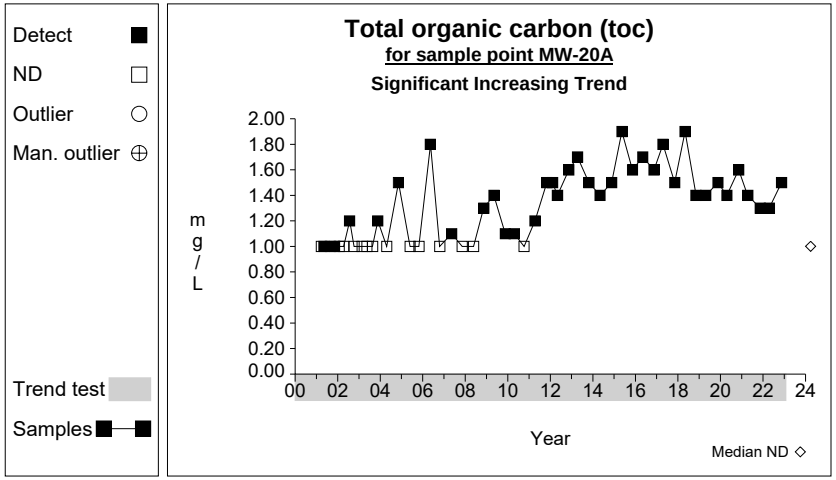
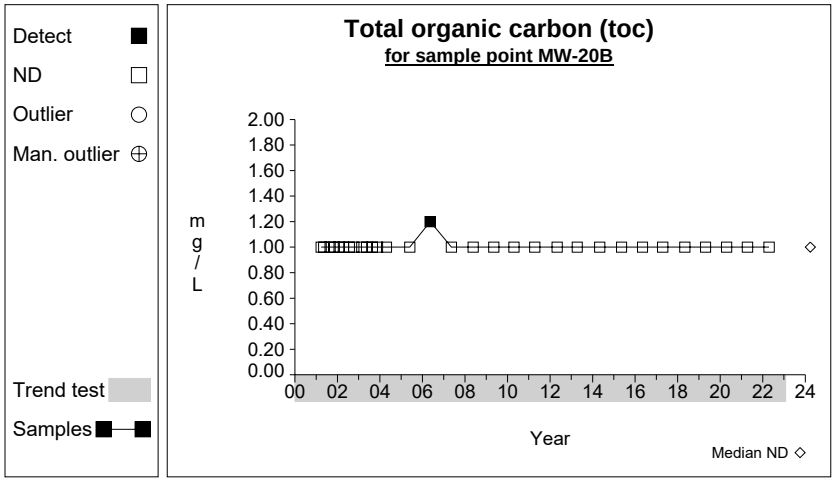
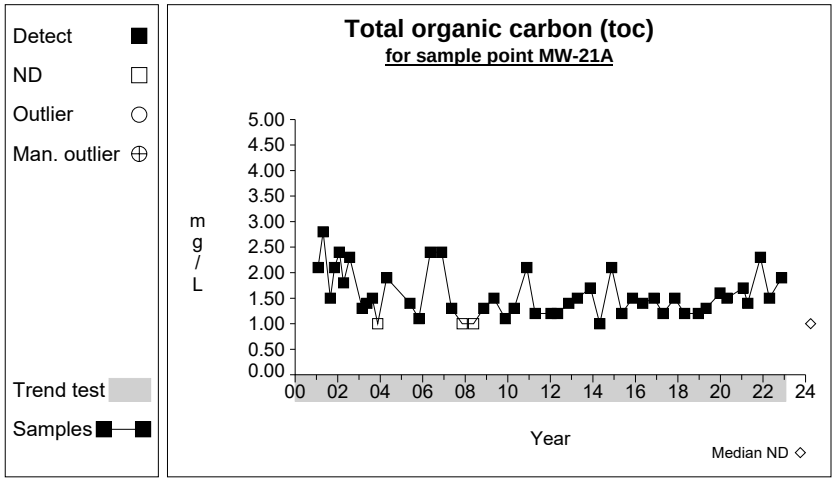


Graph 178

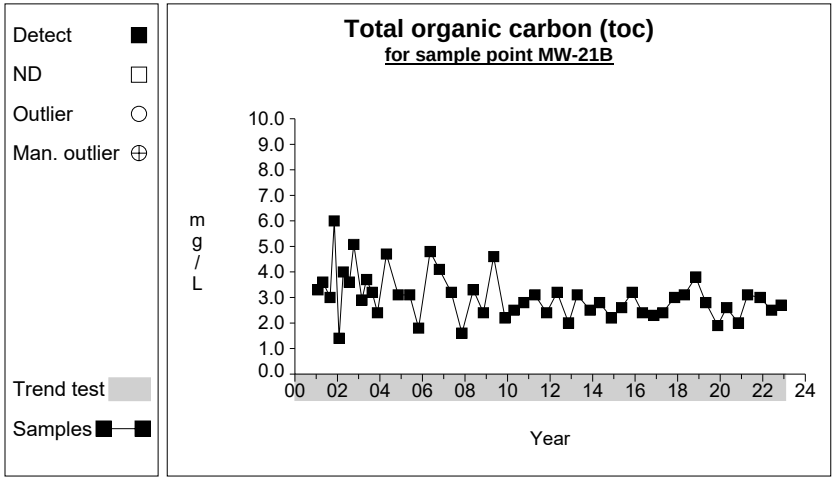


Graph 179

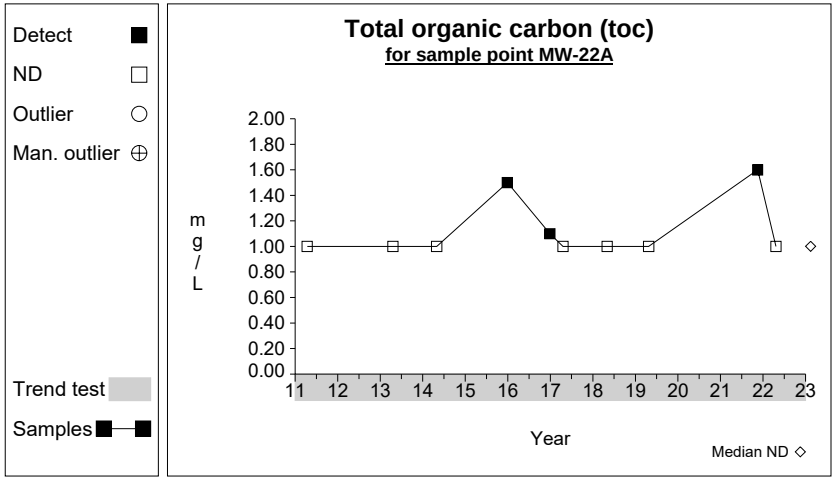


Graph 180

Time Series



Graph 181



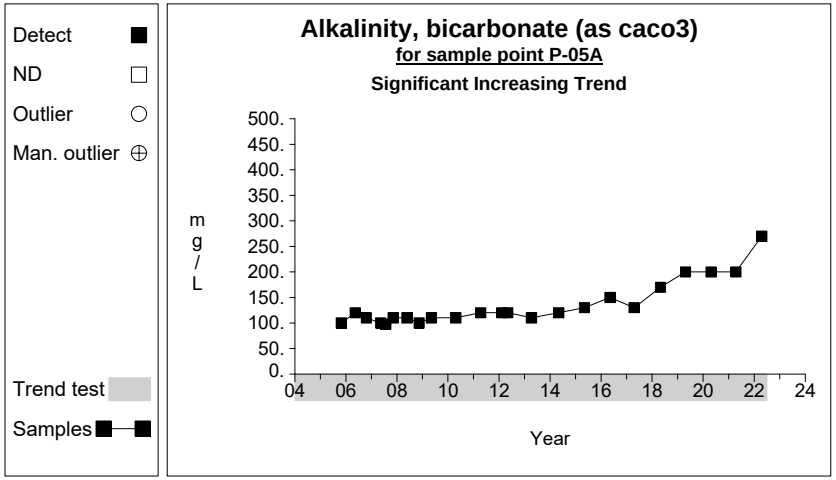
Graph 182

Poplar Tree Farm Area Supplemental Piezometers

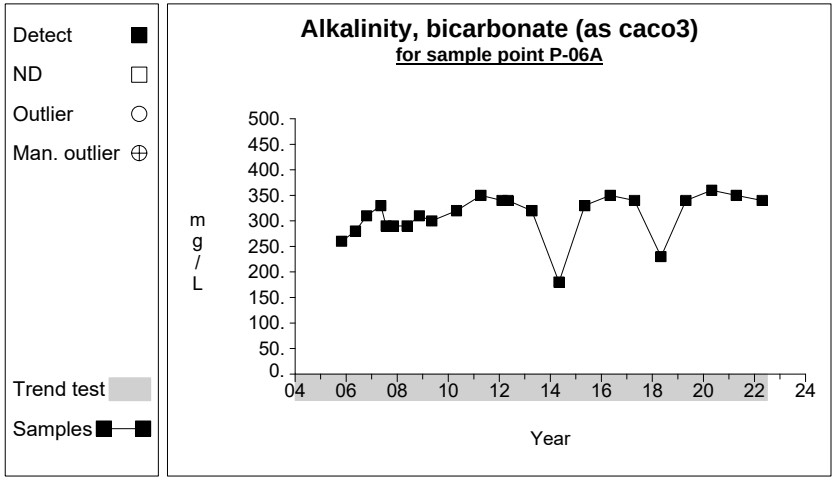
Shallow (Silt-Clay) Water-Bearing Zone

Time-Concentration Graphs

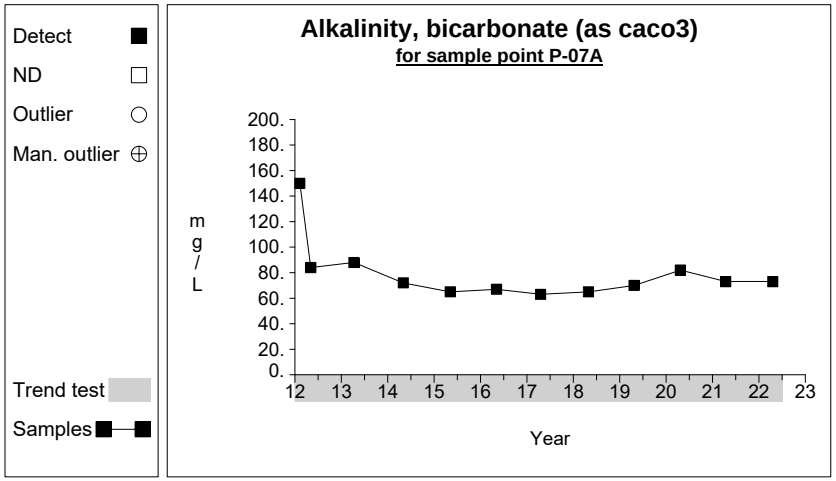
Time Series



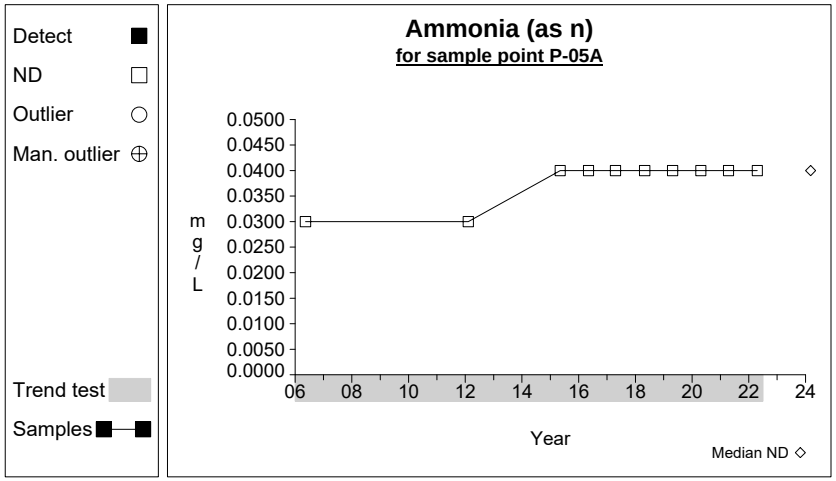
Graph 1



Graph 2

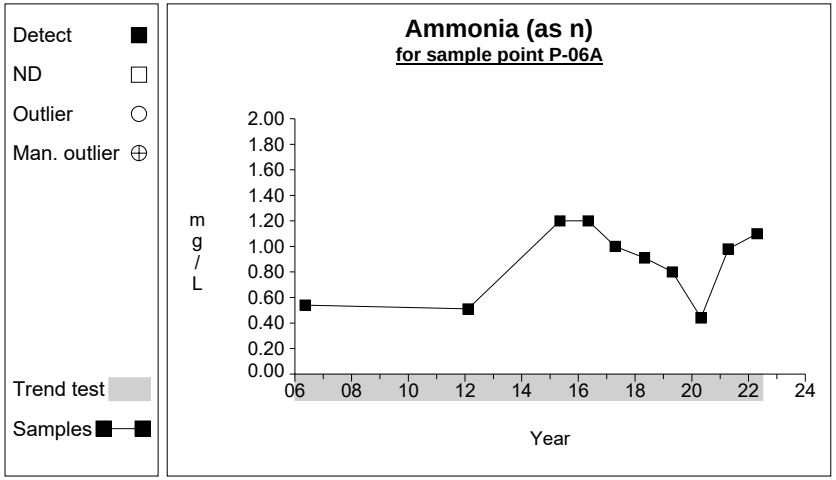


Graph 3



Graph 4

Time Series



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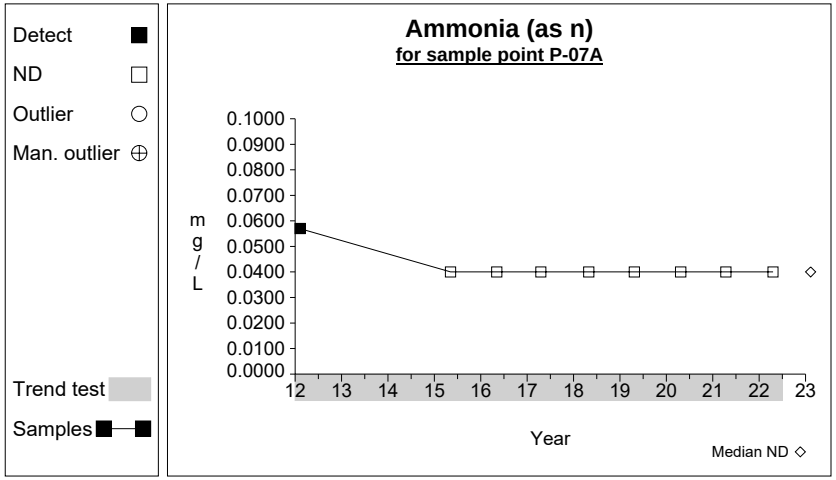
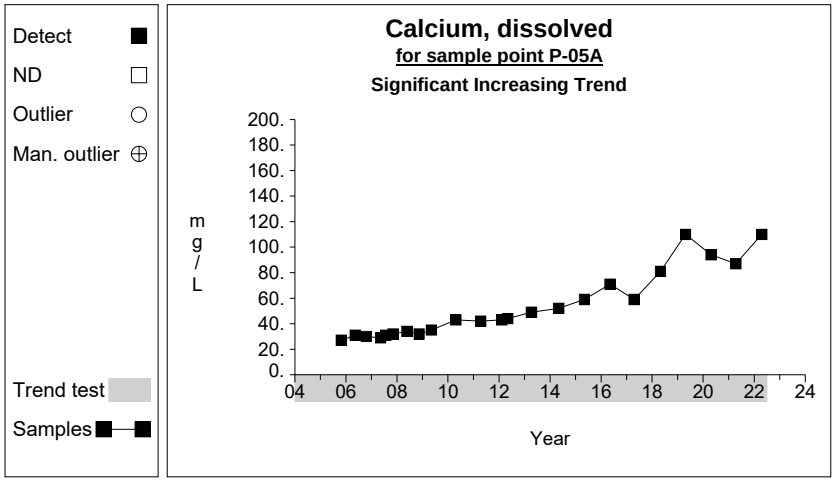
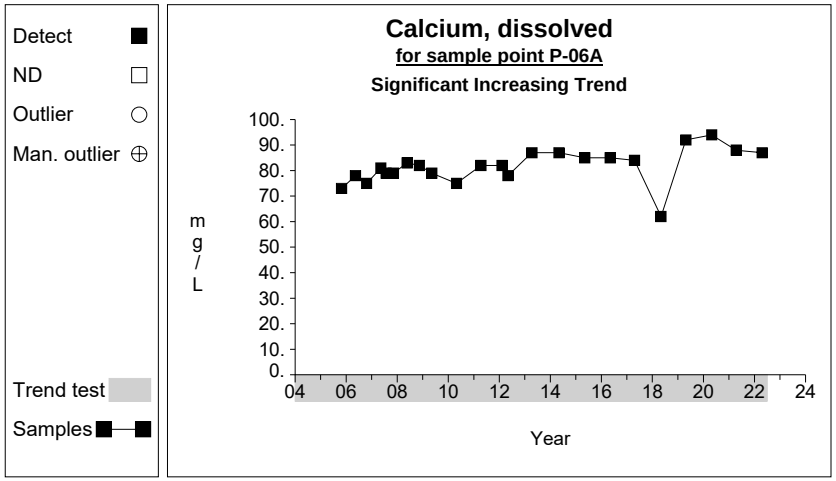


Graph 6

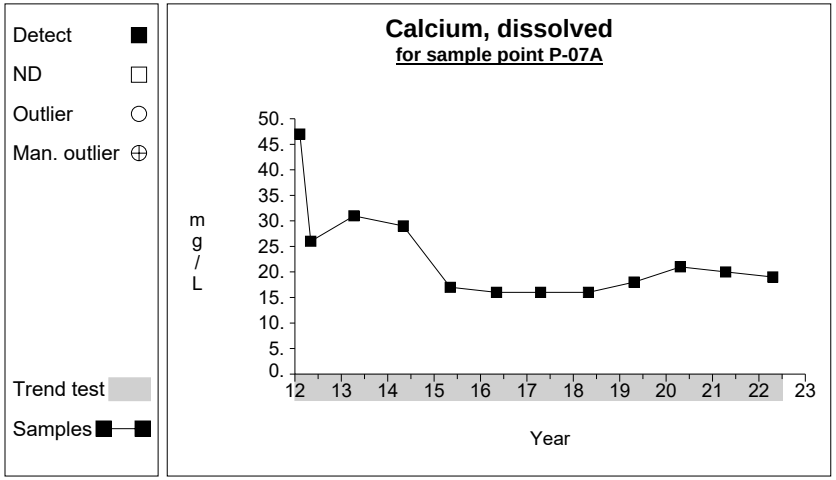


Graph 7



Graph 8

Time Series



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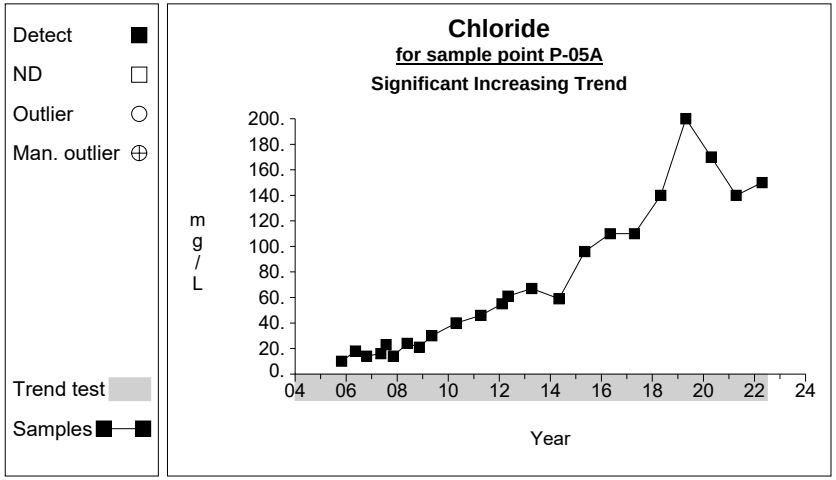
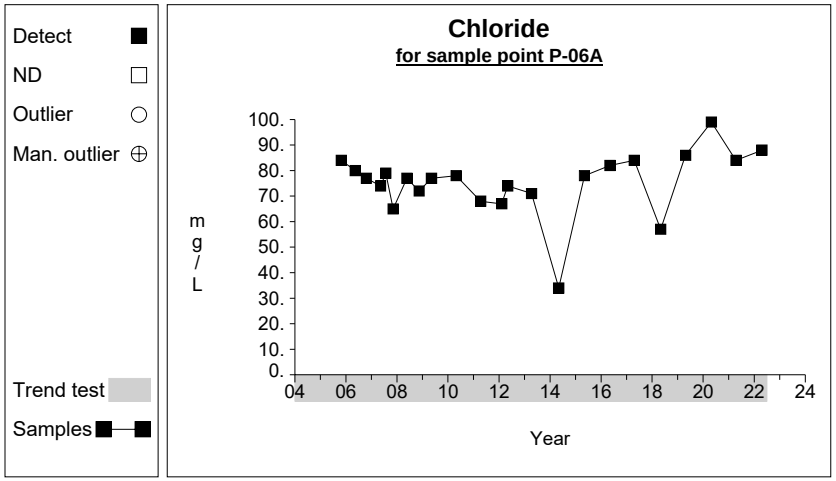
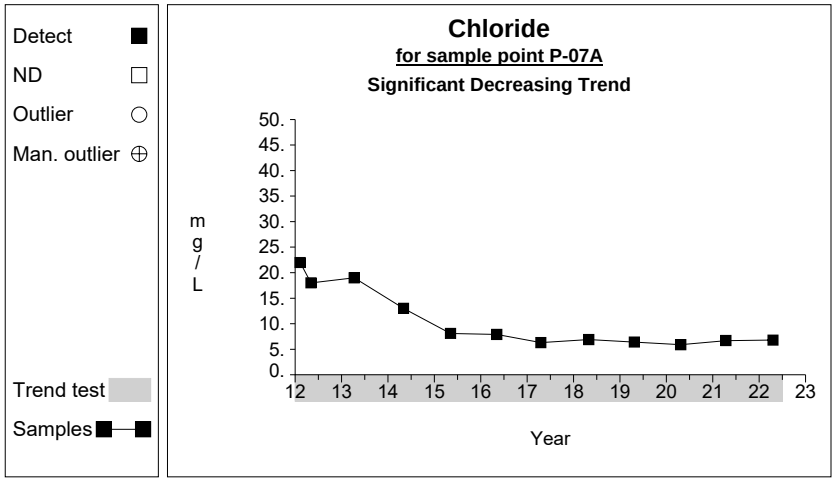


Graph 10

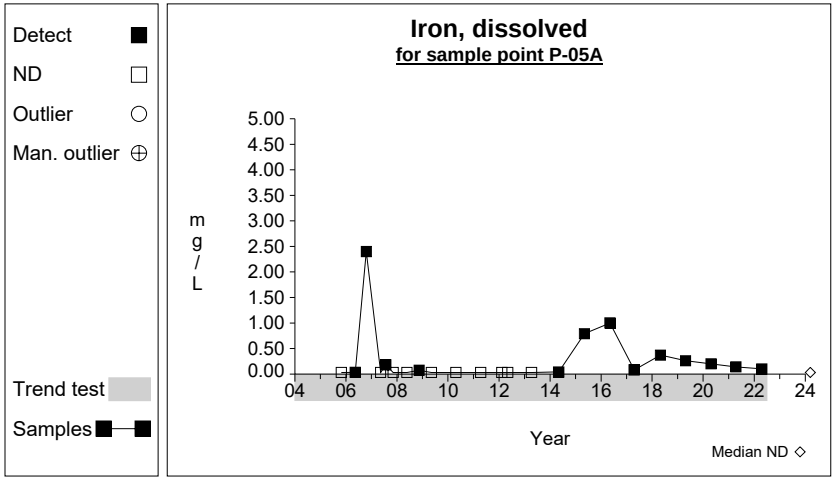


Graph 11

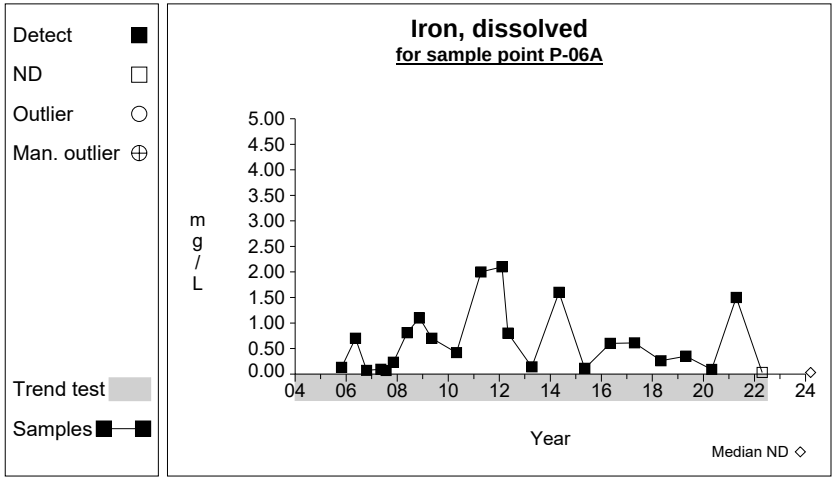


Graph 12

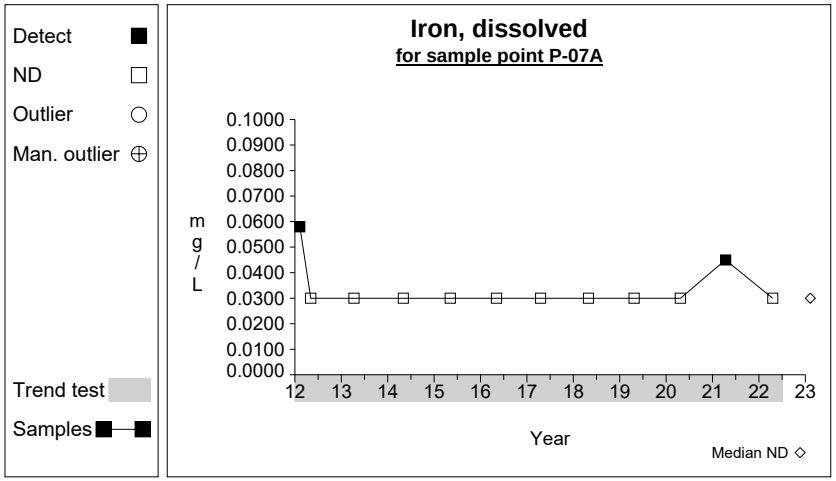
Time Series



Graph 13



Graph 14



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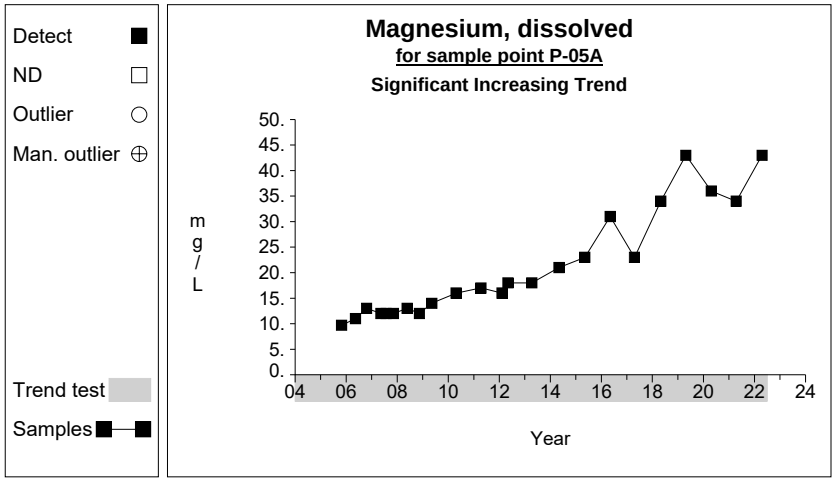
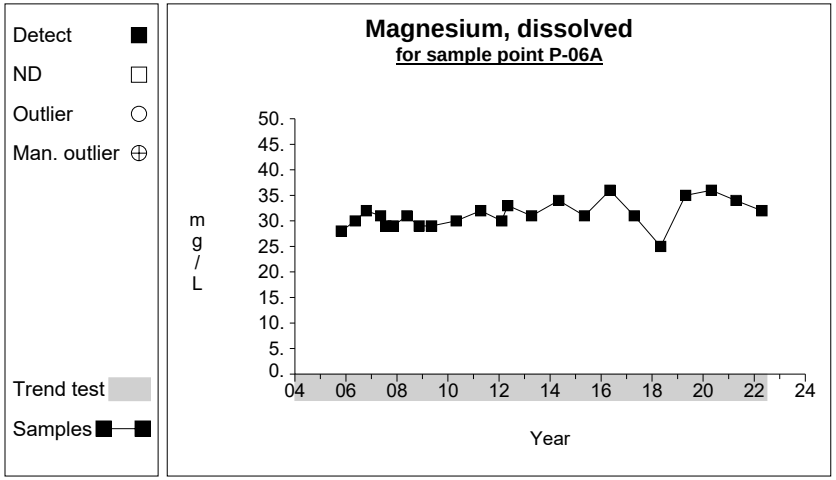
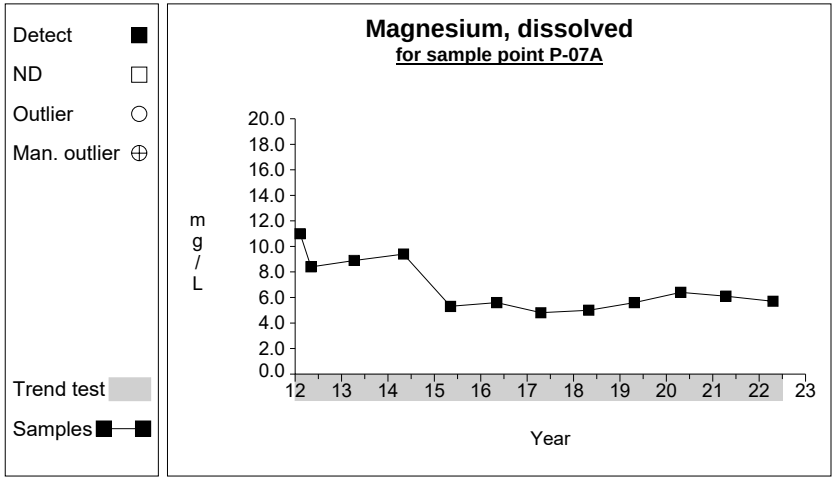


Graph 16

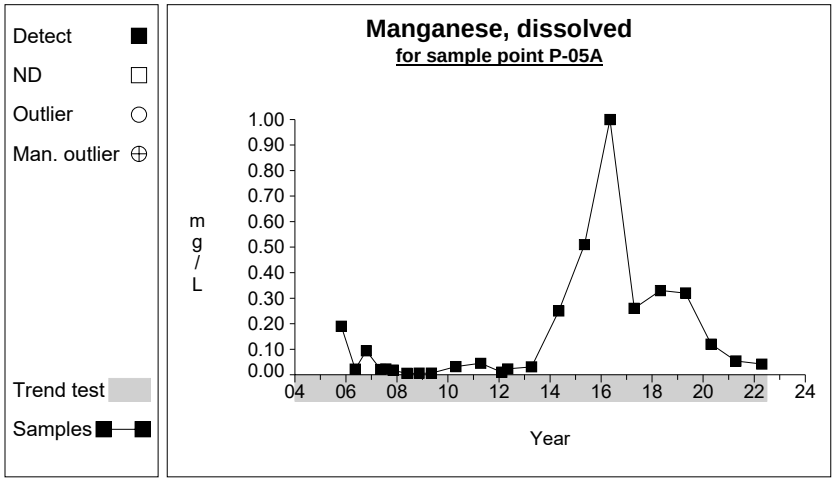
Time Series



Graph 17



Graph 18



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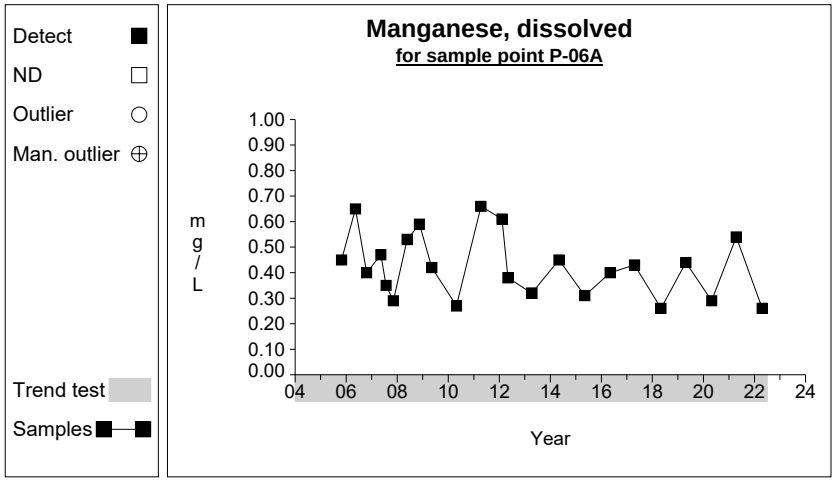
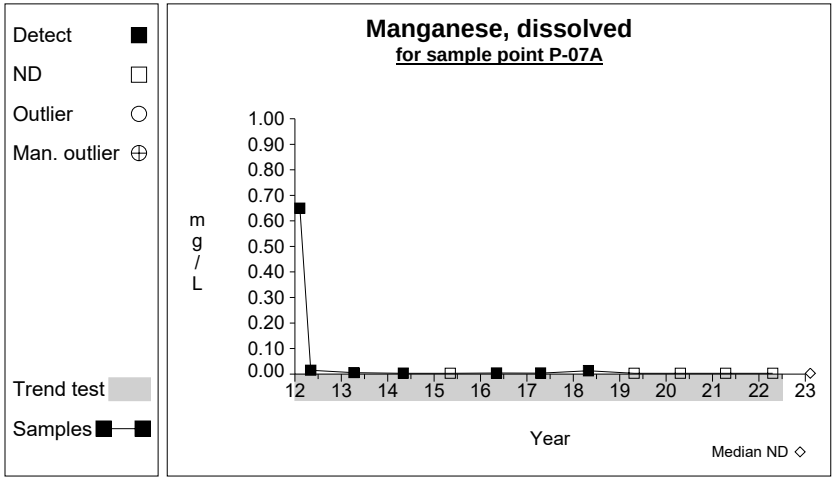


Graph 20

Time Series



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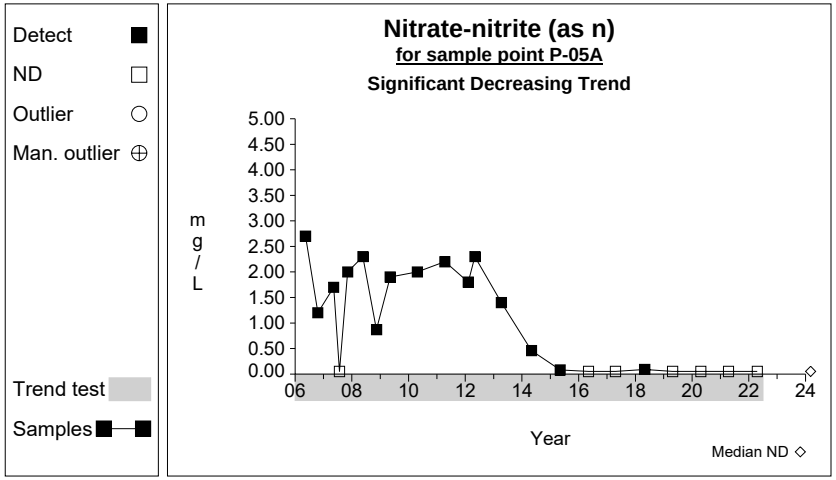

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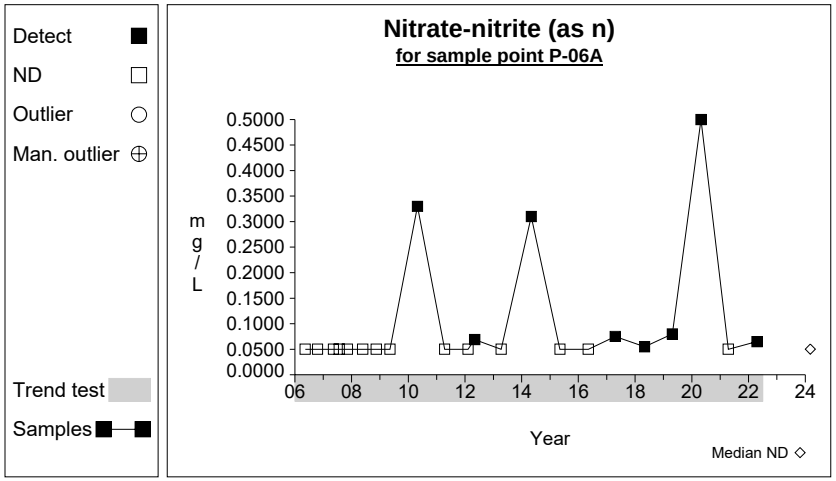

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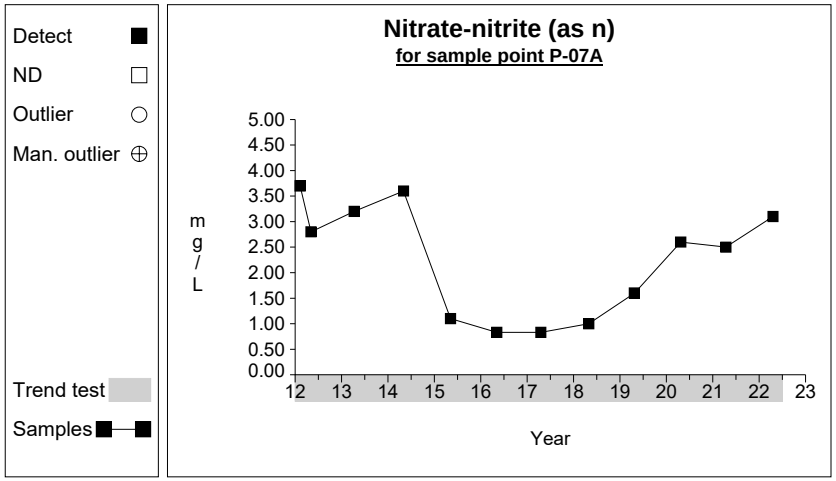
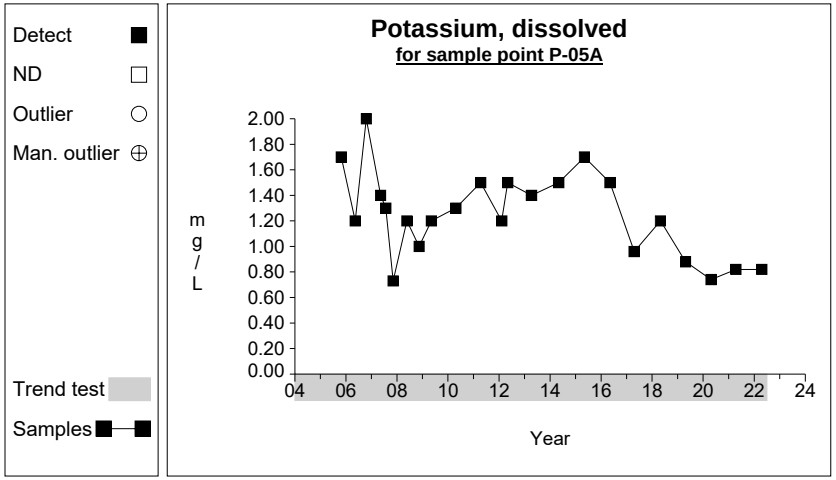


Graph 24

Time Series



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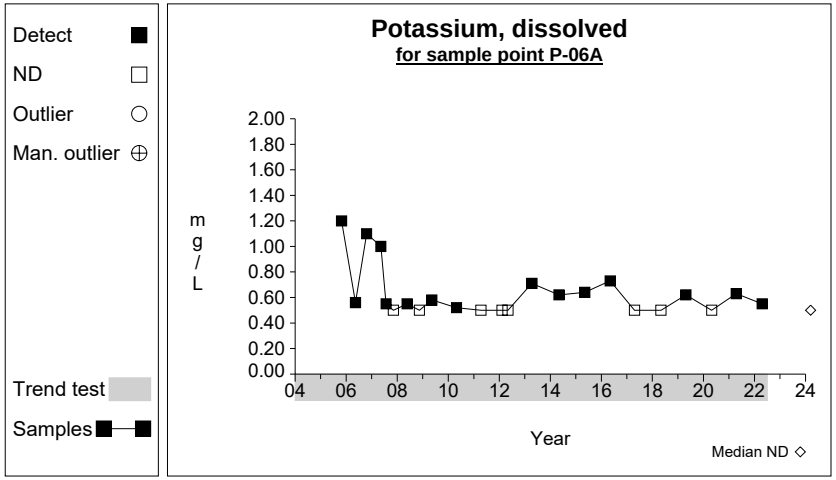

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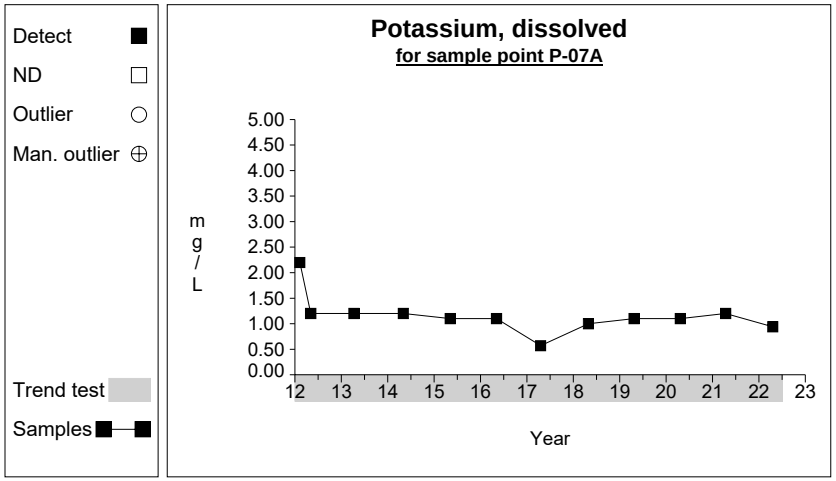

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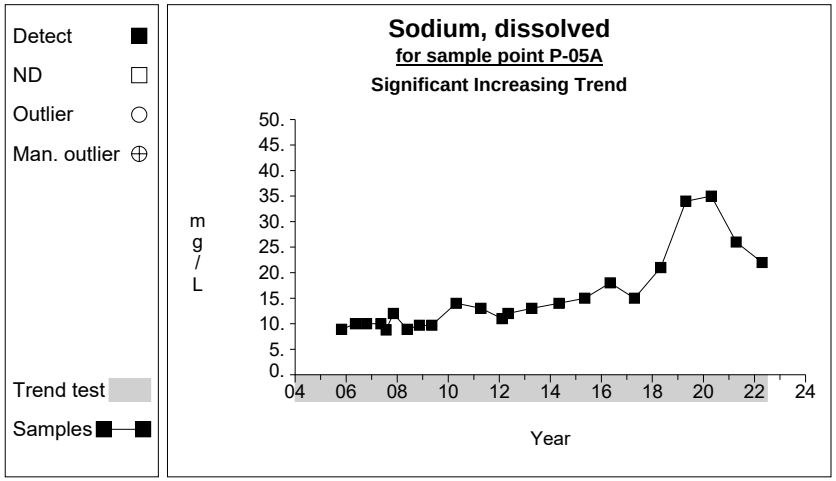
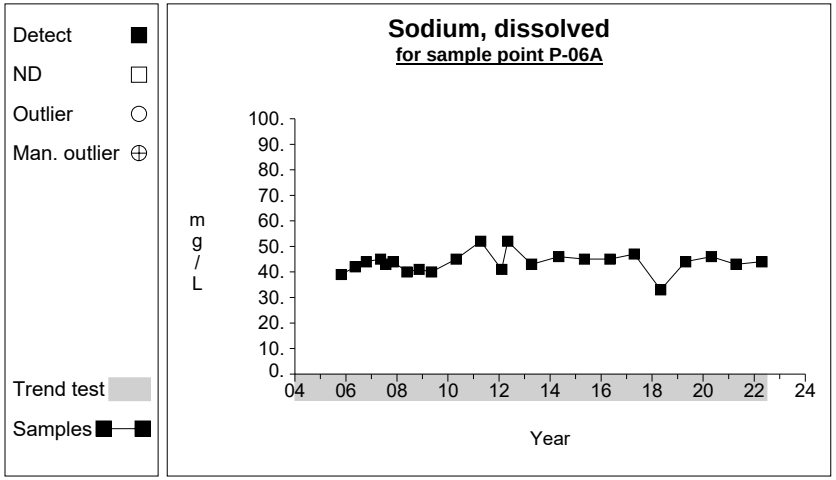


Graph 28

Time Series



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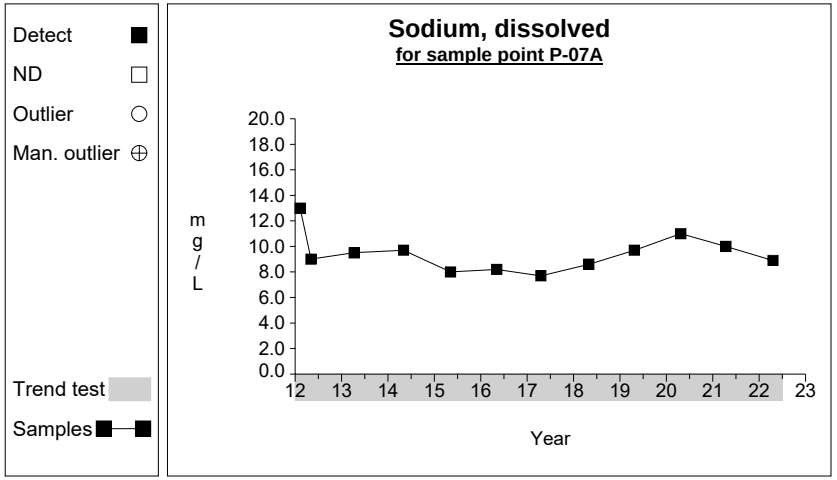
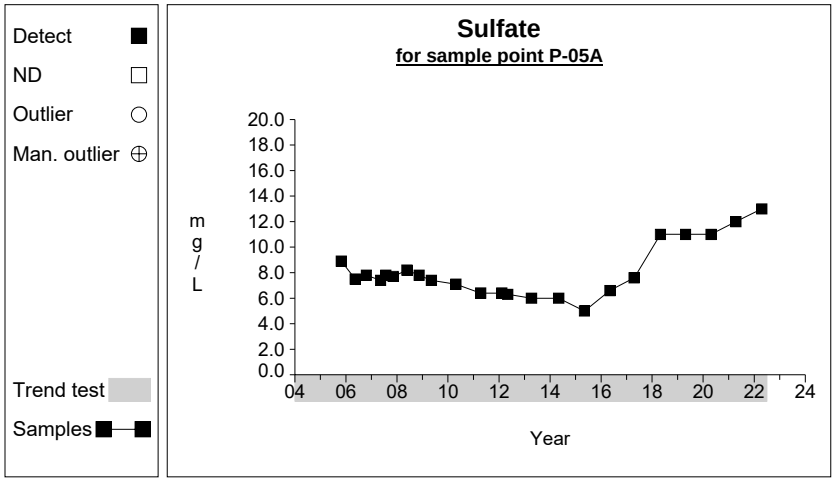


Graph 30



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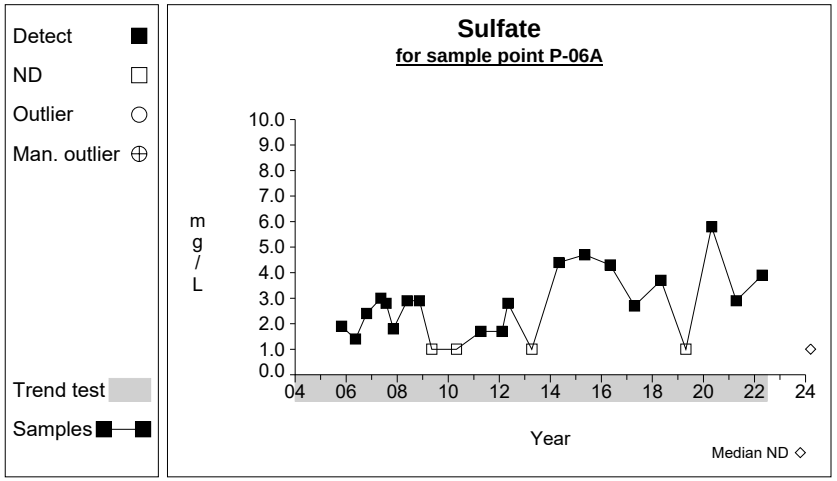
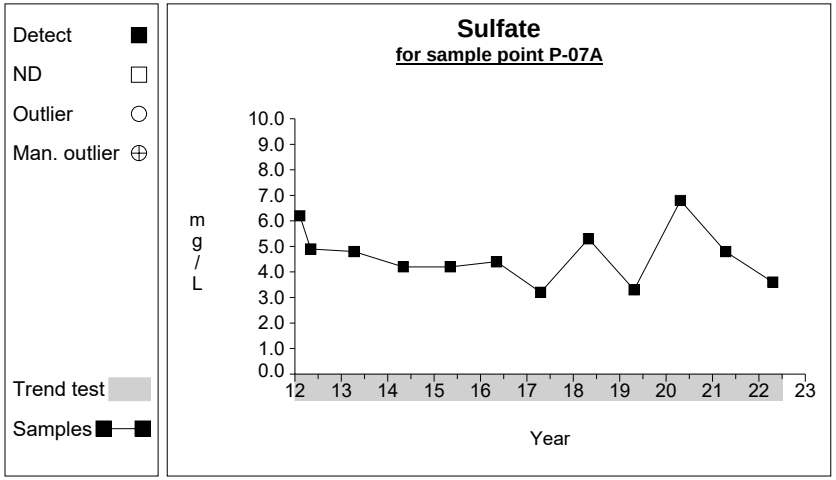


Graph 32

Time Series



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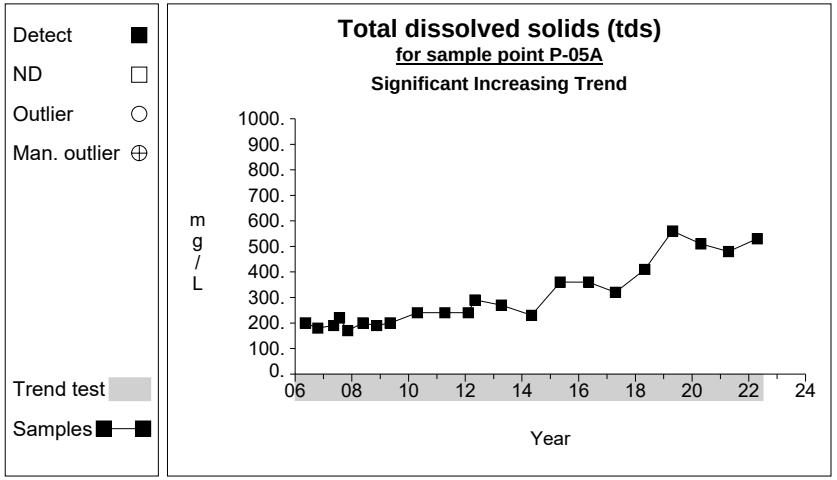

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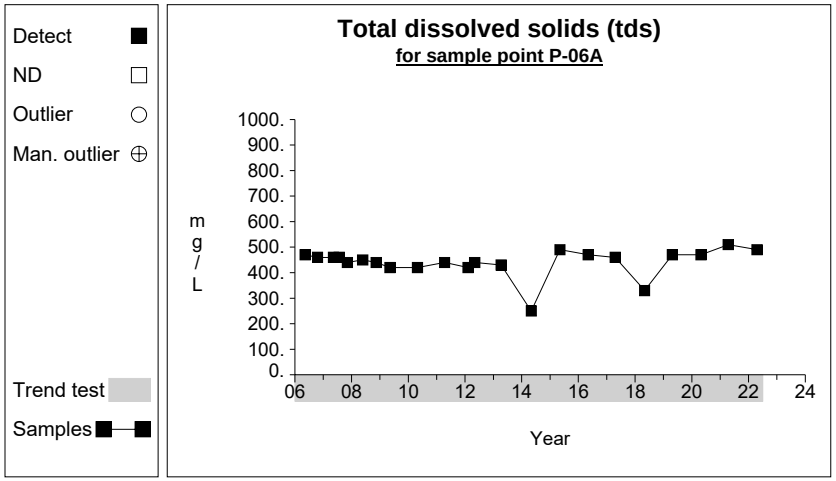

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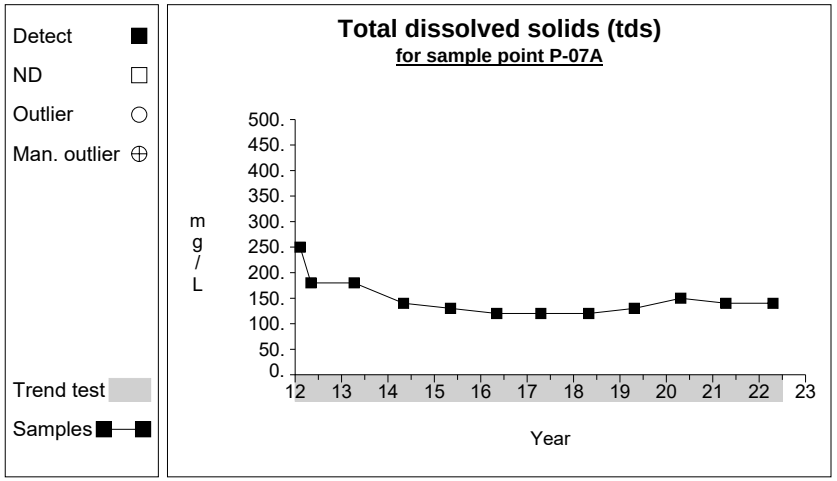
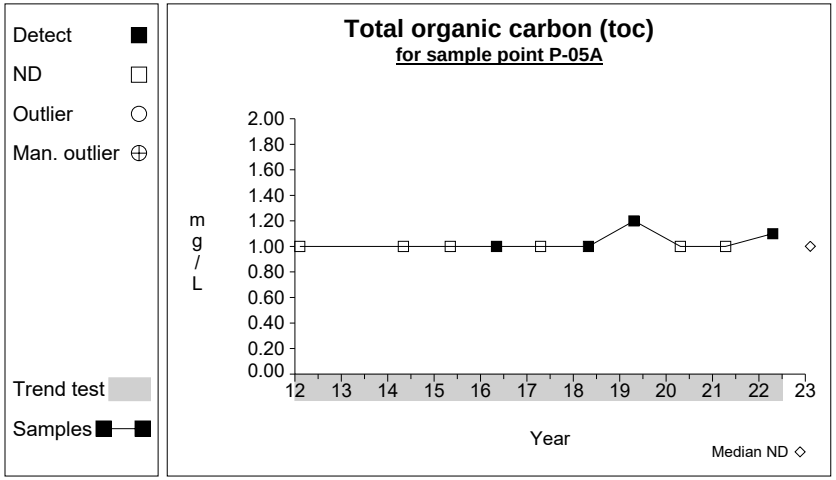


Graph 36

Time Series



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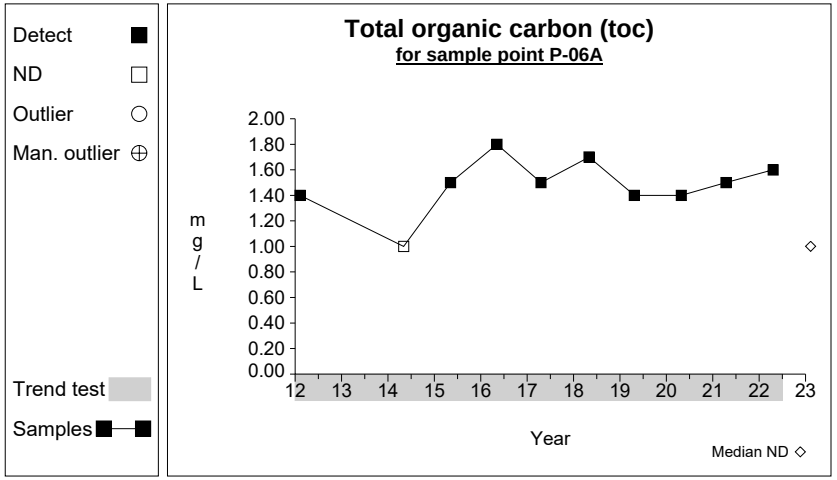

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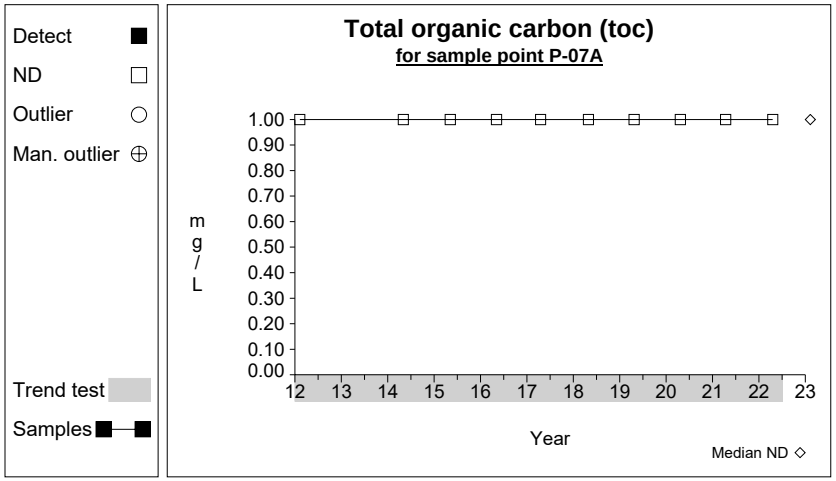
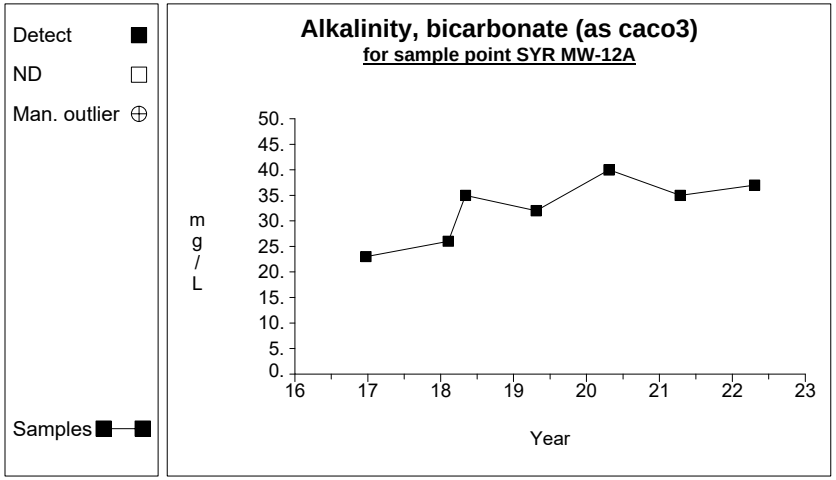


Graph 39

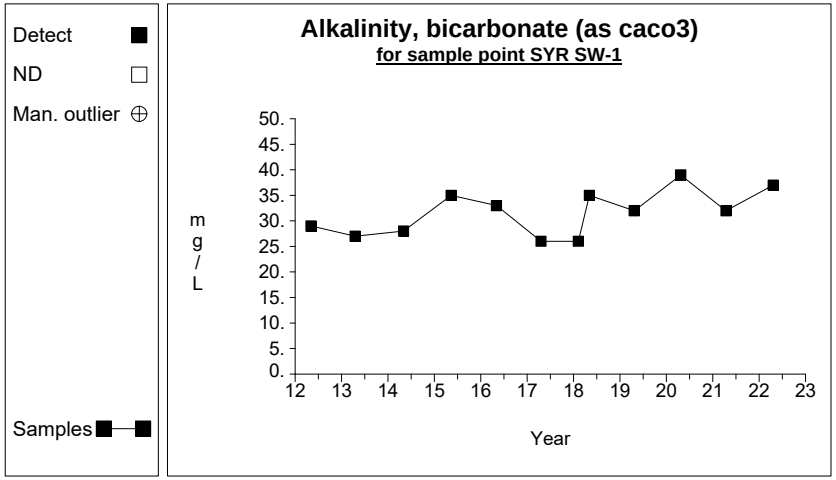
South Yamhill River Surface Water Samples

Time-Concentration Graphs

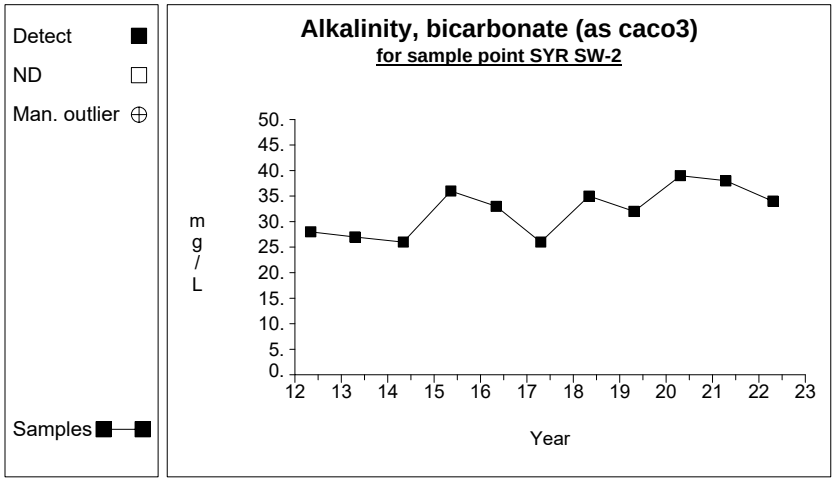
Time Series



Graph 1



Graph 2



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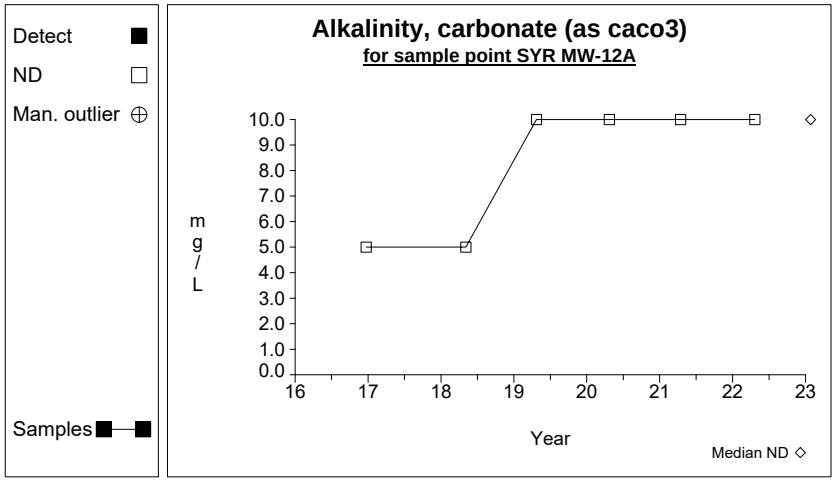
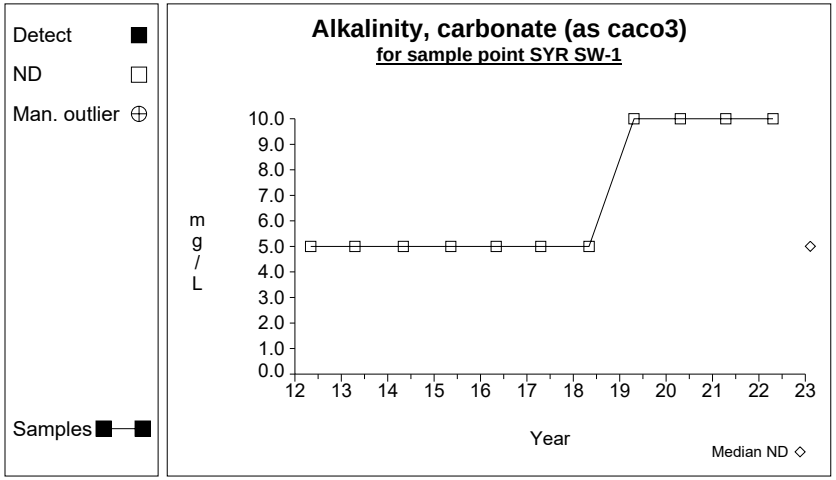


Graph 4

Time Series



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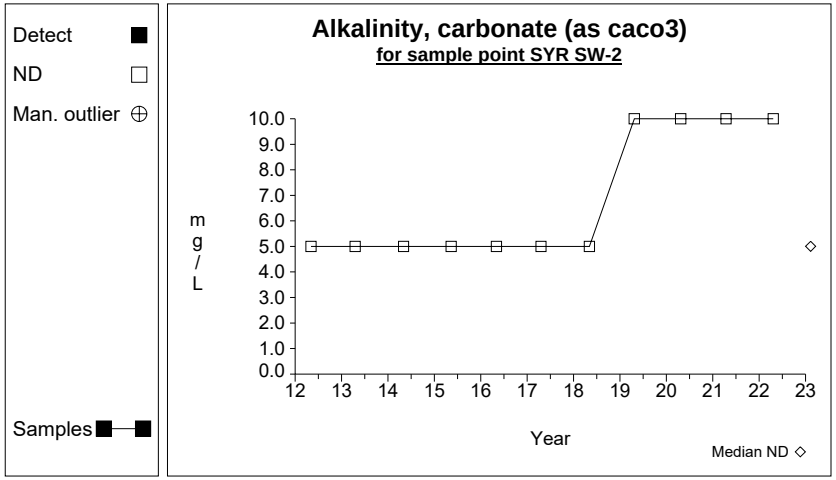
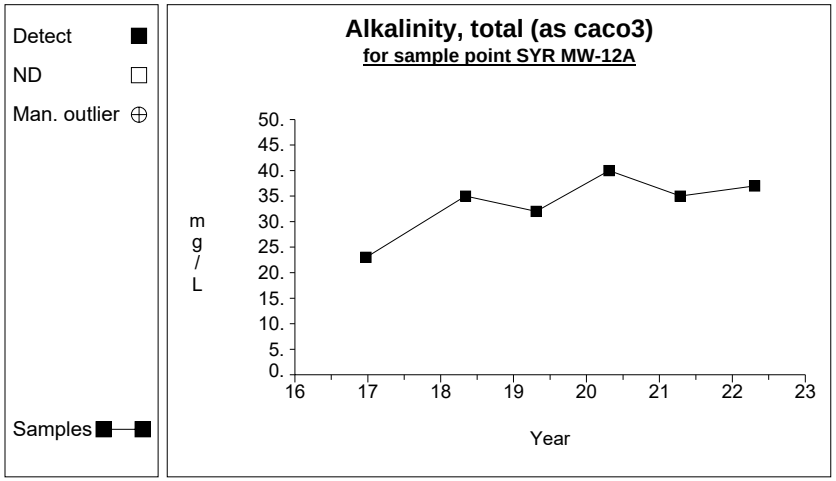
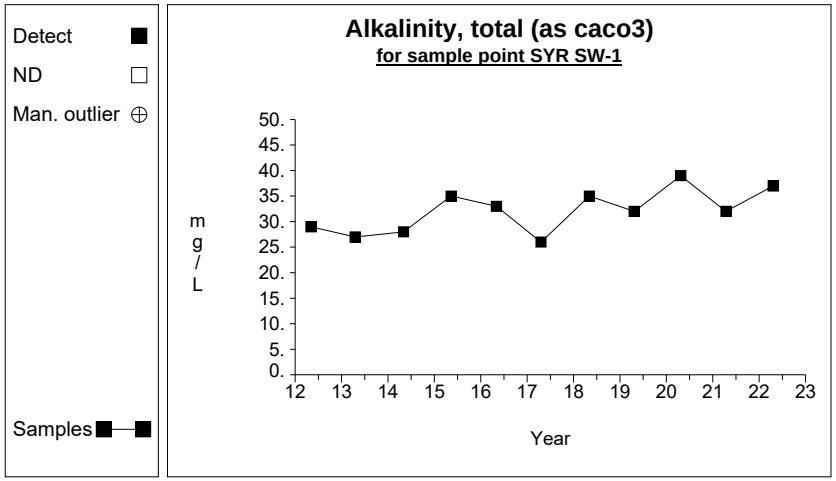


Graph 6

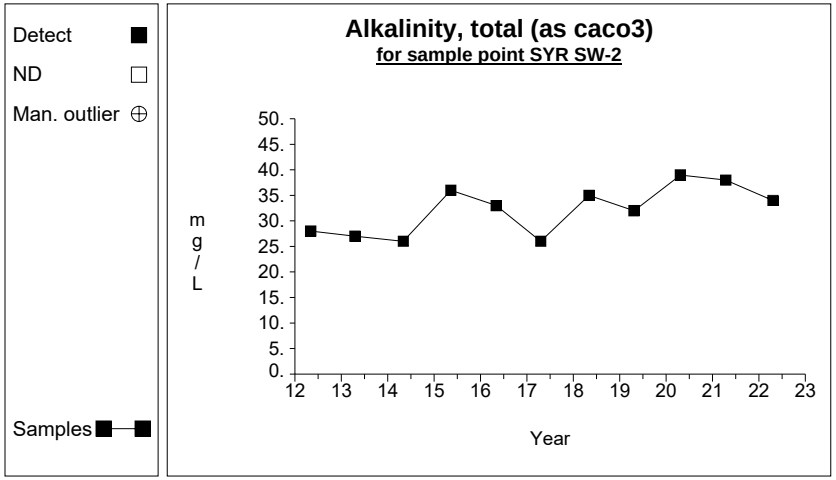


Graph 7



Graph 8

Time Series



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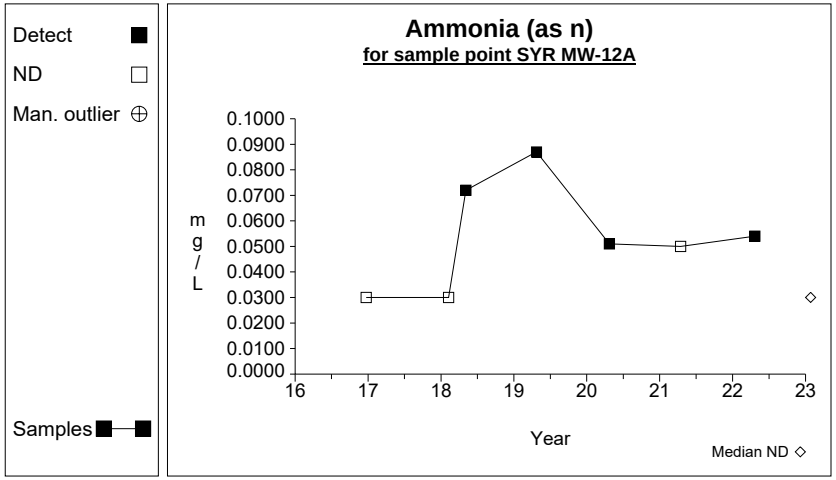

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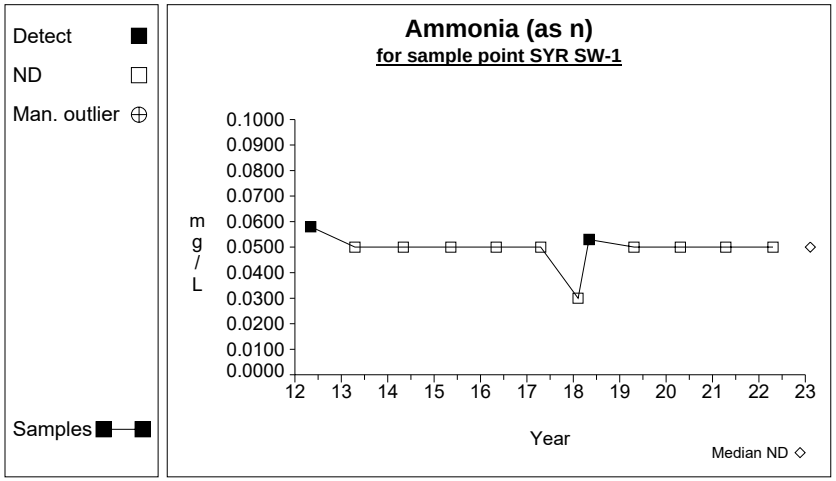
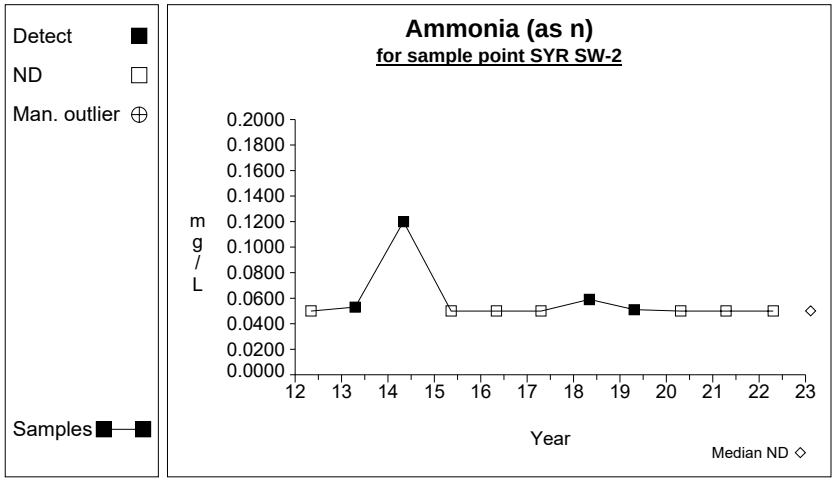
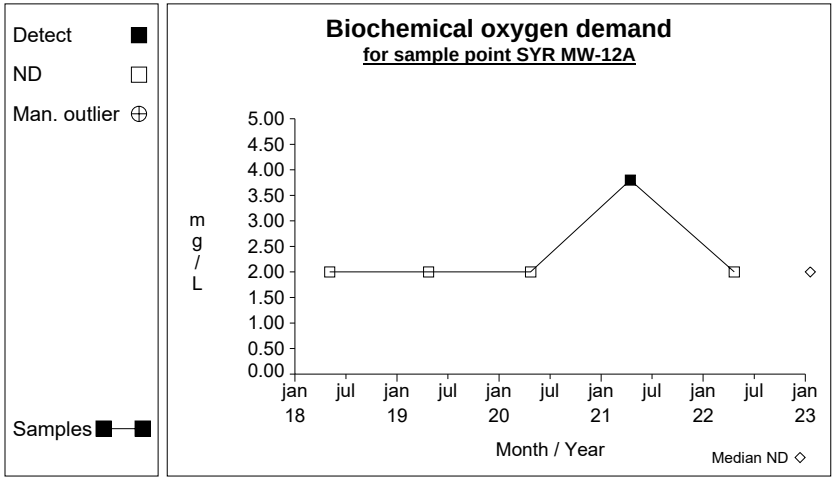


Graph 11



Graph 12

Time Series



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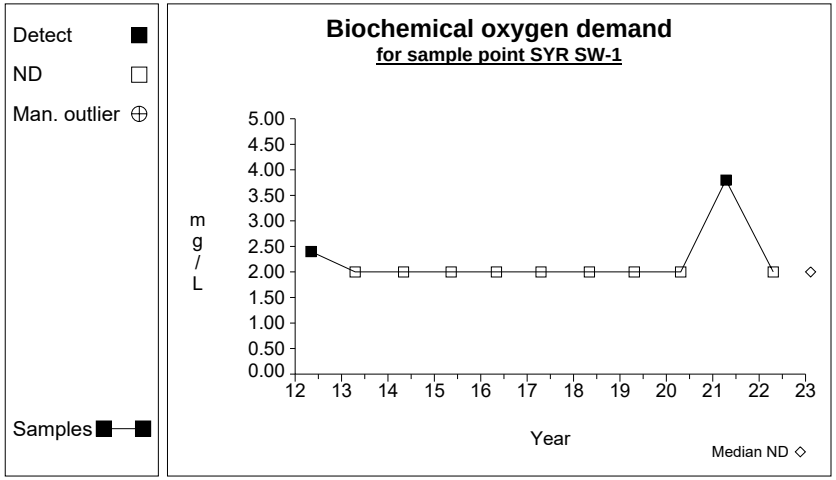
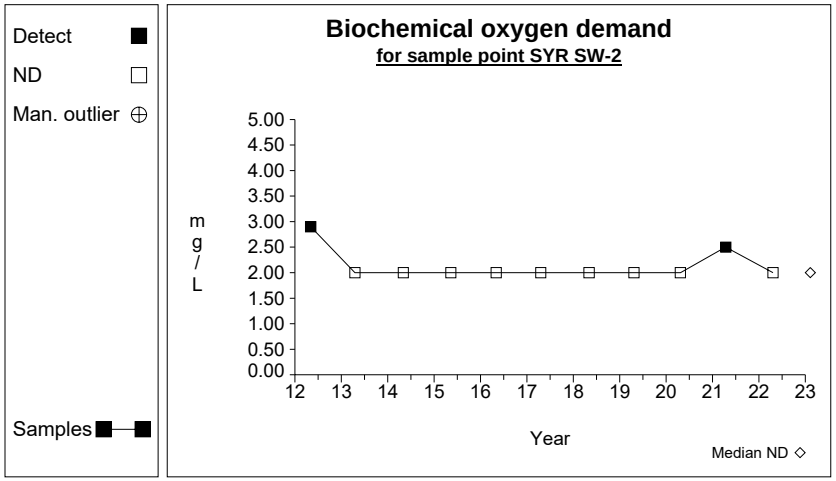
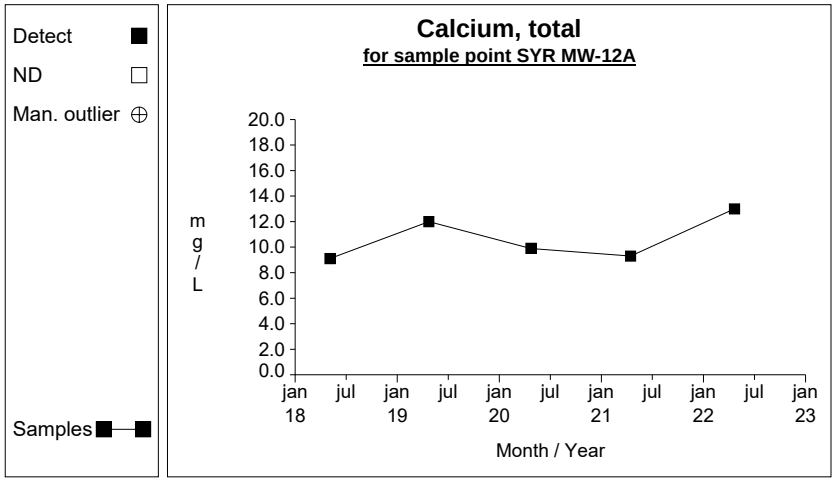


Graph 14

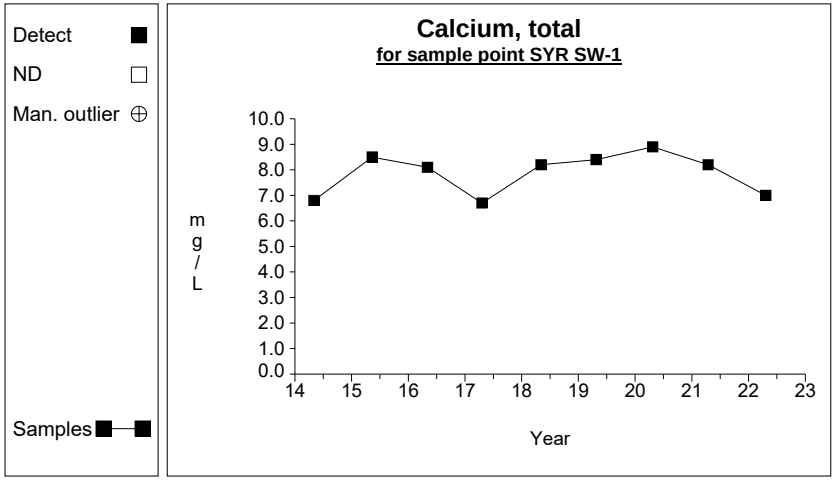


Graph 15

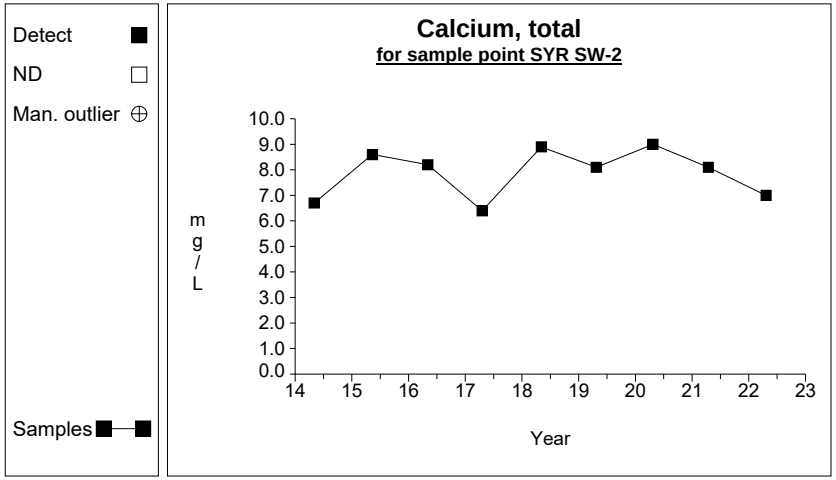


Graph 16

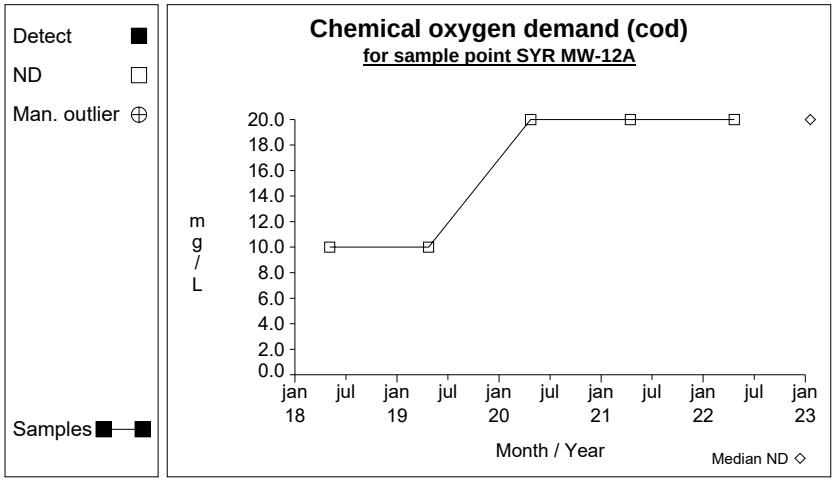
Time Series



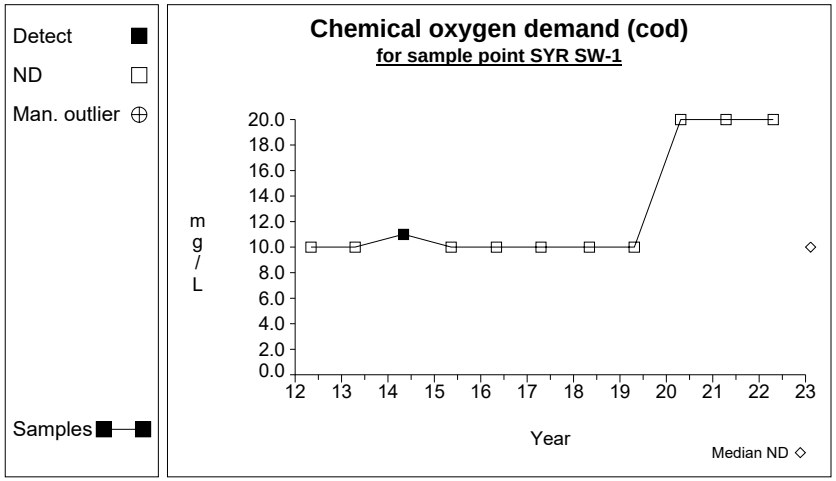
Graph 17



Graph 18

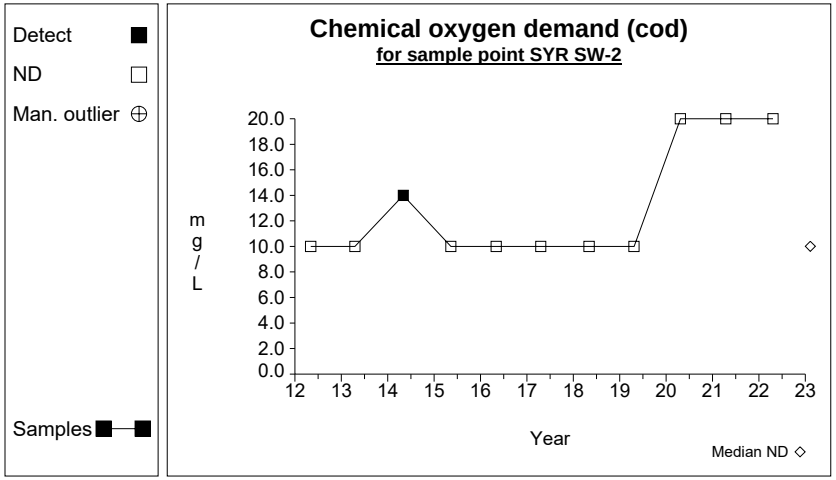


Graph 19

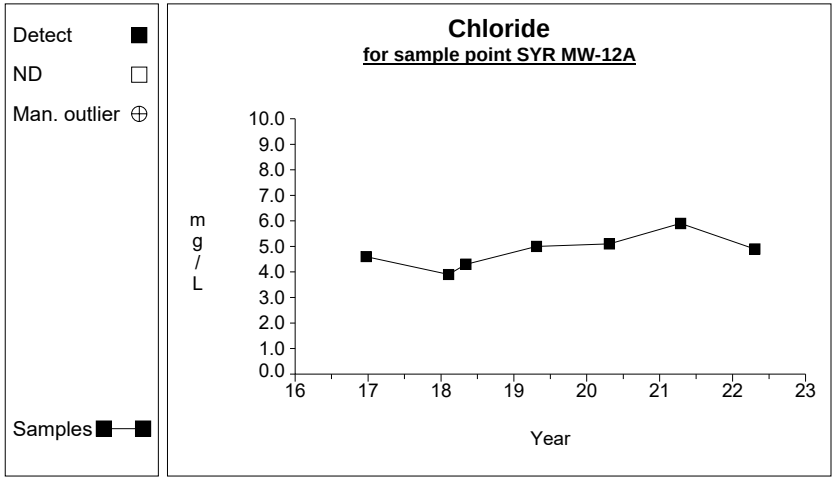


Graph 20

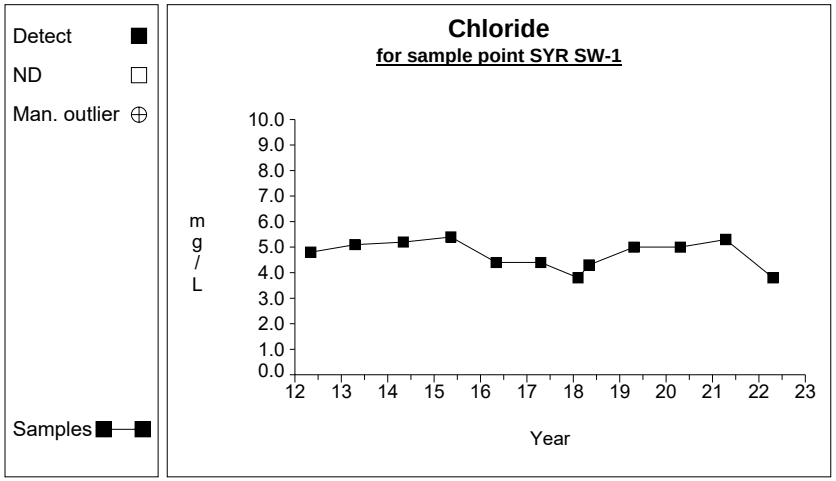
Time Series



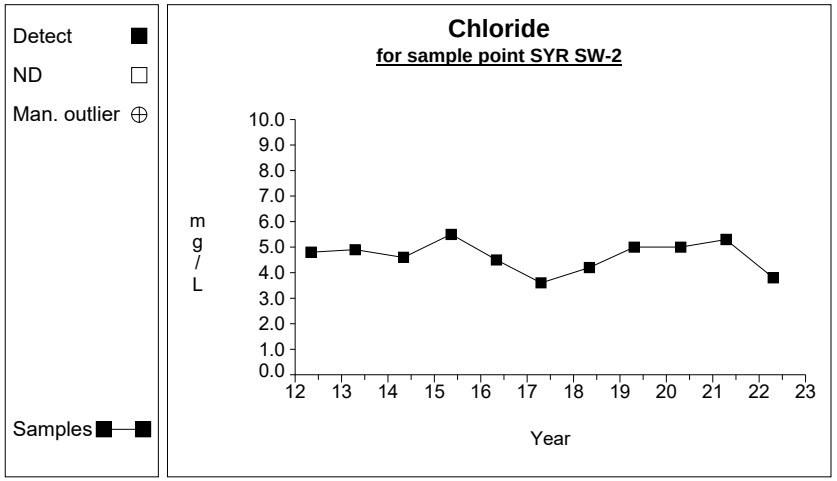
Graph 21



Graph 22

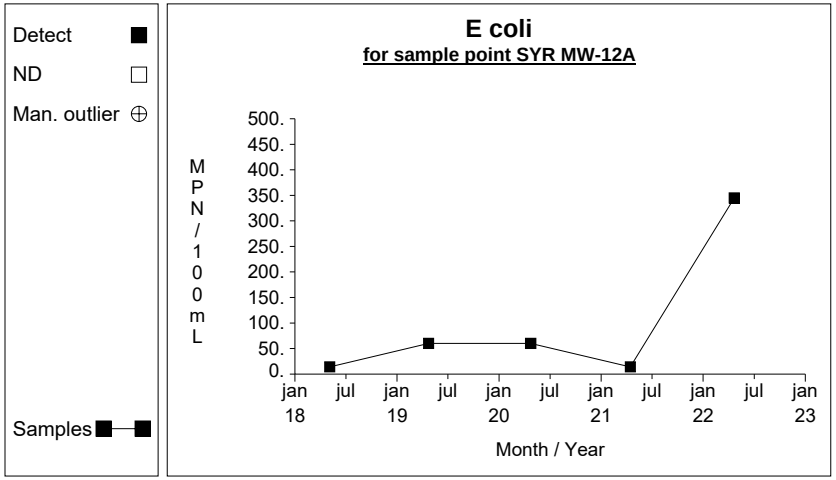


Graph 23

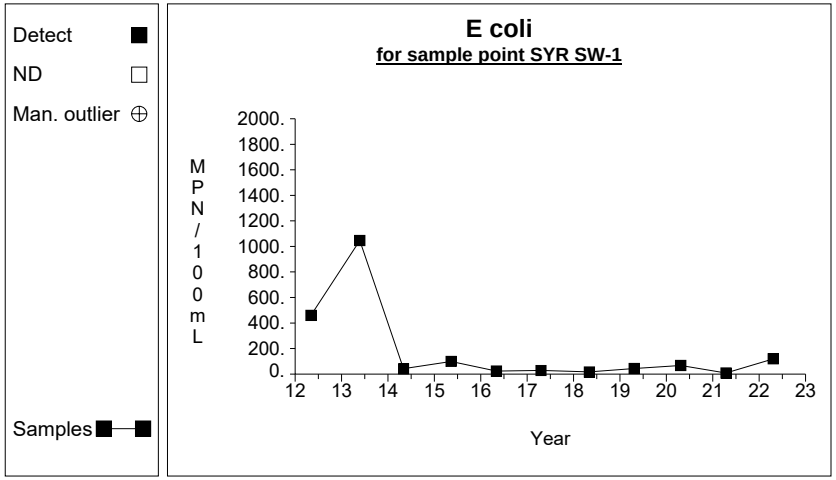


Graph 24

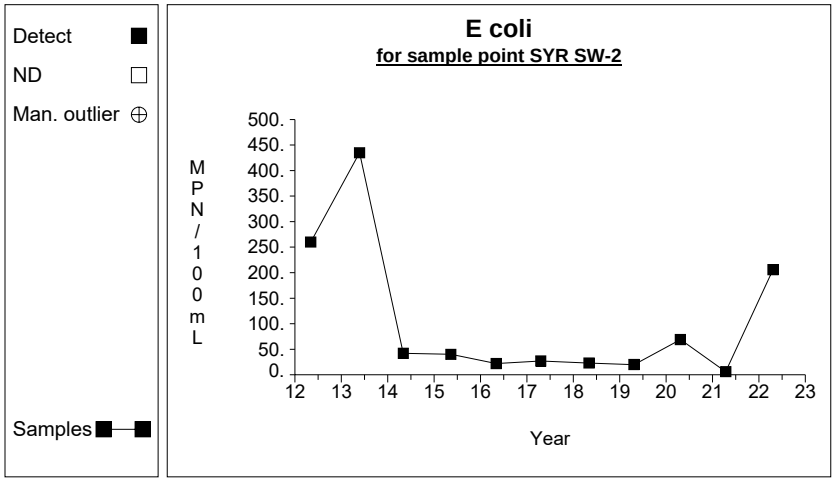
Time Series



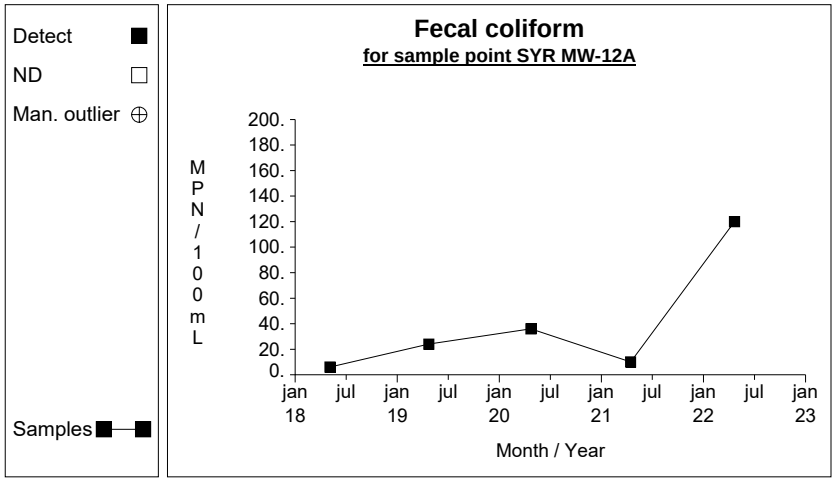
Graph 25



Graph 26

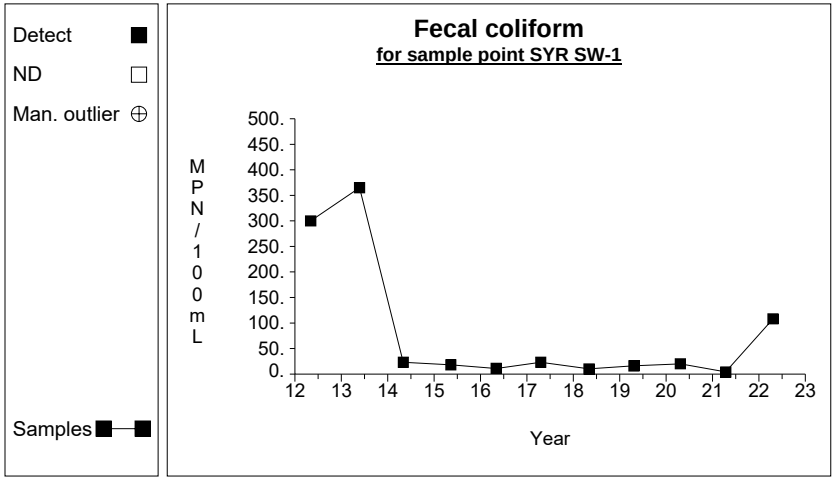


Graph 27

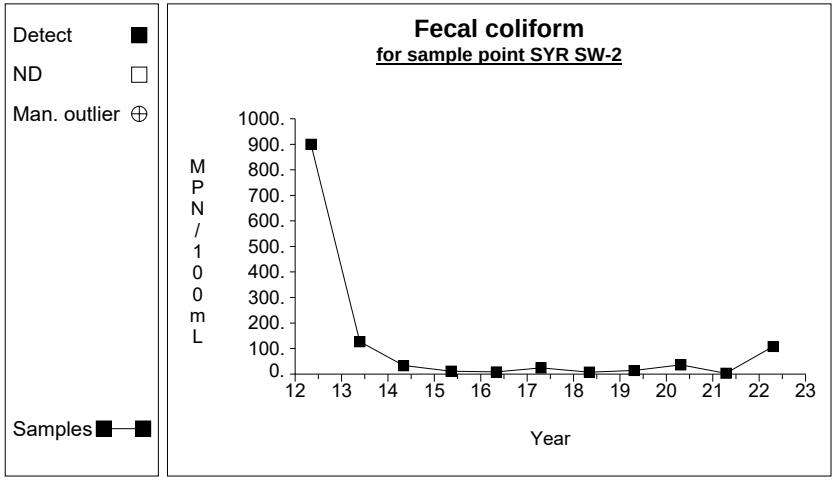


Graph 28

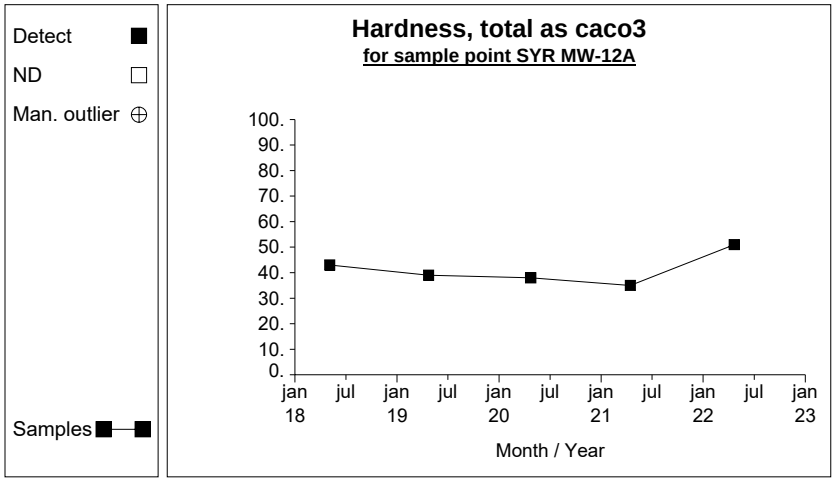
Time Series



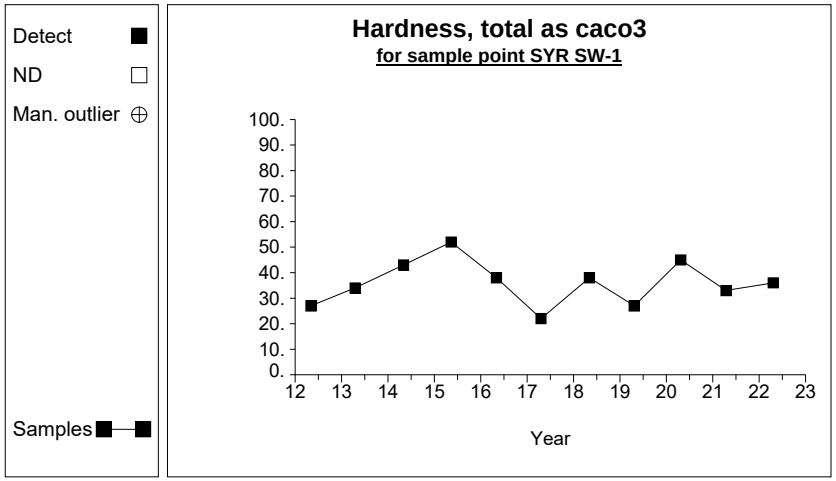
Graph 29



Graph 30

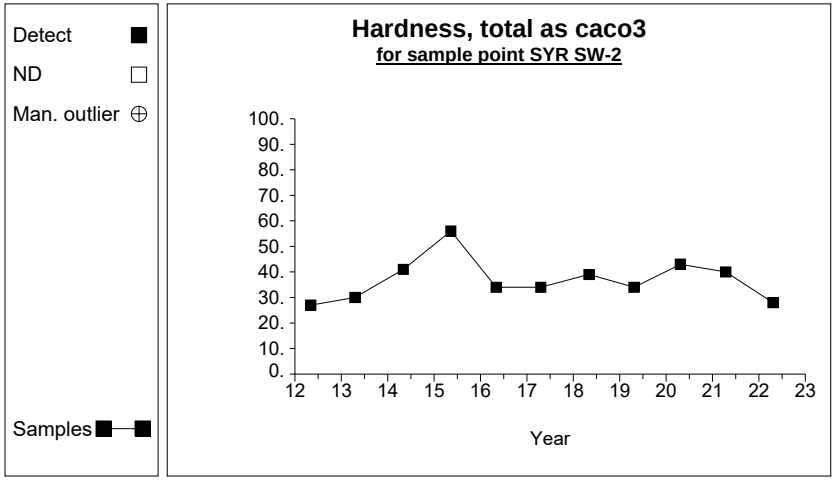


Graph 31

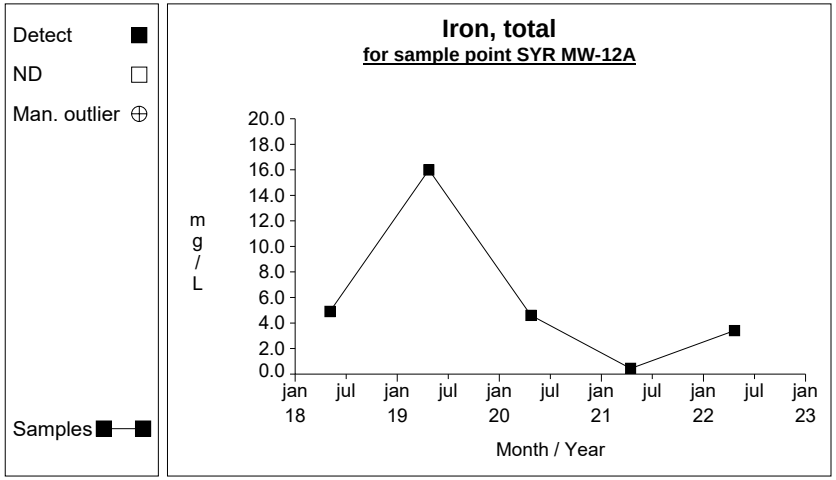


Graph 32

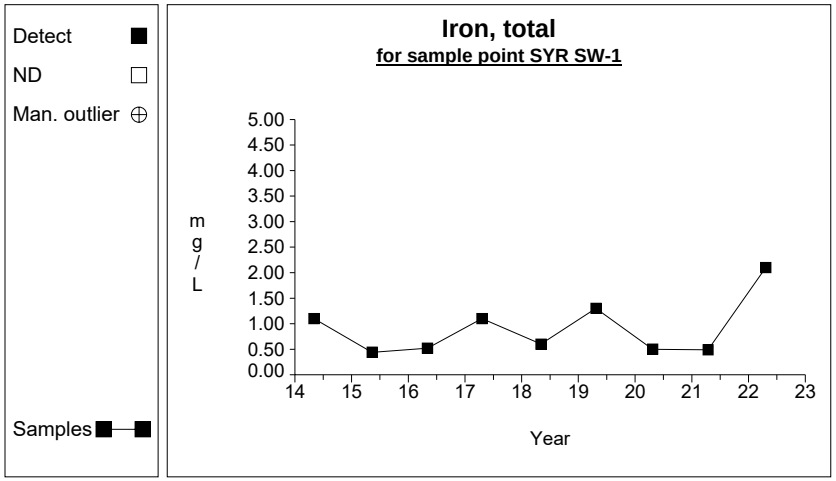
Time Series



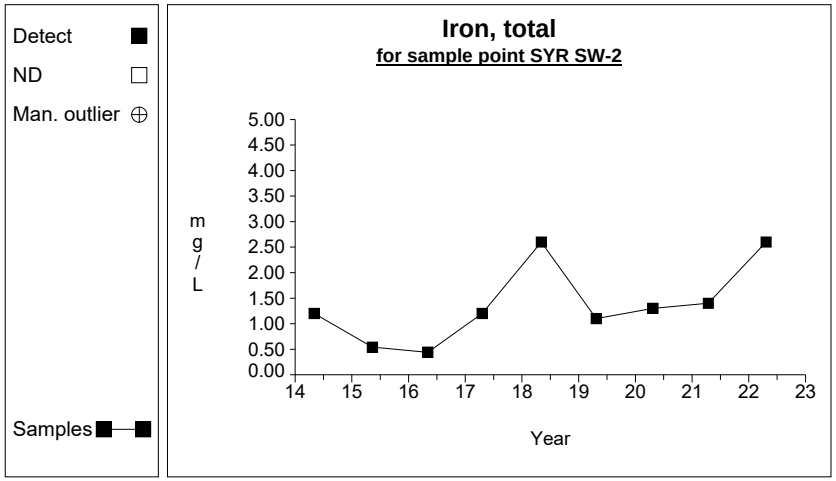
Graph 33



Graph 34

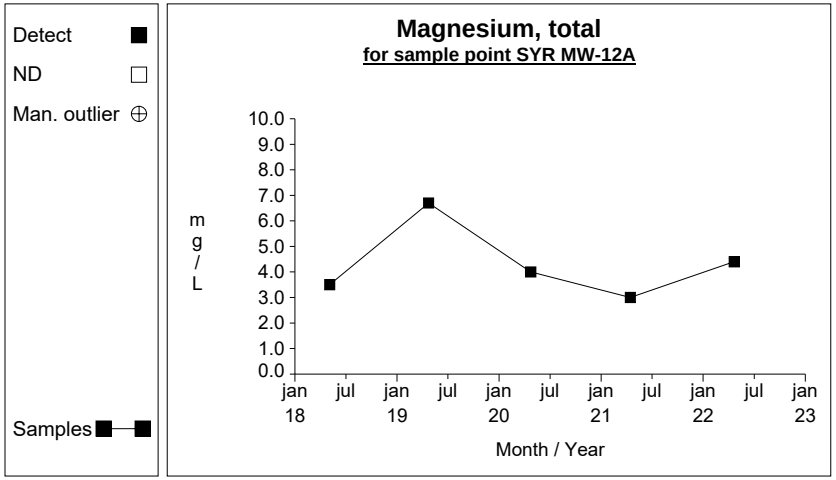


Graph 35

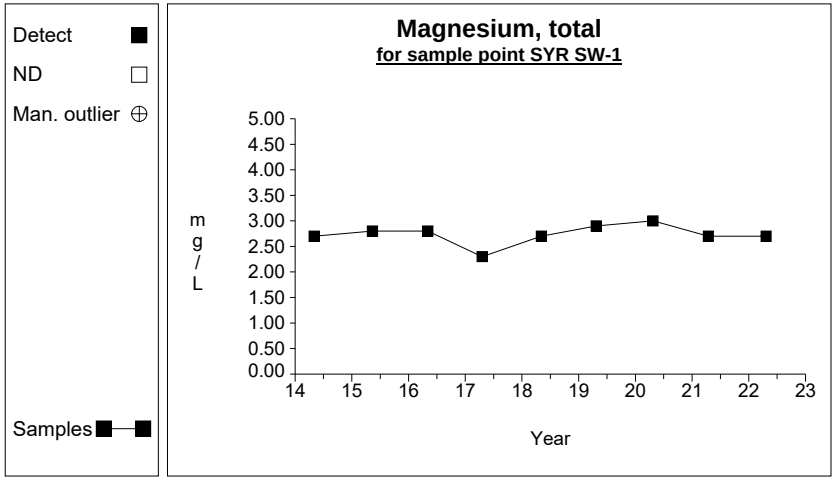


Graph 36

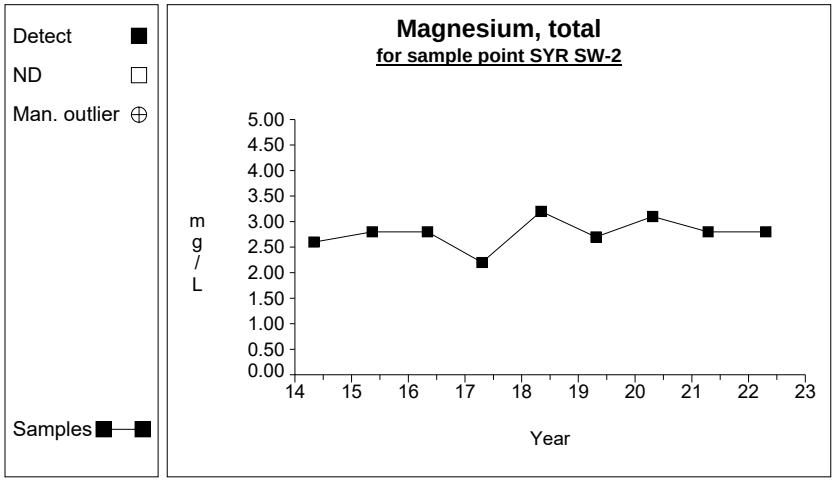
Time Series



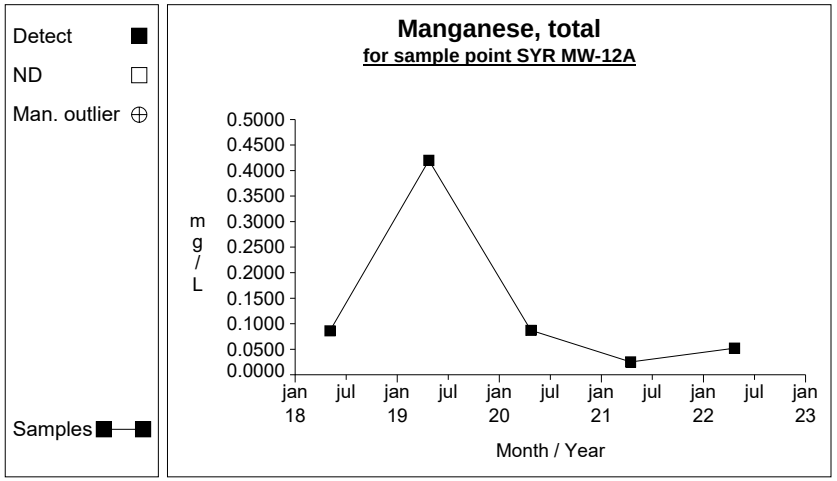
Graph 37



Graph 38

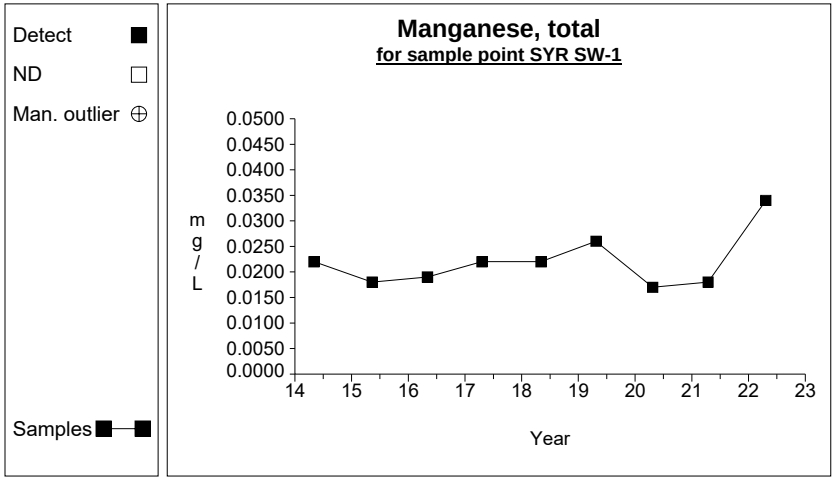


Graph 39

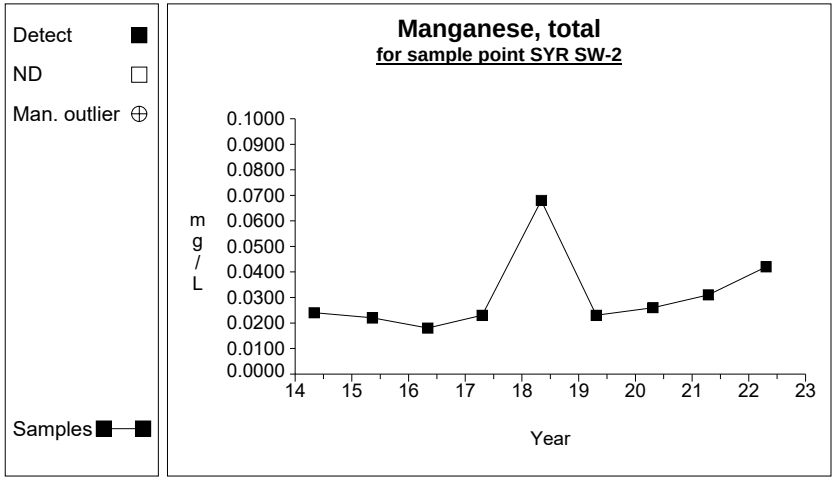


Graph 40

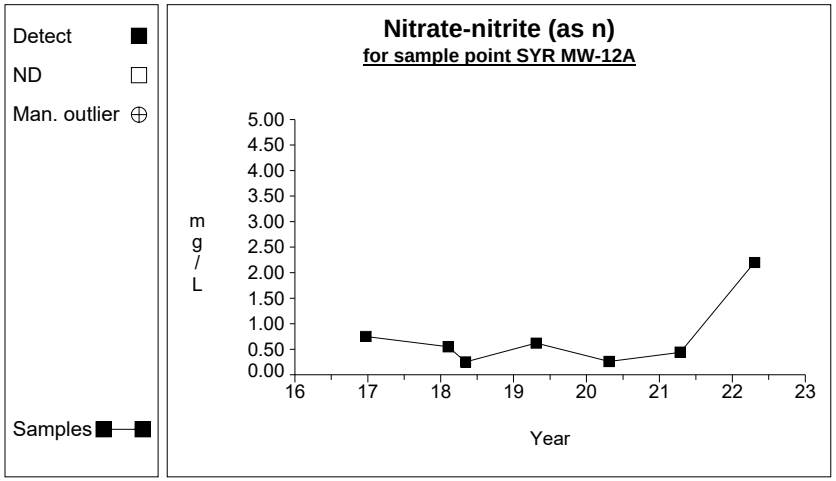
Time Series



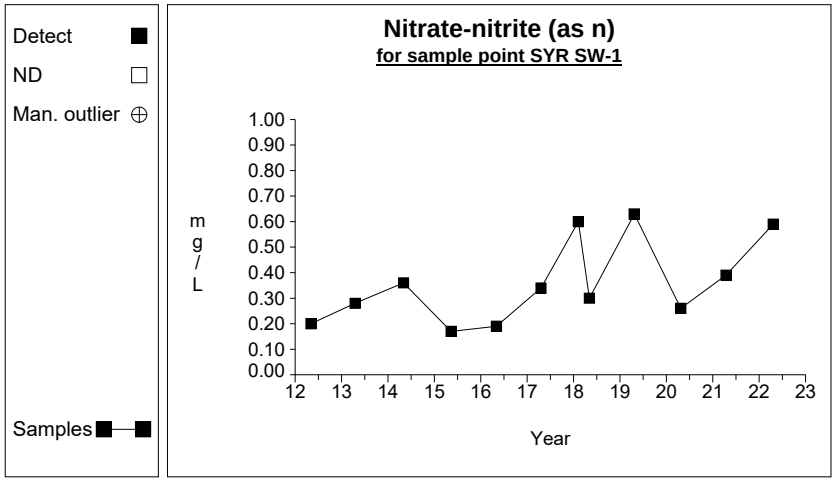
Graph 41



Graph 42

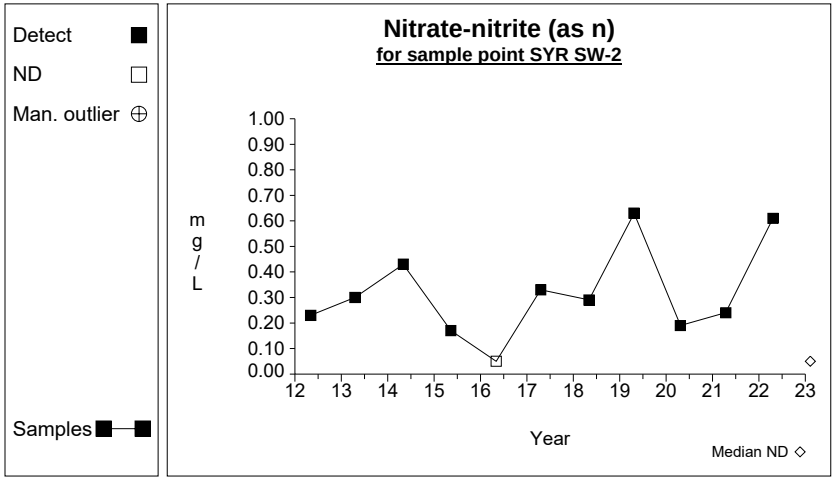


Graph 43

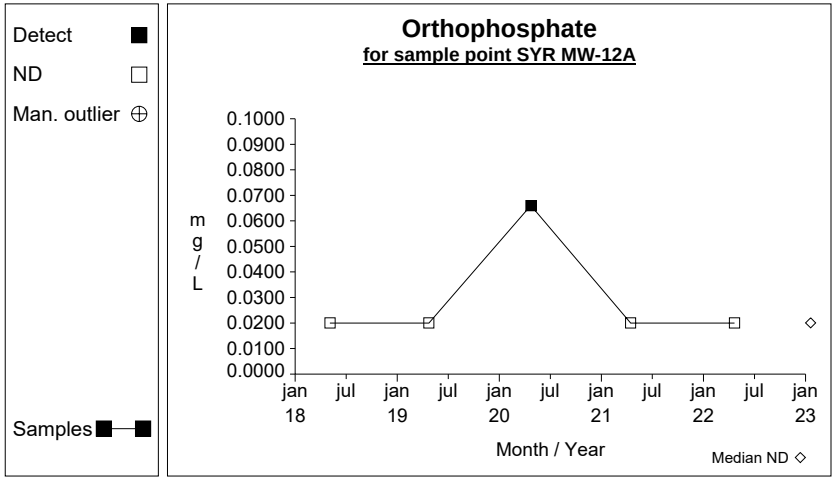


Graph 44

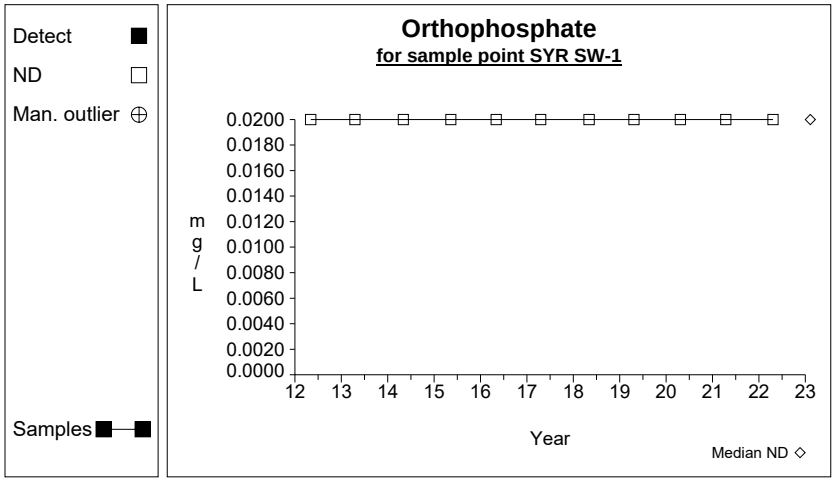
Time Series



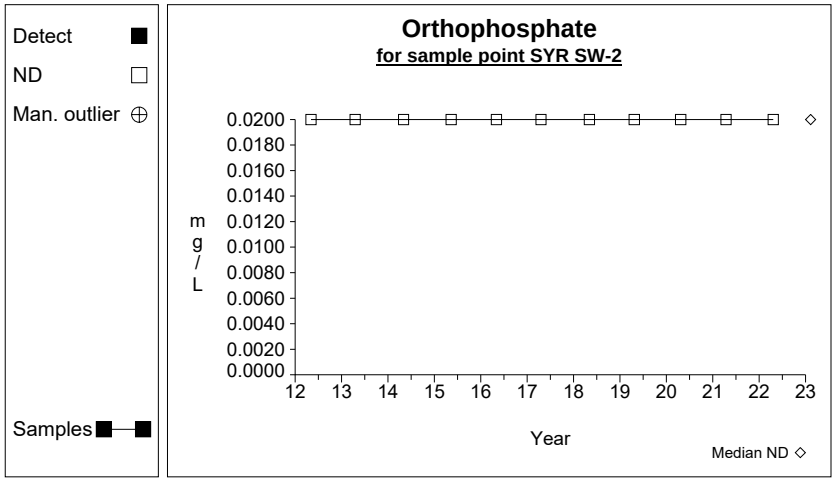
Graph 45



Graph 46

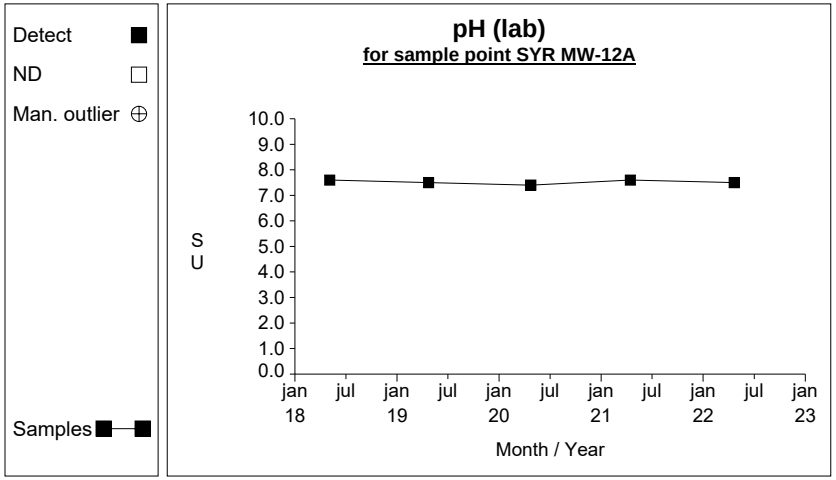


Graph 47

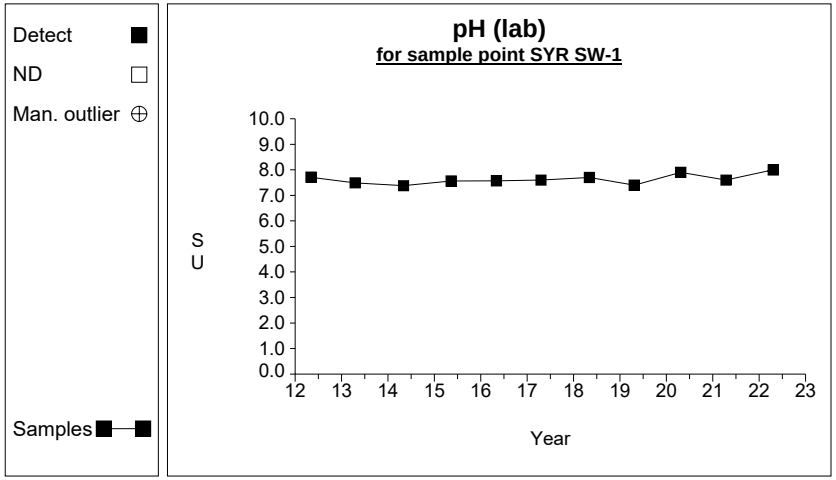


Graph 48

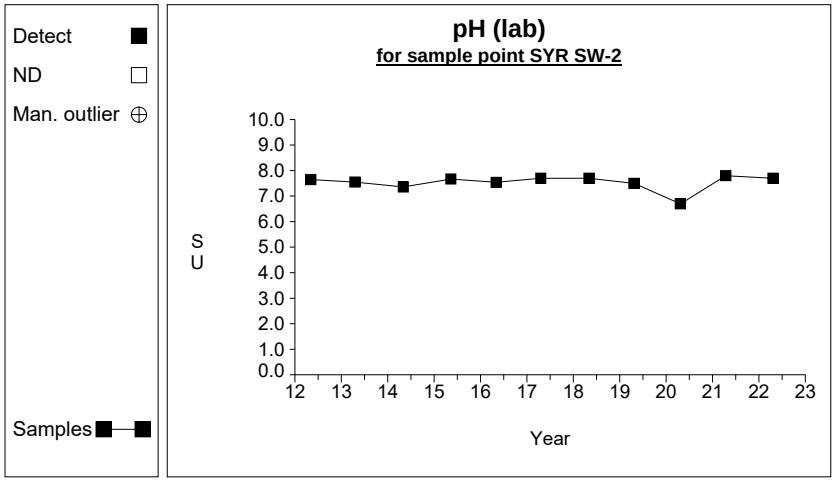
Time Series



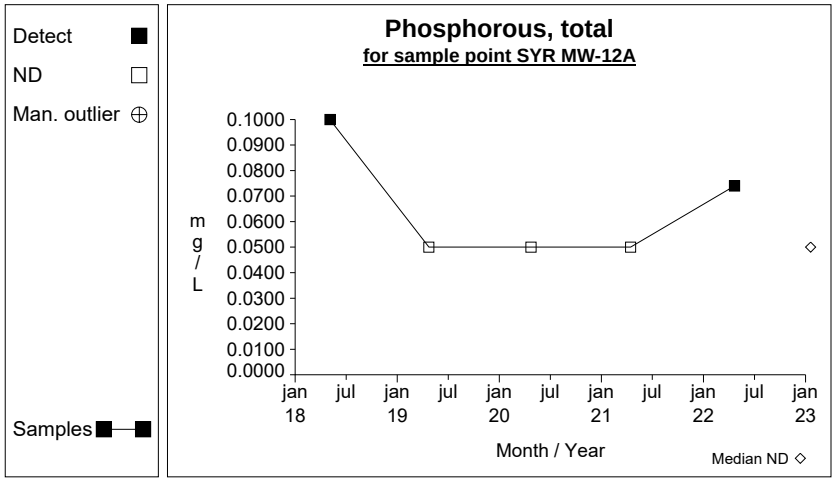
Graph 49



Graph 50

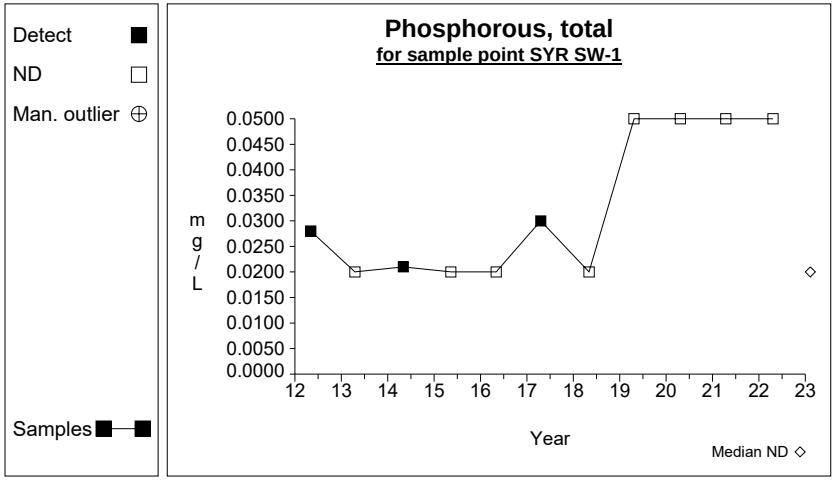


Graph 51

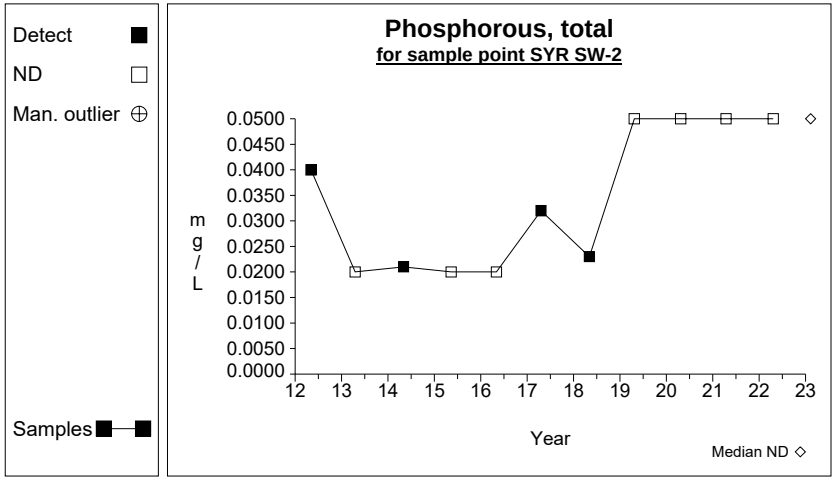


Graph 52

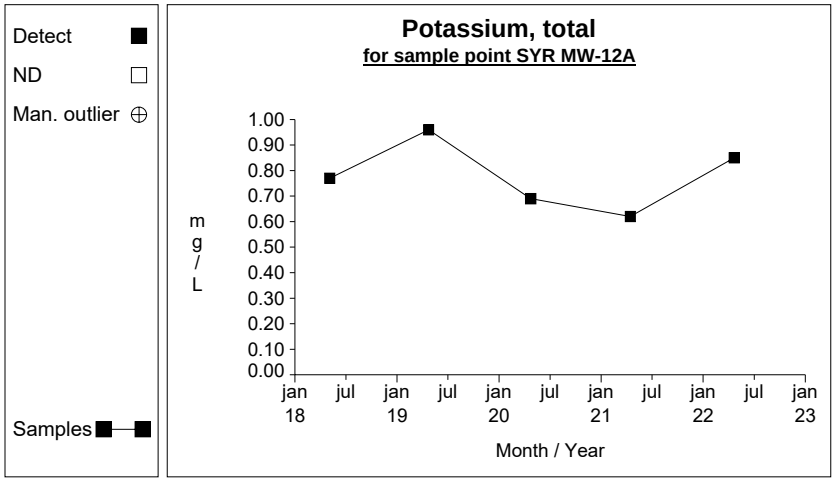
Time Series



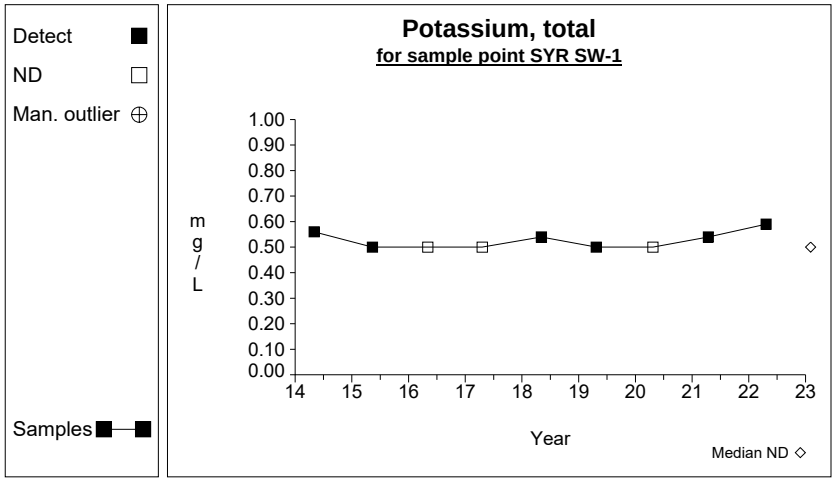
Graph 53



Graph 54

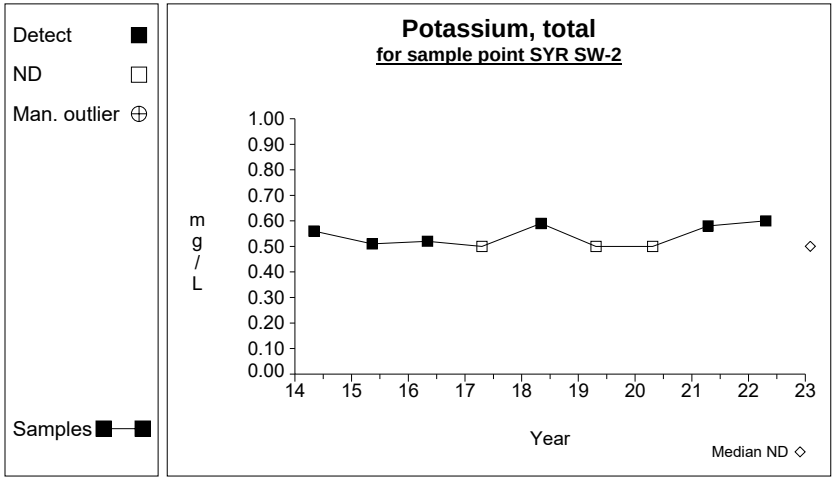


Graph 55

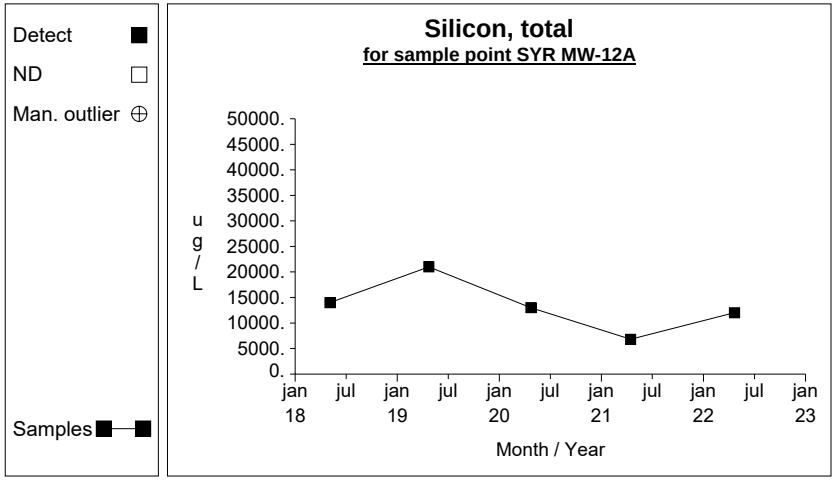


Graph 56

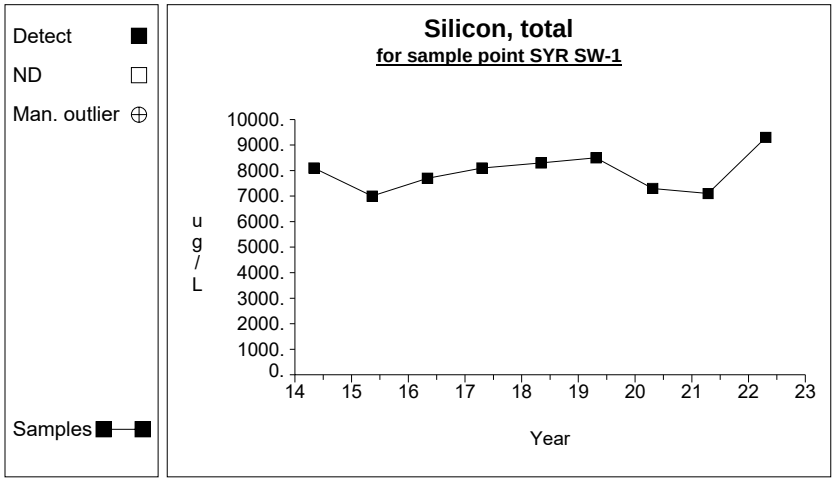
Time Series



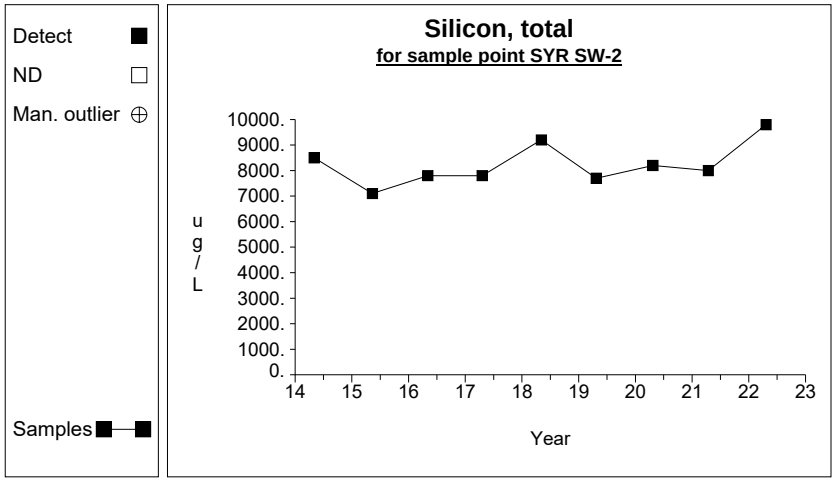
Graph 57



Graph 58

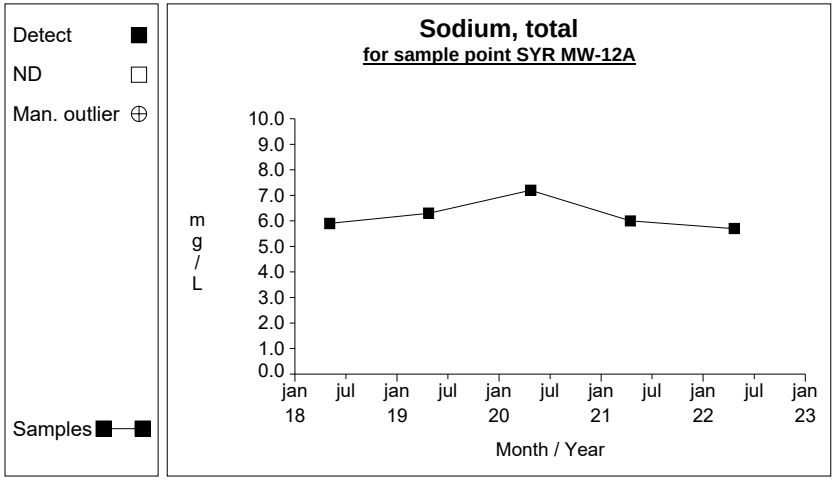


Graph 59

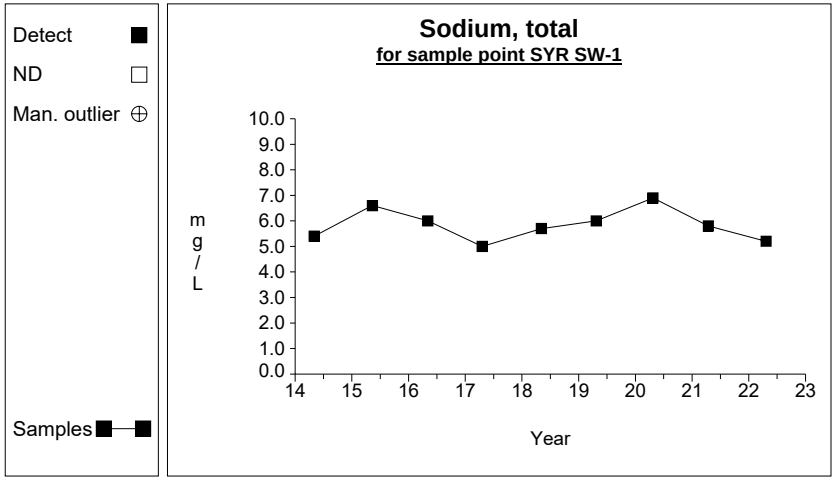


Graph 60

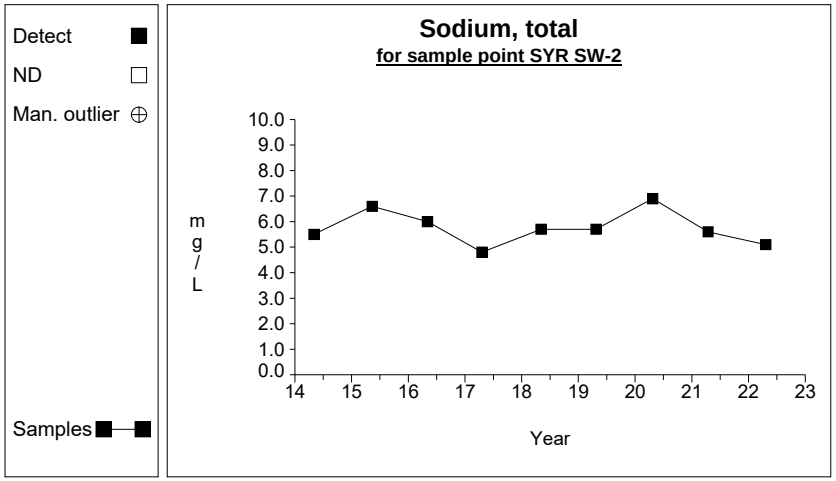
Time Series



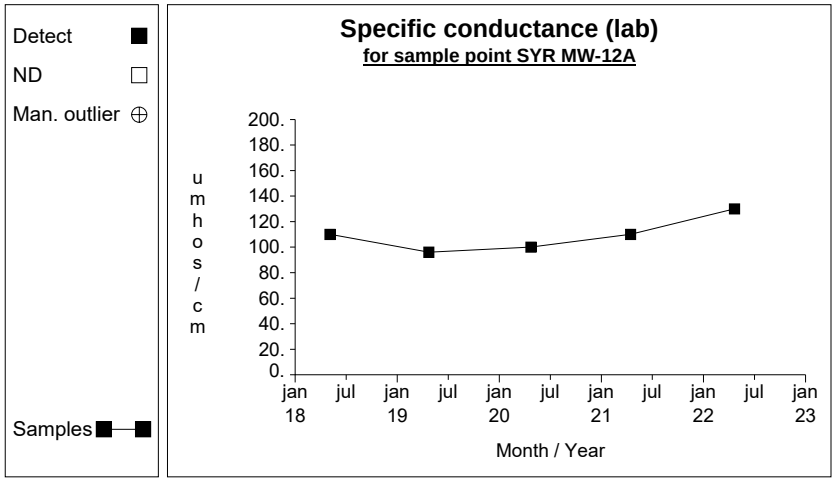
Graph 61



Graph 62

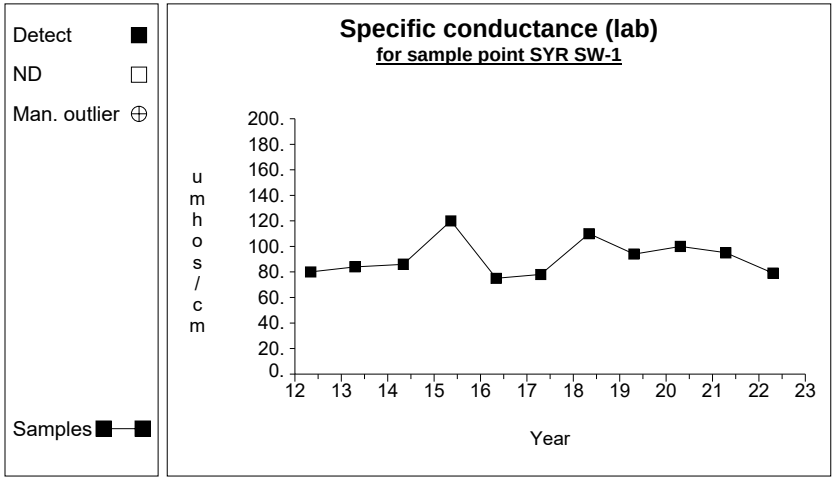


Graph 63

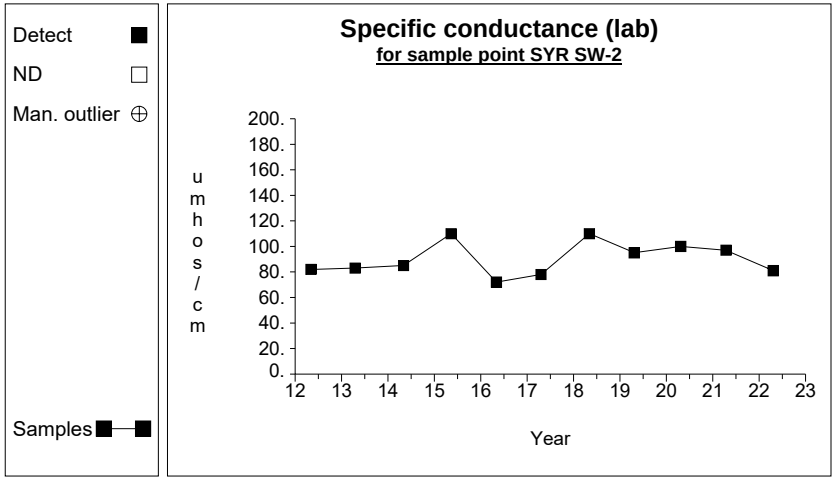


Graph 64

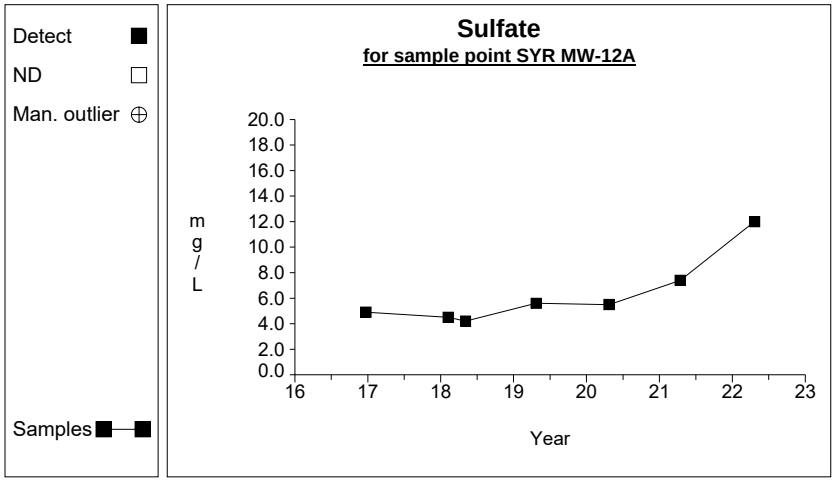
Time Series



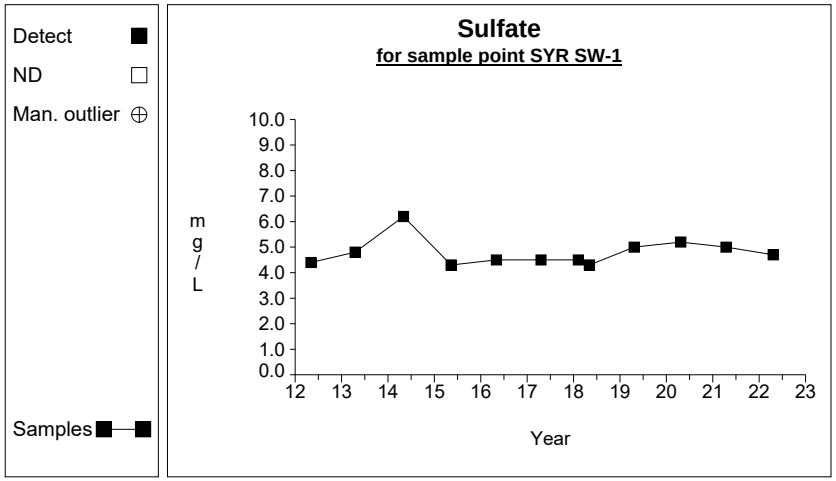
Graph 65



Graph 66

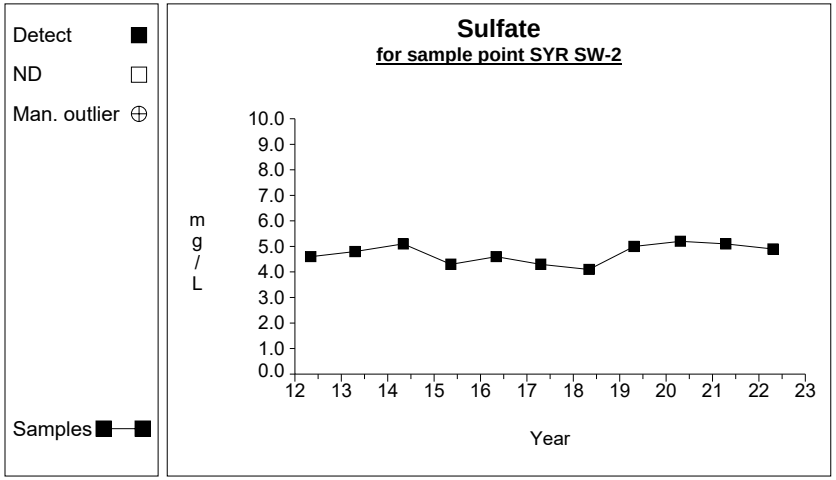


Graph 67

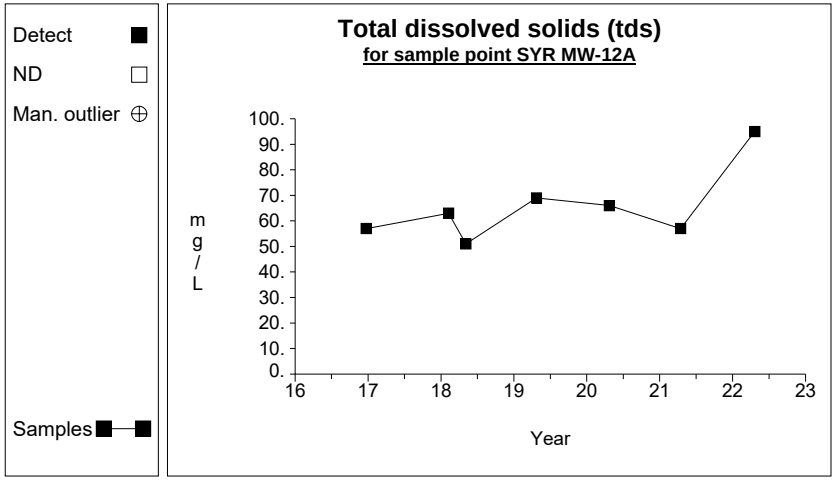


Graph 68

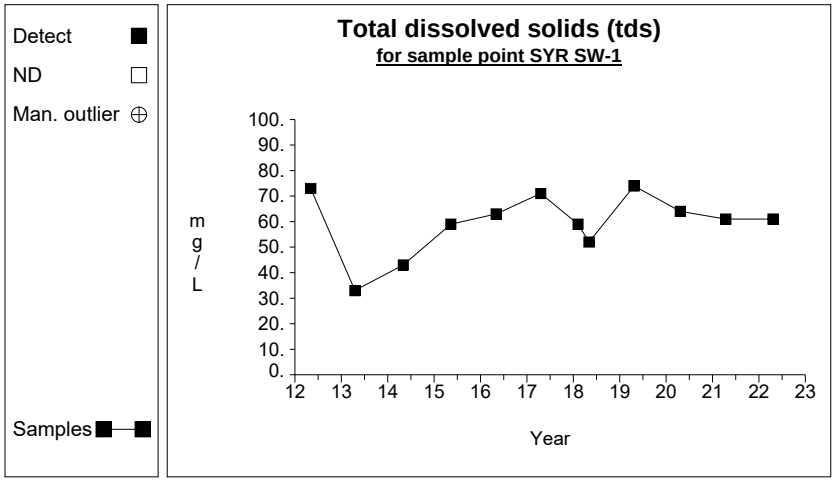
Time Series



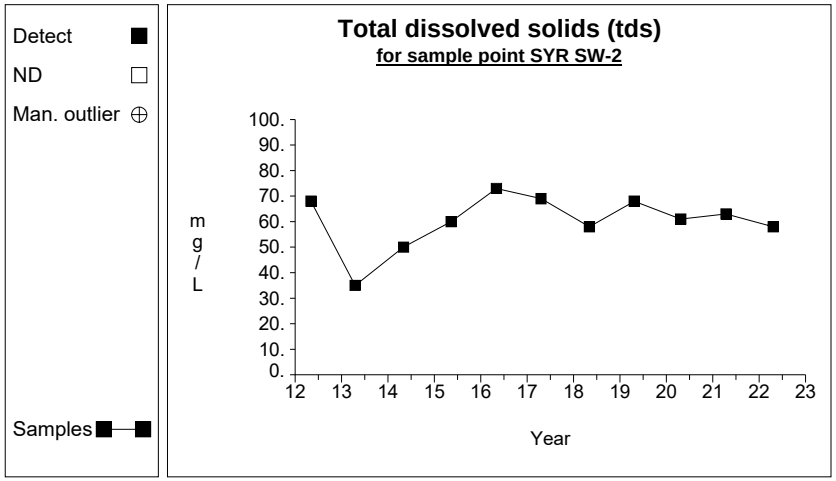
Graph 69



Graph 70

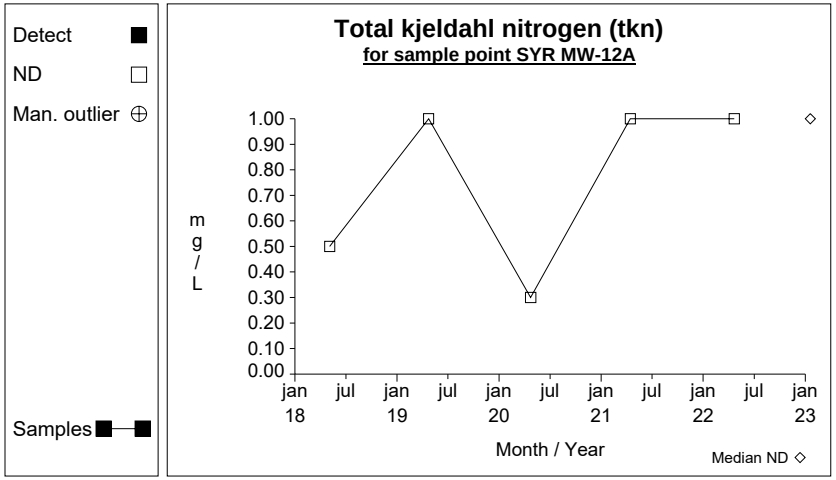


Graph 71

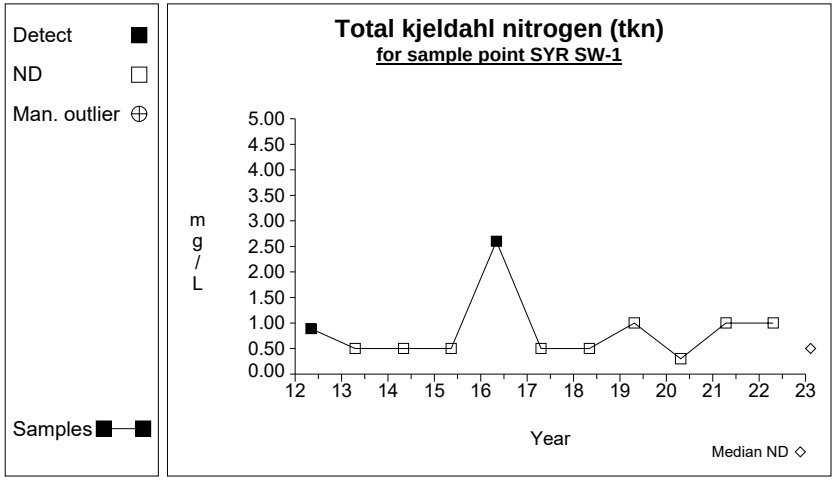


Graph 72

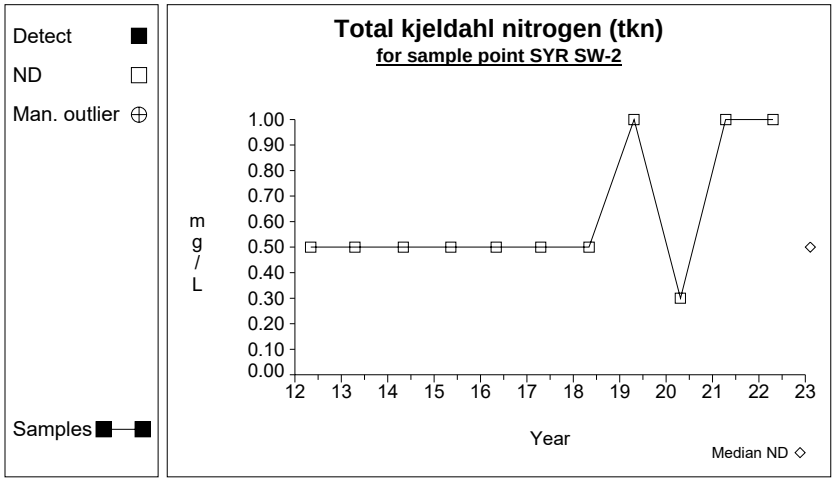
Time Series



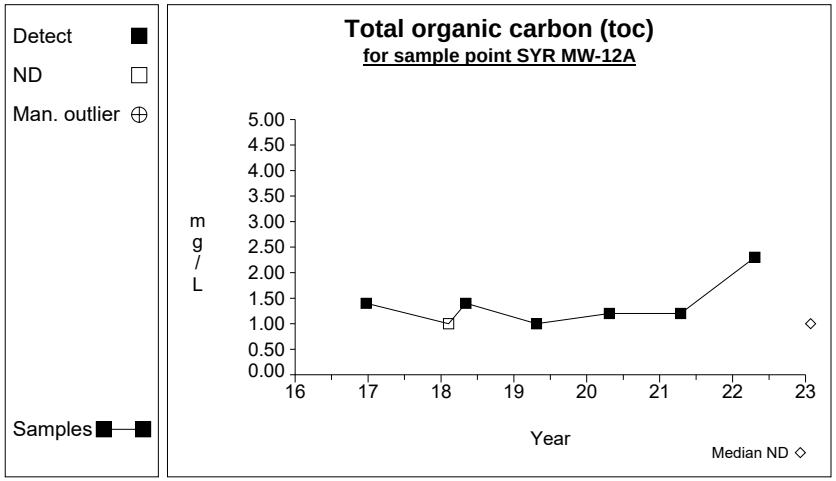
Graph 73



Graph 74

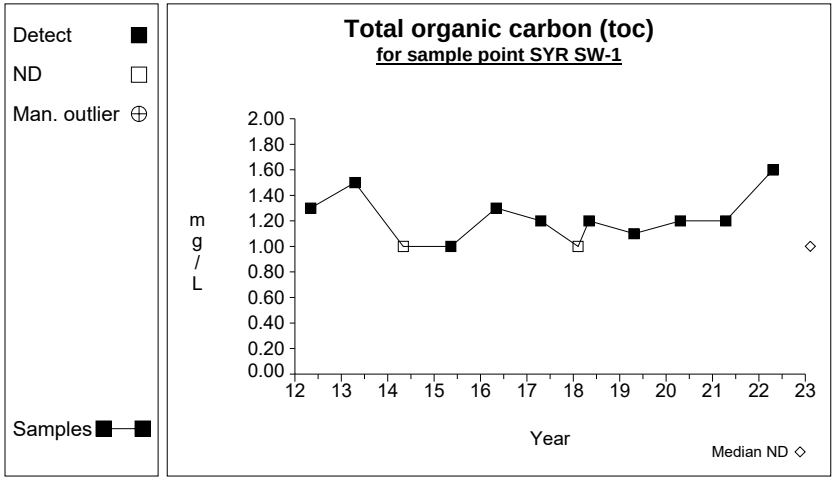


Graph 75

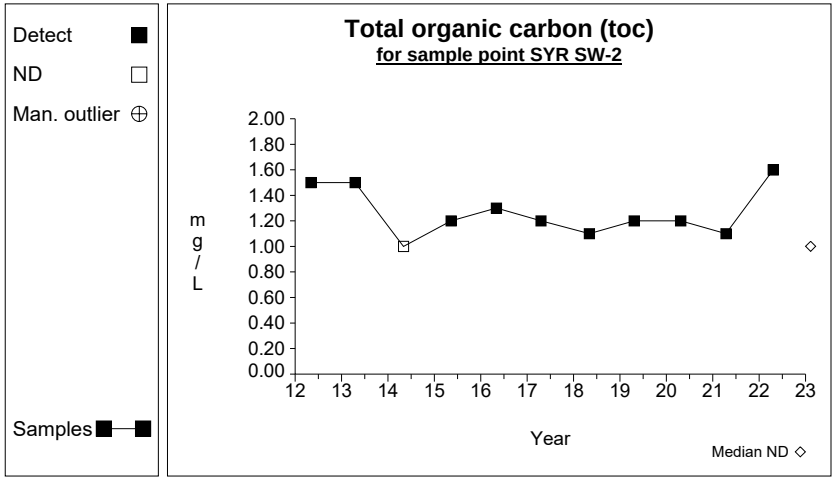


Graph 76

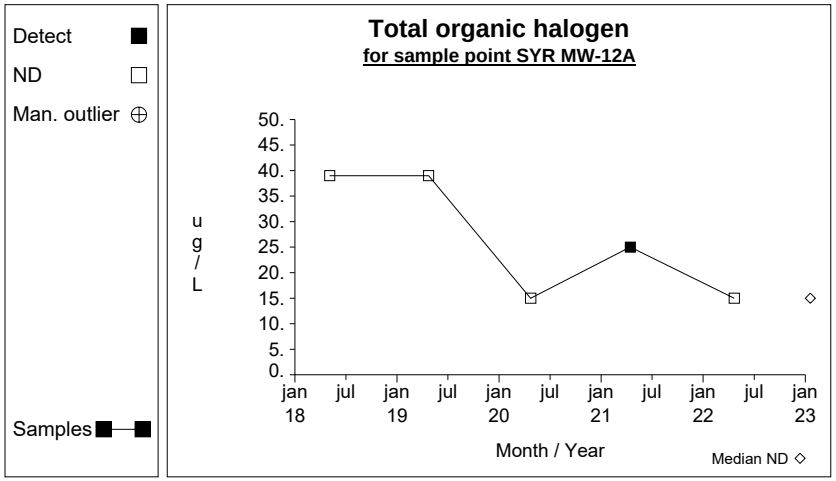
Time Series



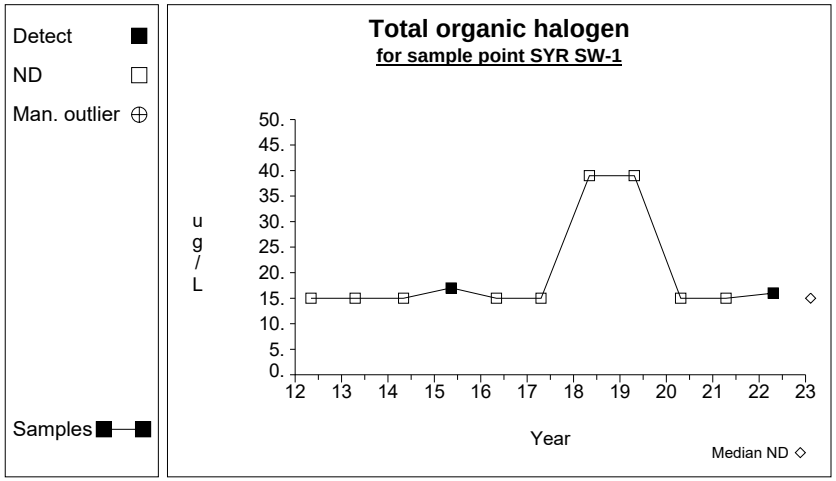
Graph 77



Graph 78

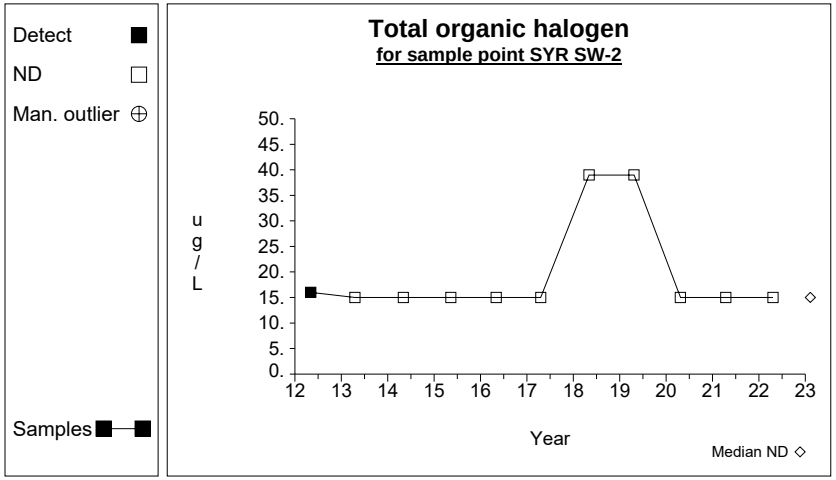


Graph 79

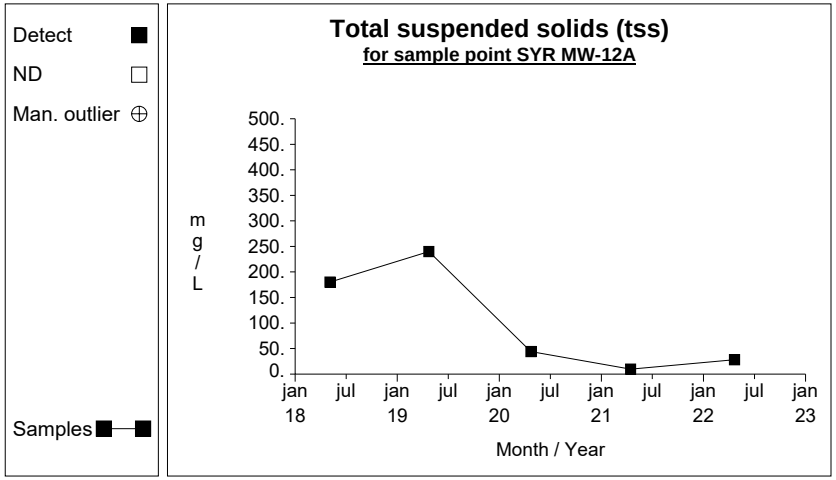


Graph 80

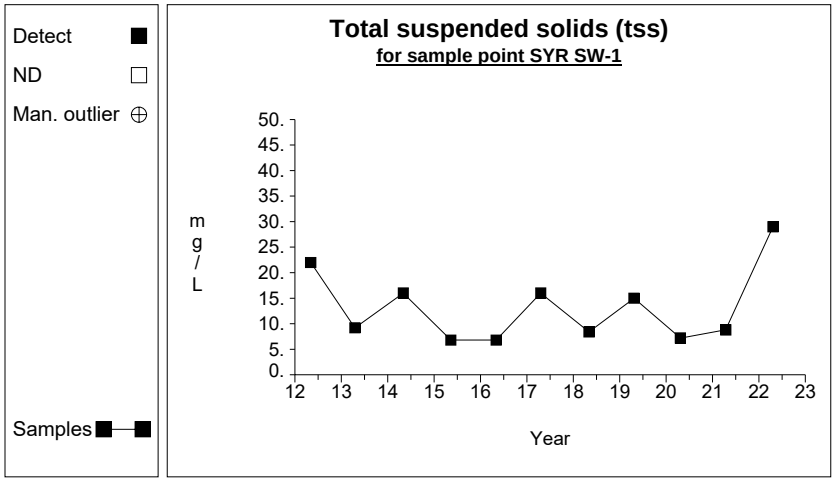
Time Series



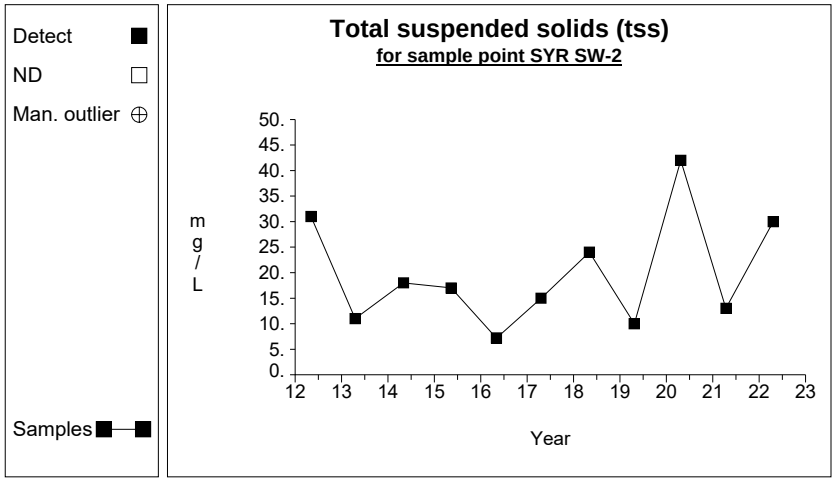
Graph 81



Graph 82



Graph 83

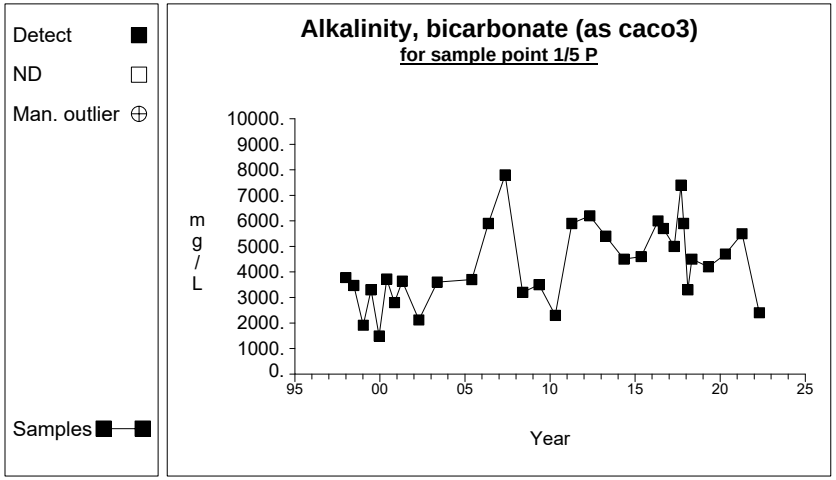


Graph 84

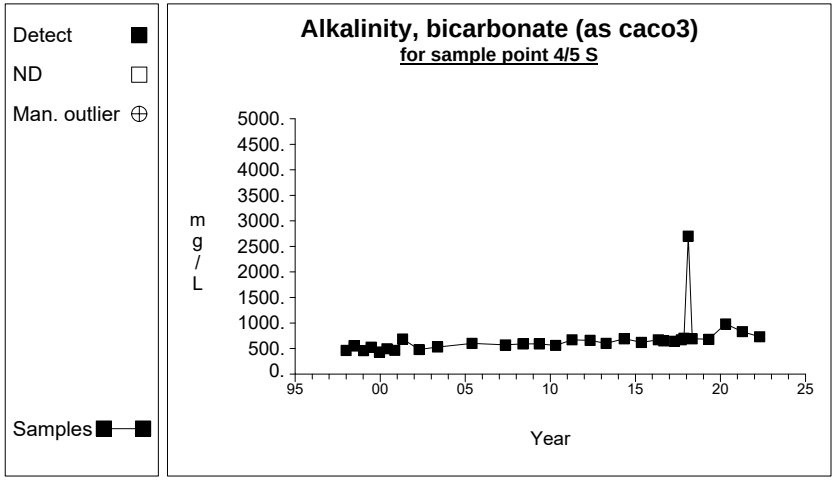
LCRS and LDS Sump Samples

Time-Concentration Graphs

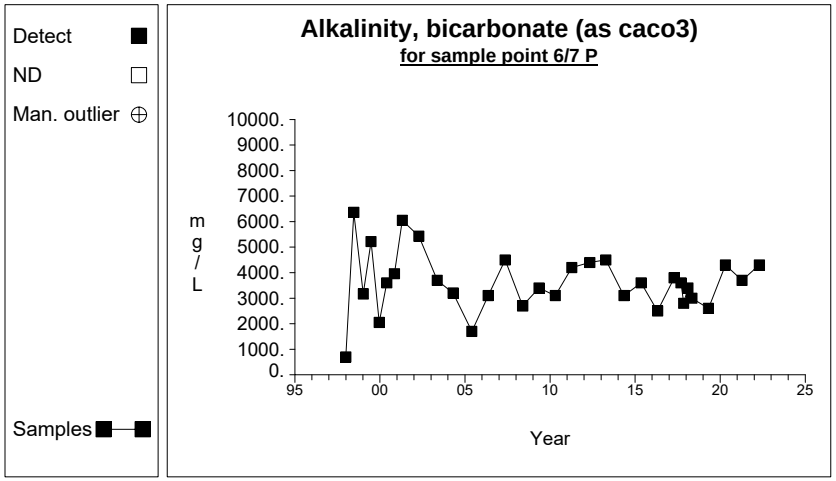
Time Series



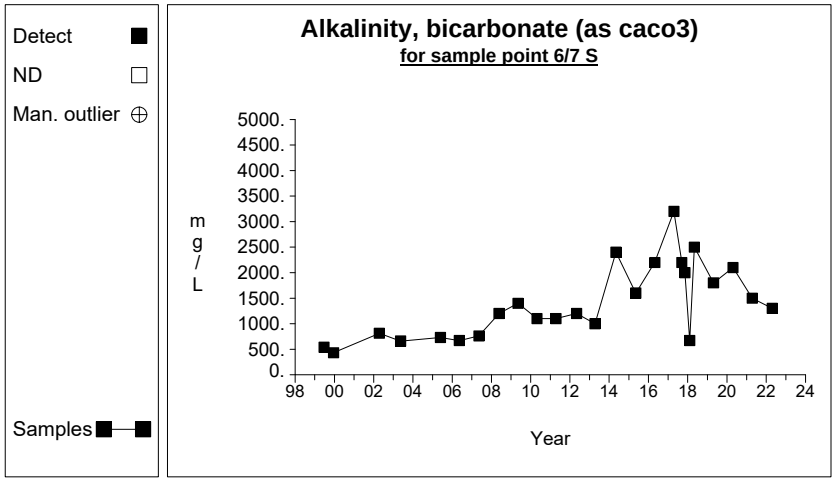
Graph 1



Graph 2

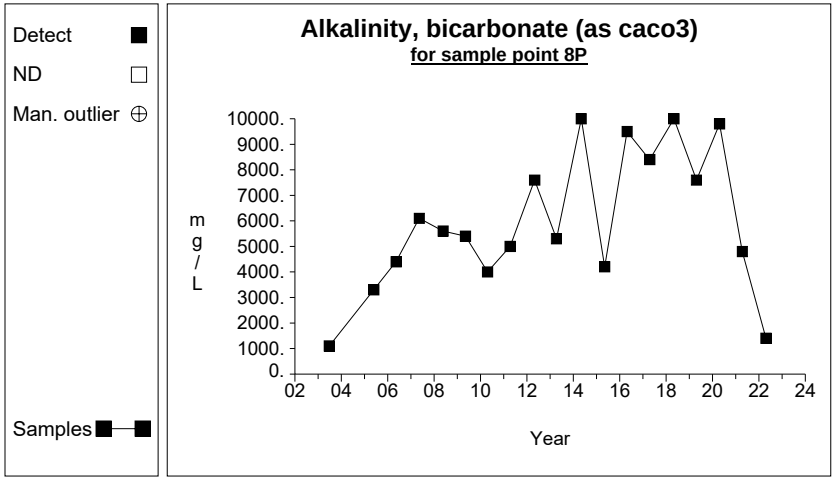


Graph 3

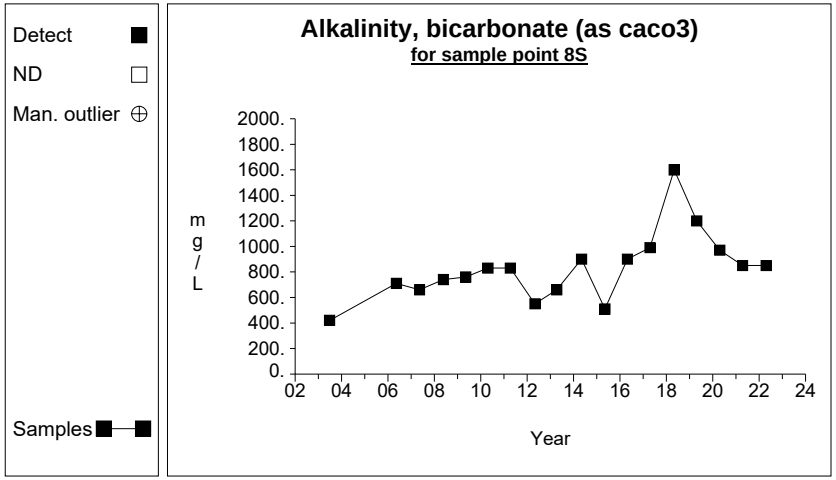


Graph 4

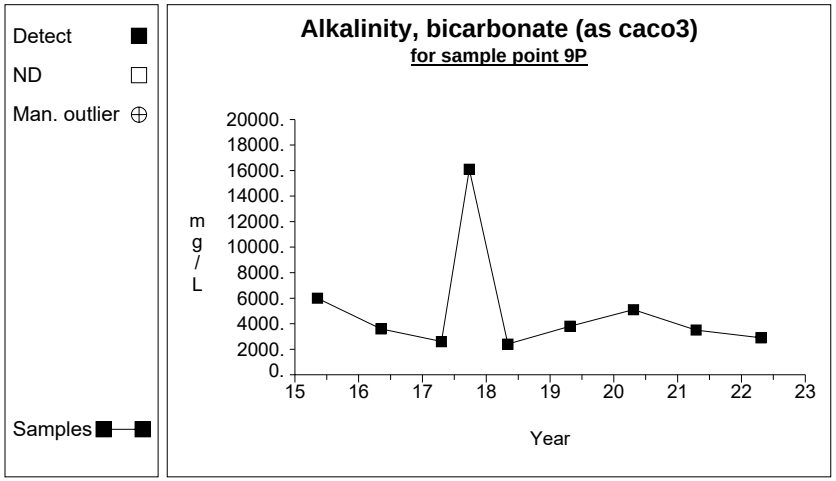
Time Series



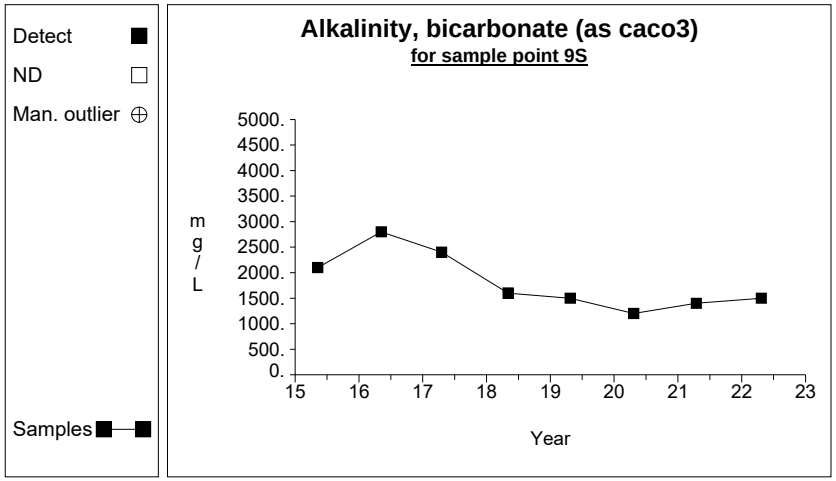
Graph 5



Graph 6

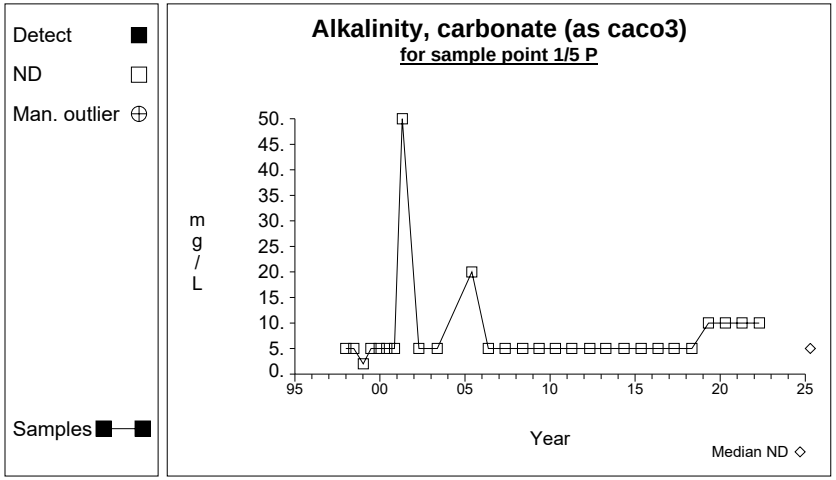


Graph 7

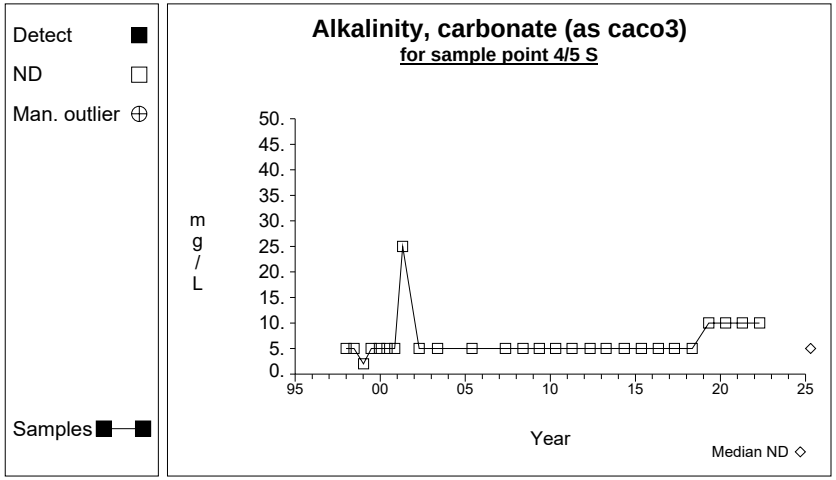


Graph 8

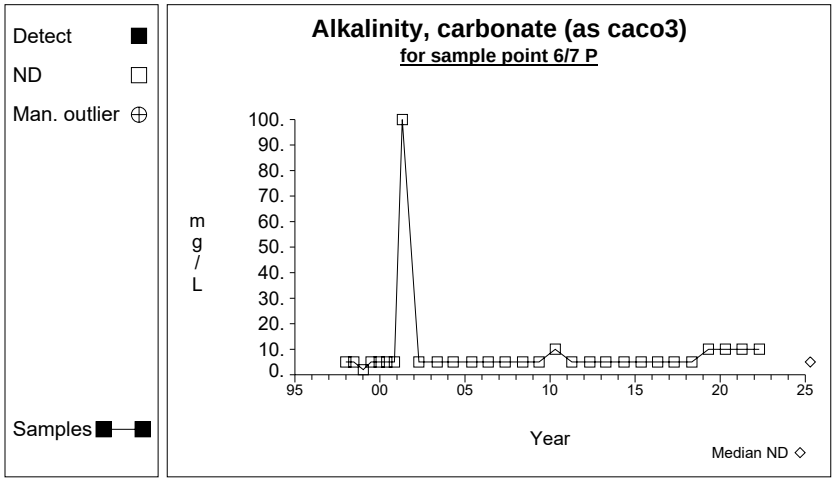
Time Series



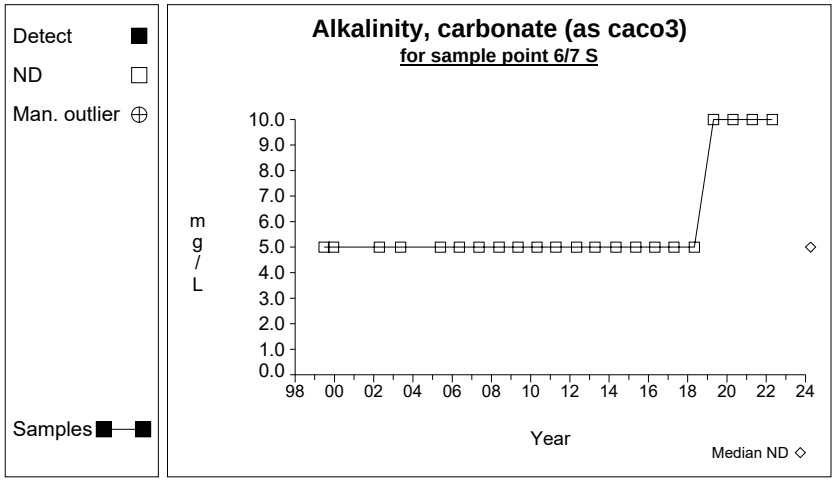
Graph 9



Graph 10

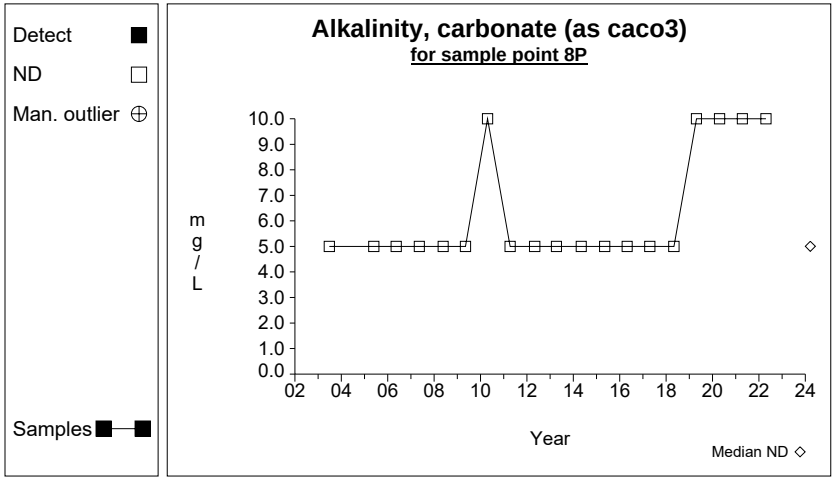


Graph 11

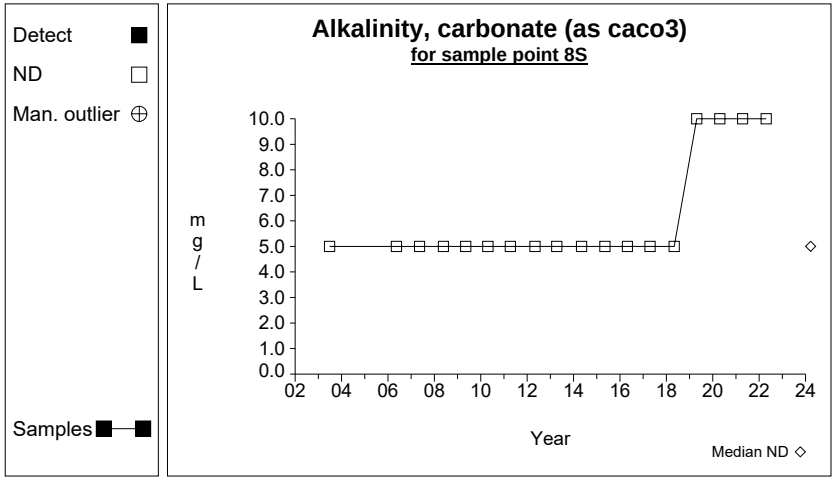


Graph 12

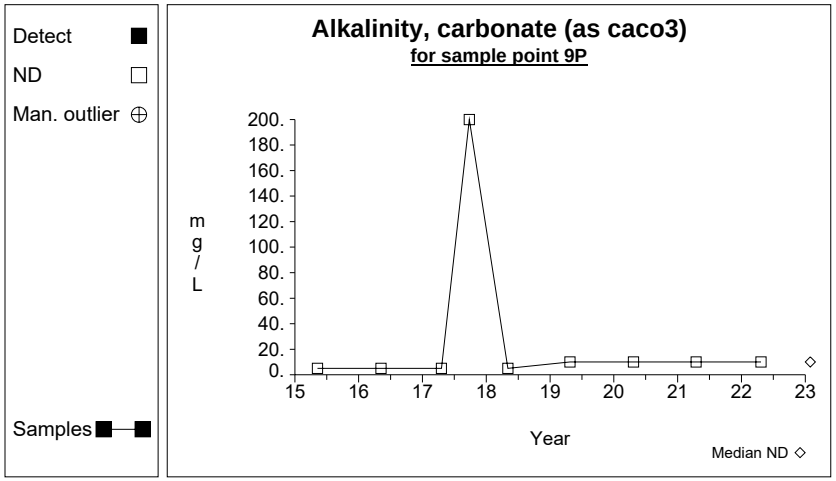
Time Series



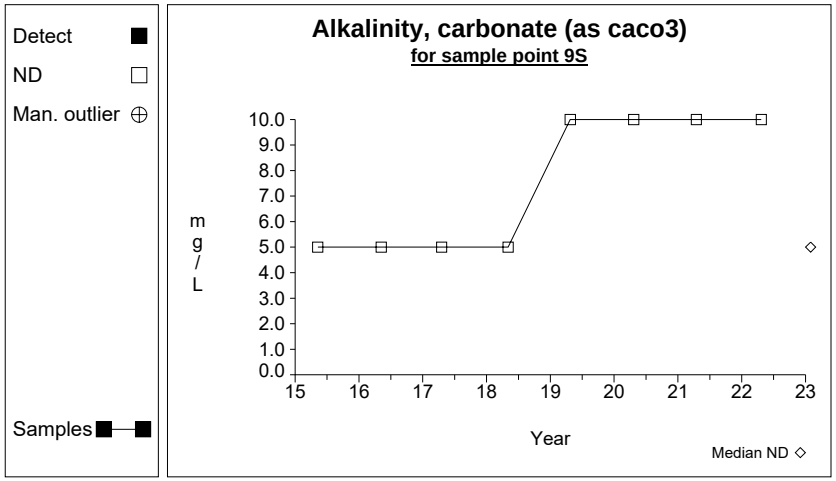
Graph 13



Graph 14

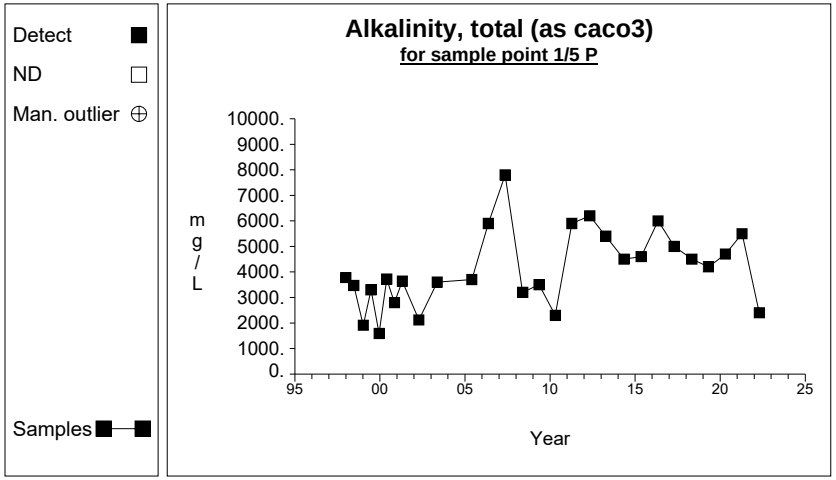


Graph 15

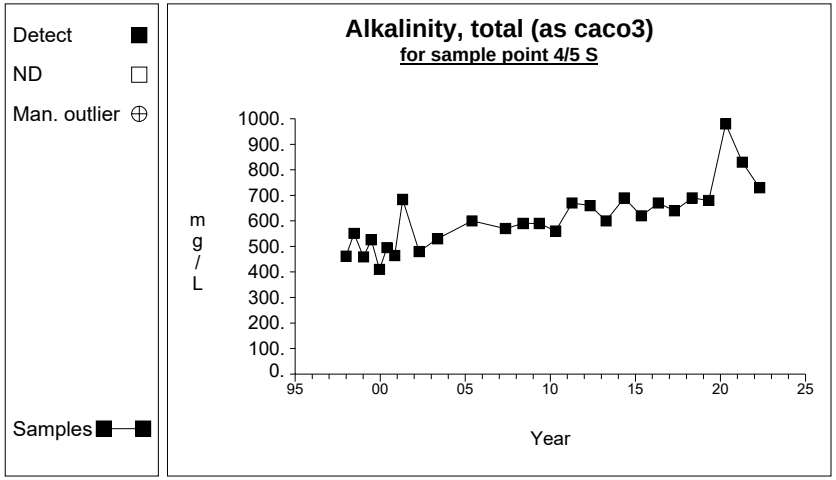


Graph 16

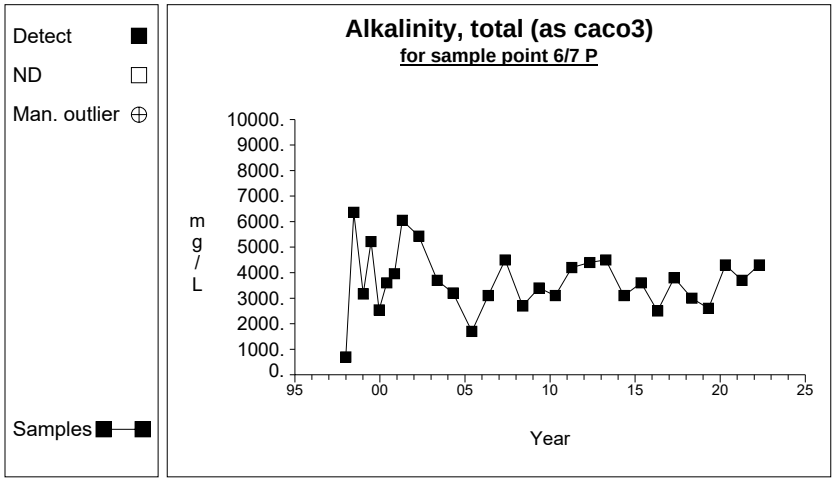
Time Series



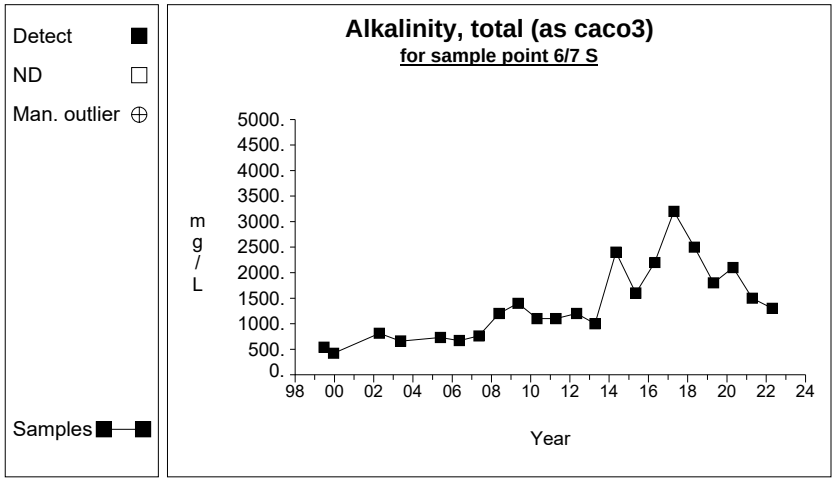
Graph 17



Graph 18

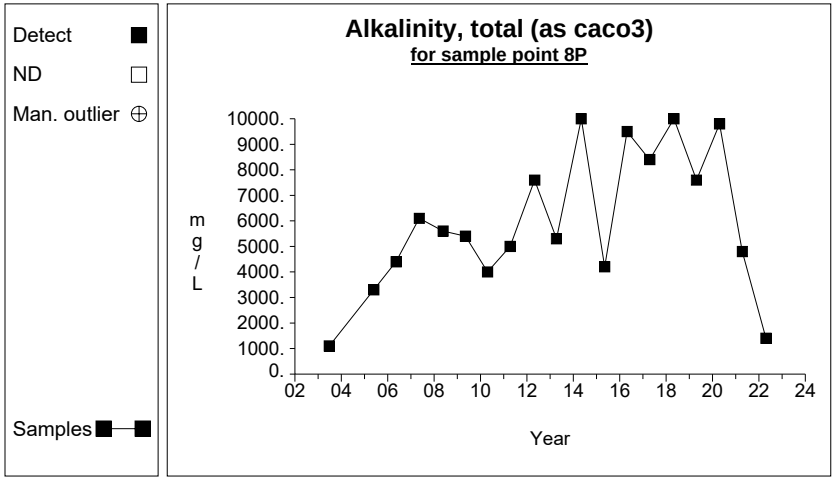


Graph 19

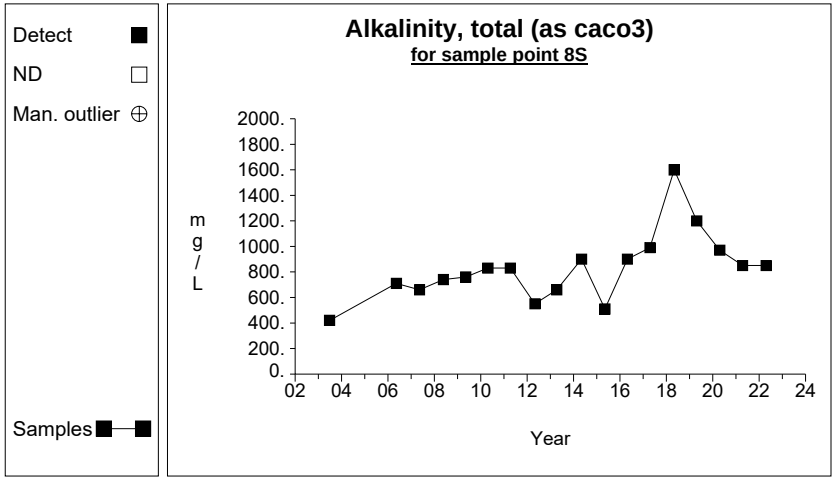


Graph 20

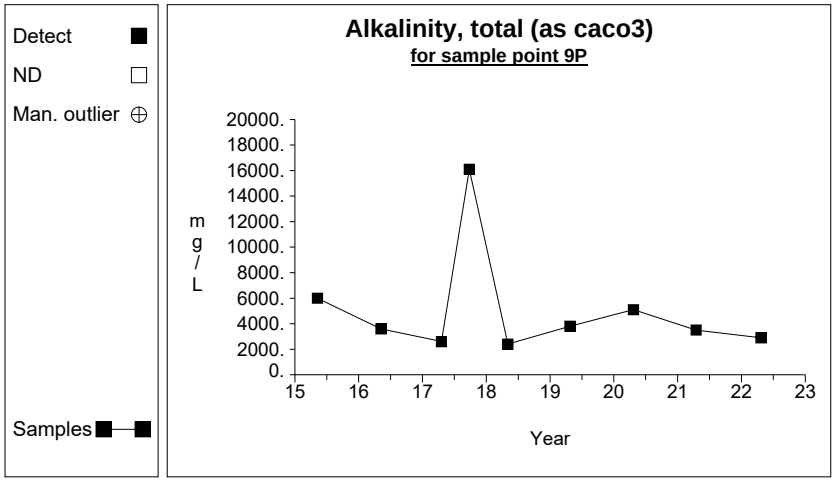
Time Series



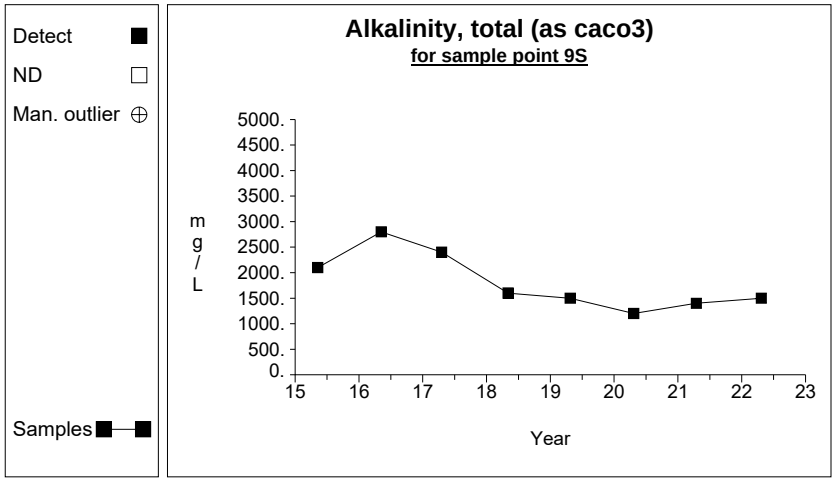
Graph 21



Graph 22

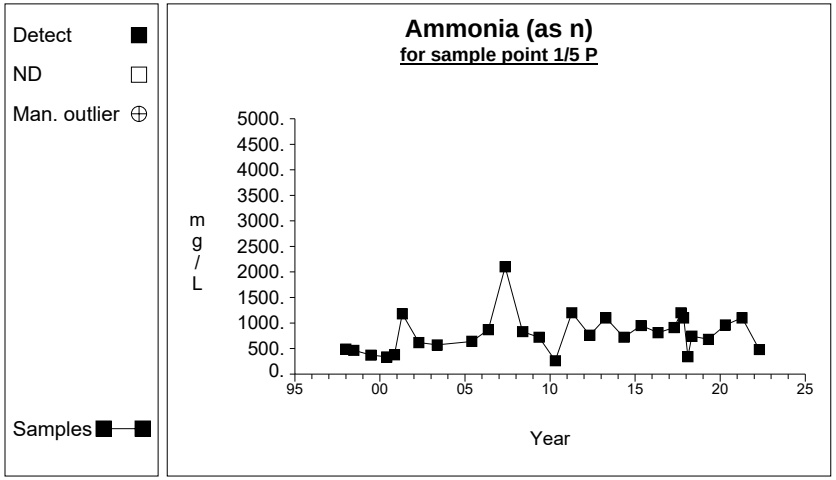


Graph 23

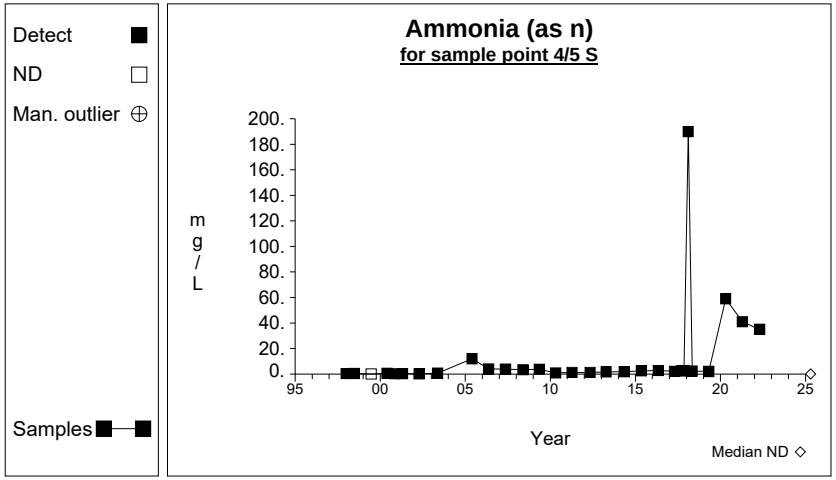


Graph 24

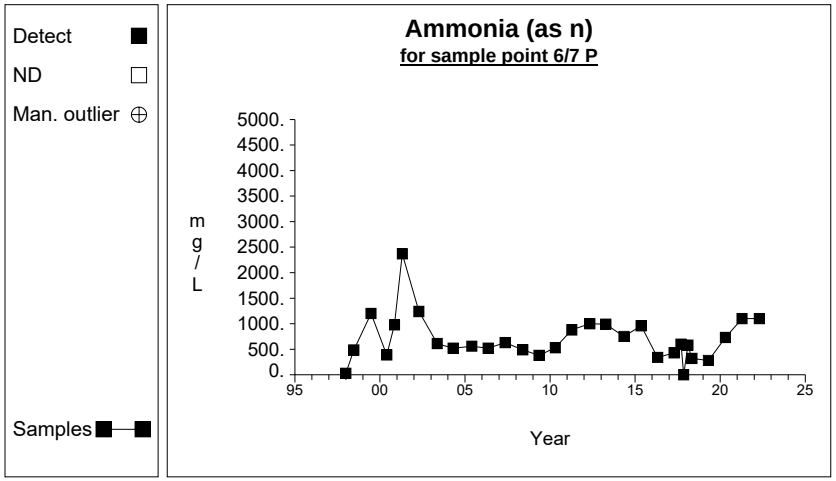
Time Series



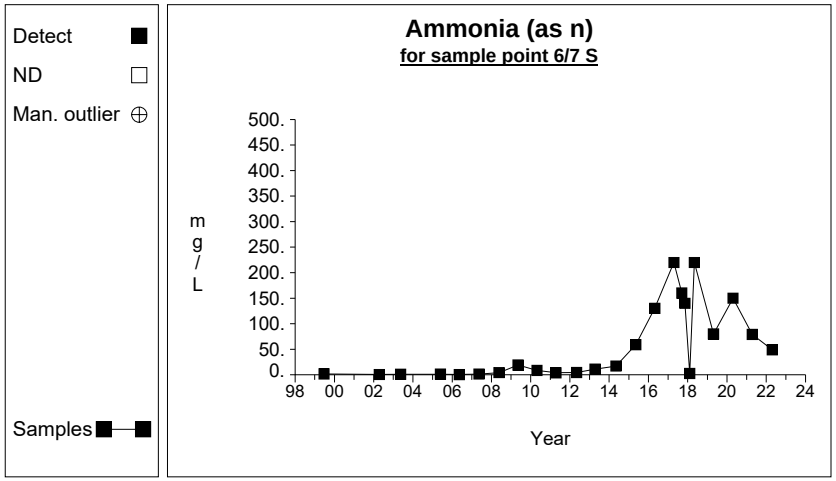
Graph 25



Graph 26

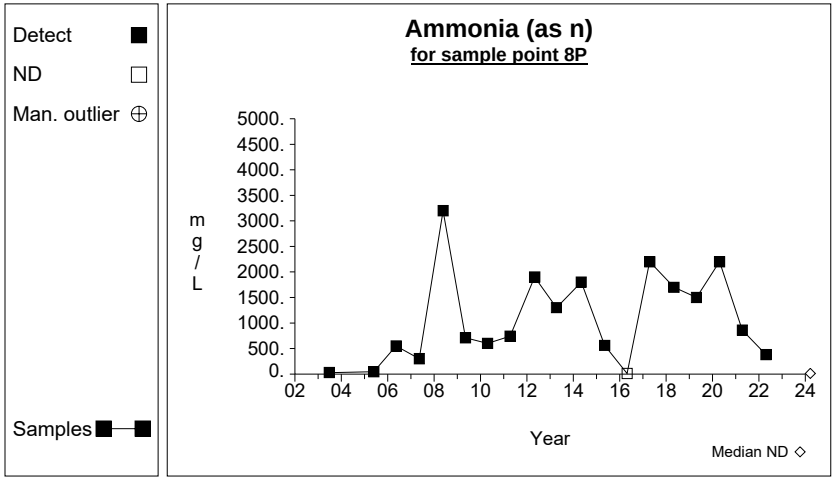


Graph 27

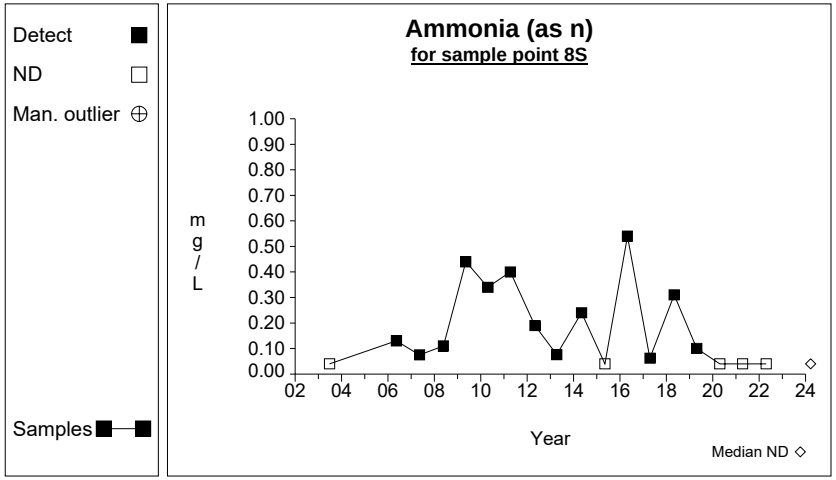


Graph 28

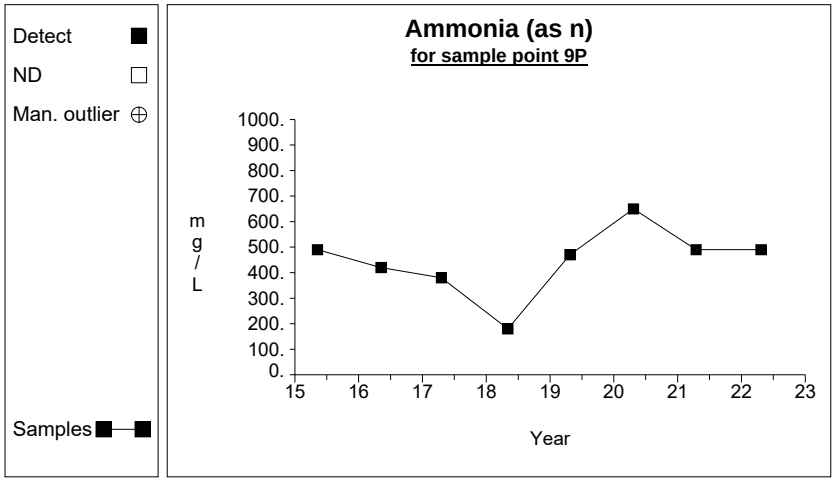
Time Series



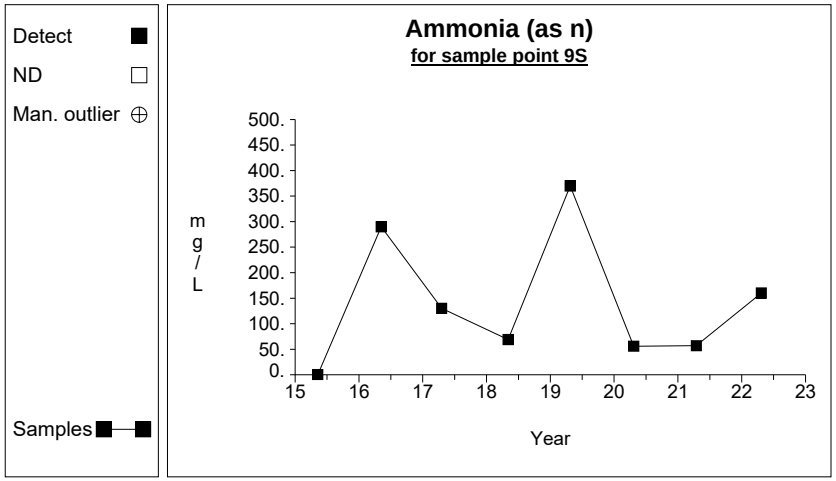
Graph 29



Graph 30

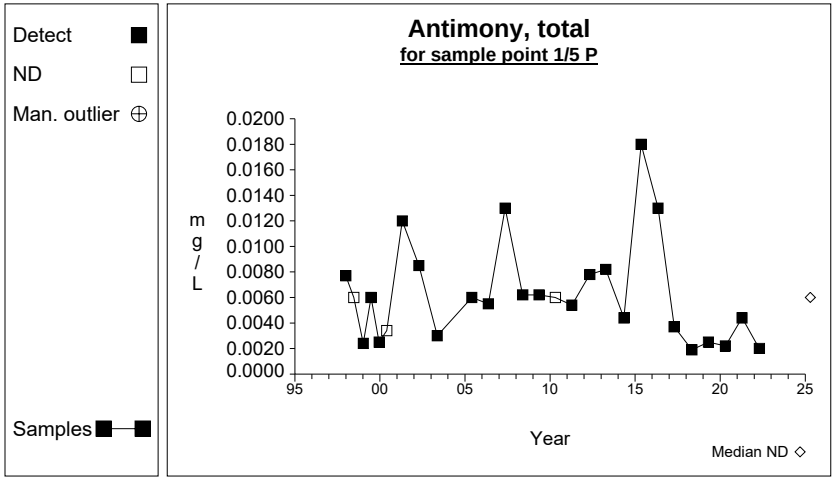


Graph 31

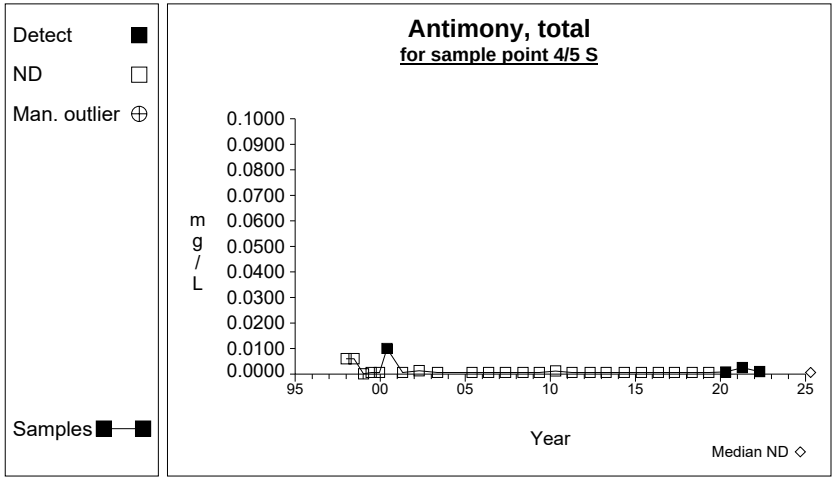


Graph 32

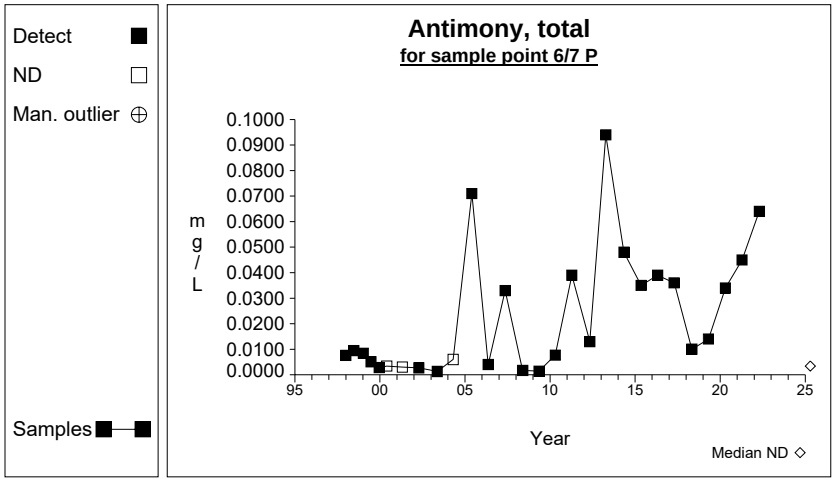
Time Series



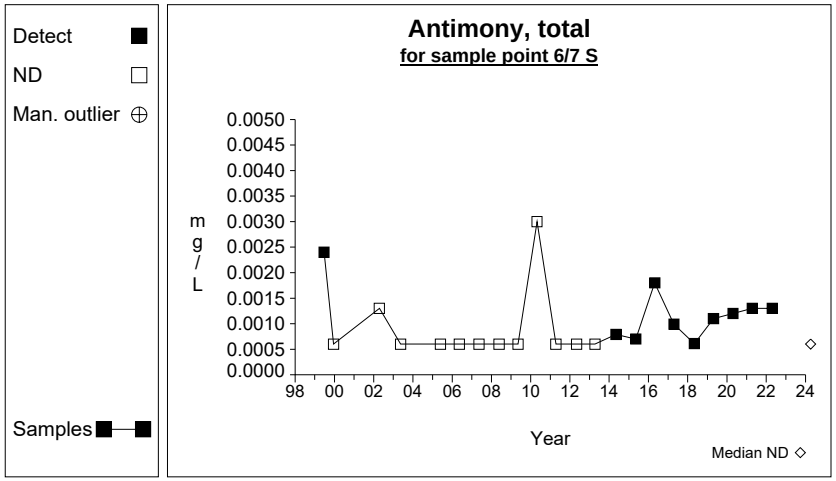
Graph 33



Graph 34

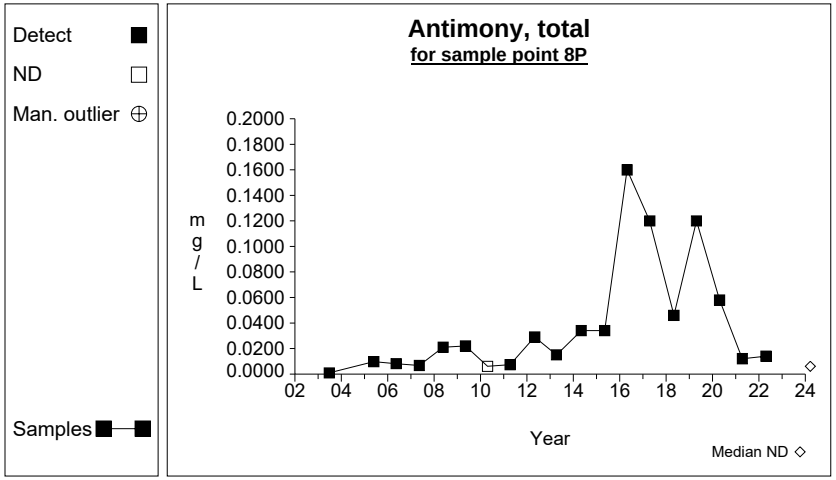


Graph 35

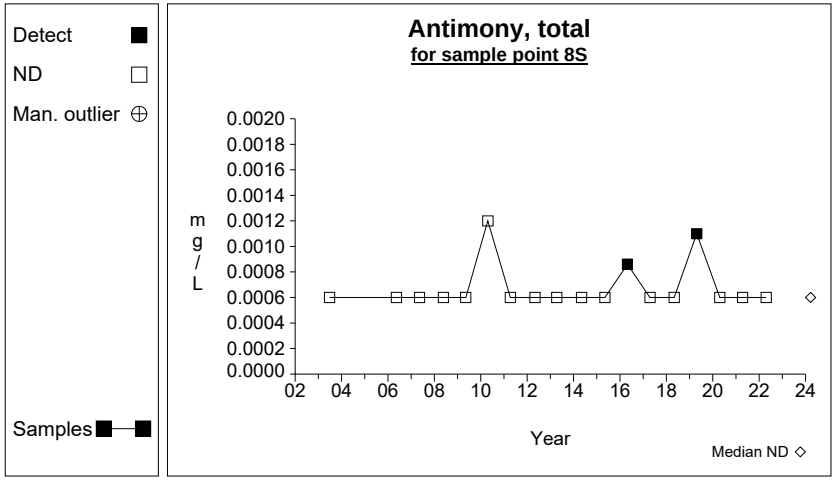


Graph 36

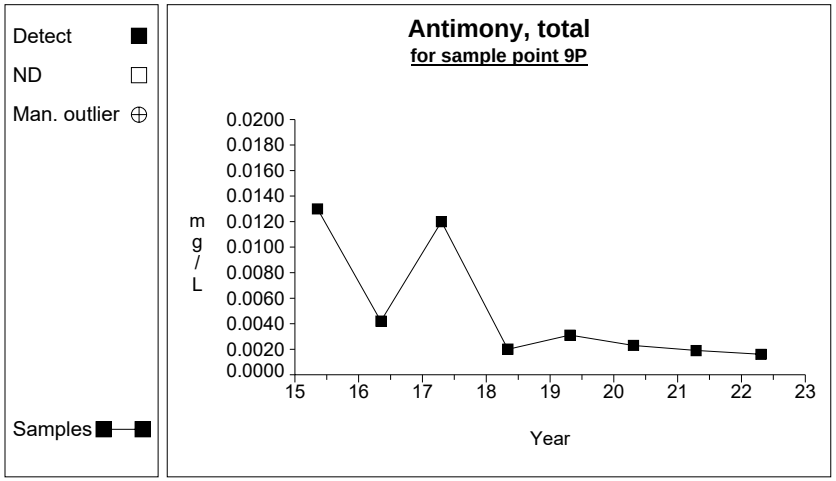
Time Series



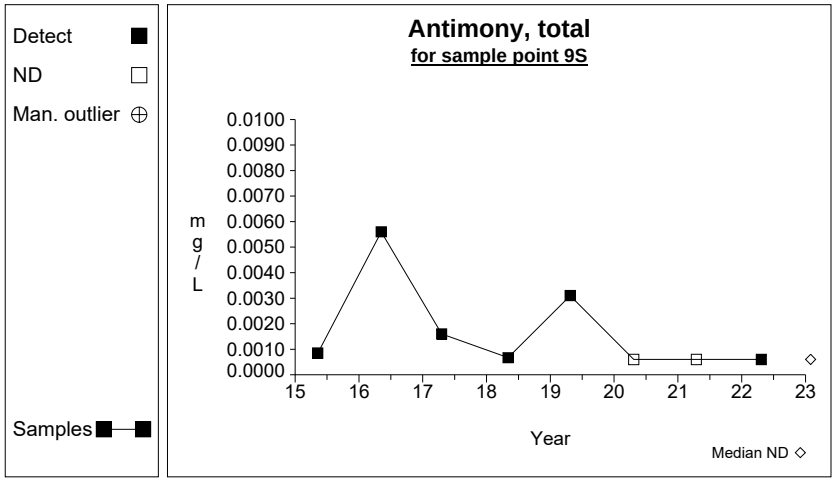
Graph 37



Graph 38

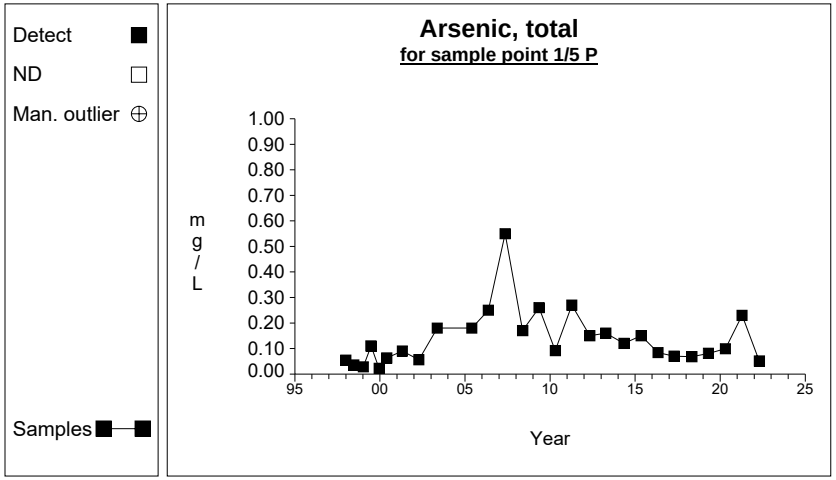


Graph 39

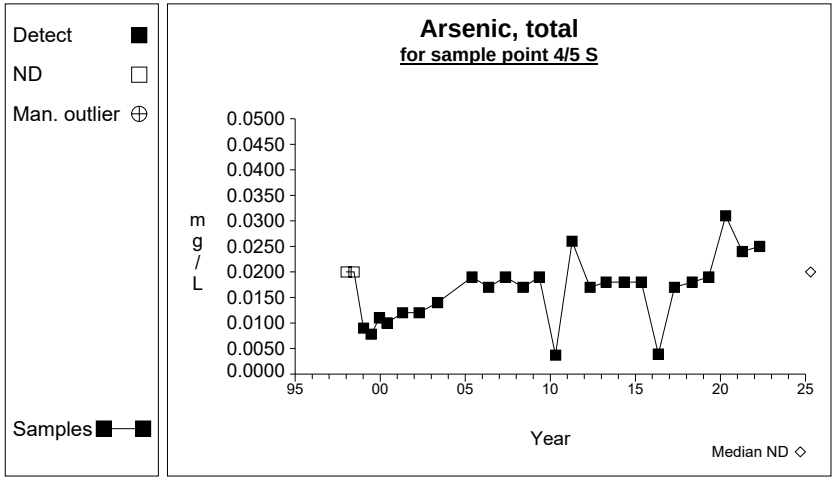


Graph 40

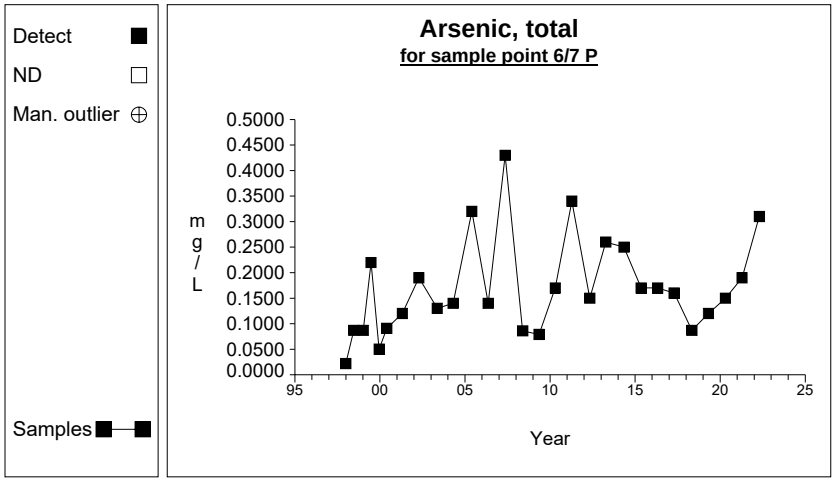
Time Series



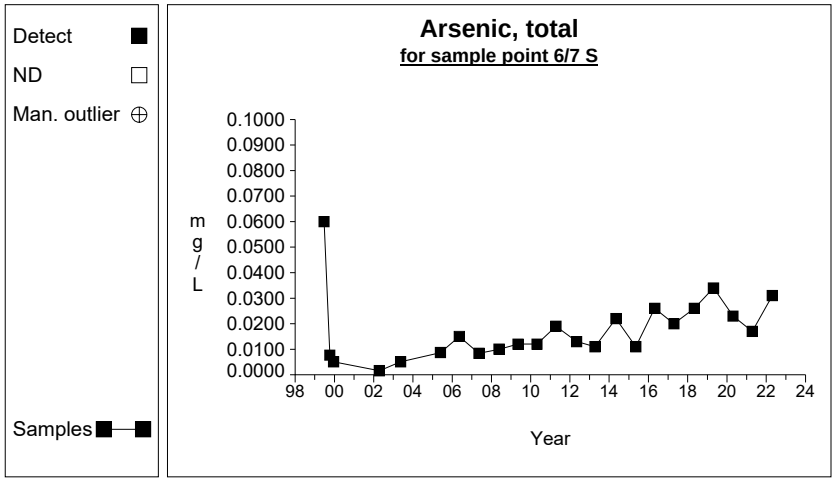
Graph 41



Graph 42

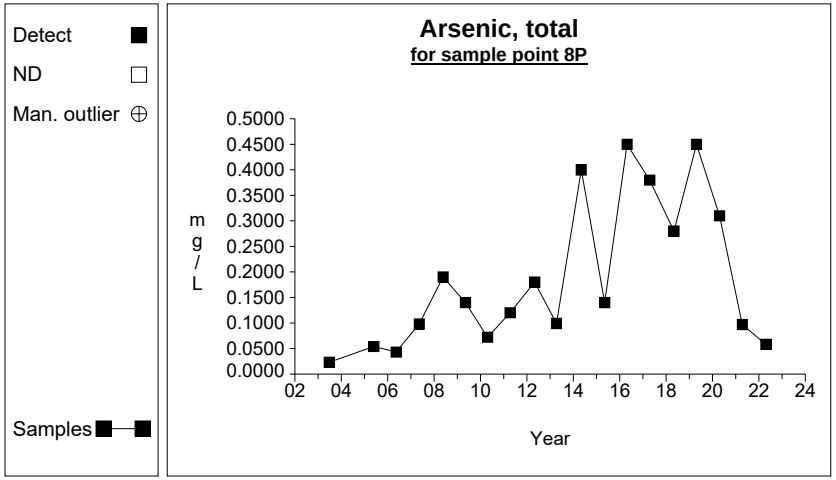


Graph 43

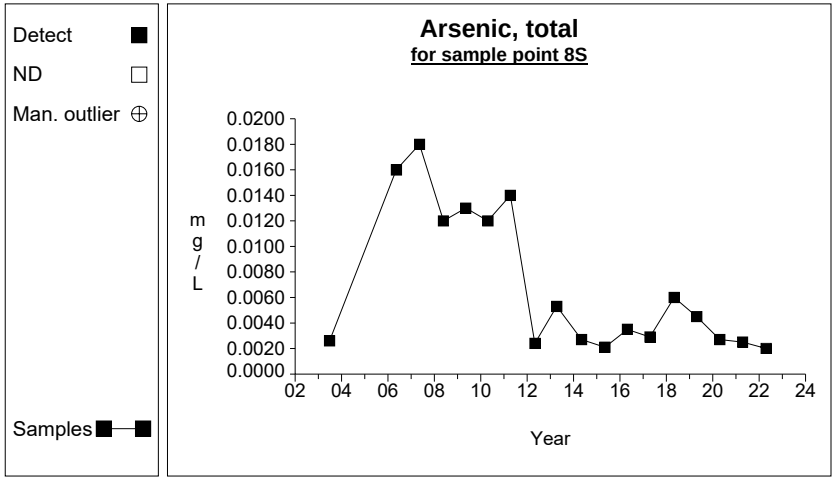


Graph 44

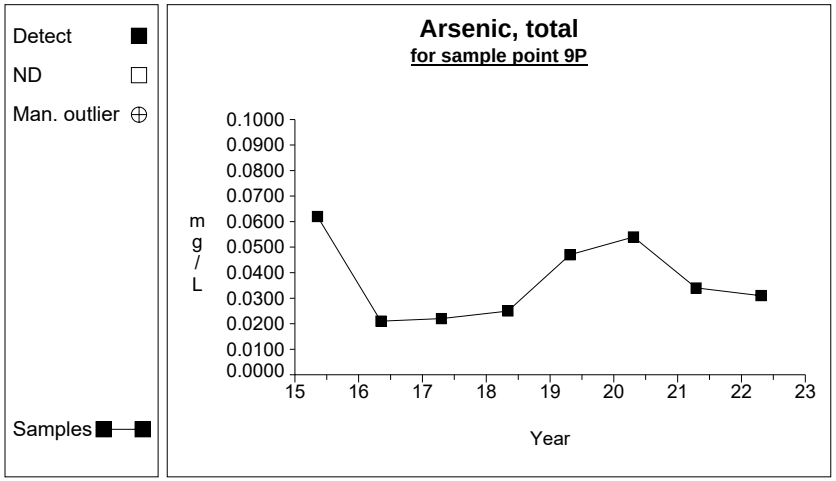
Time Series



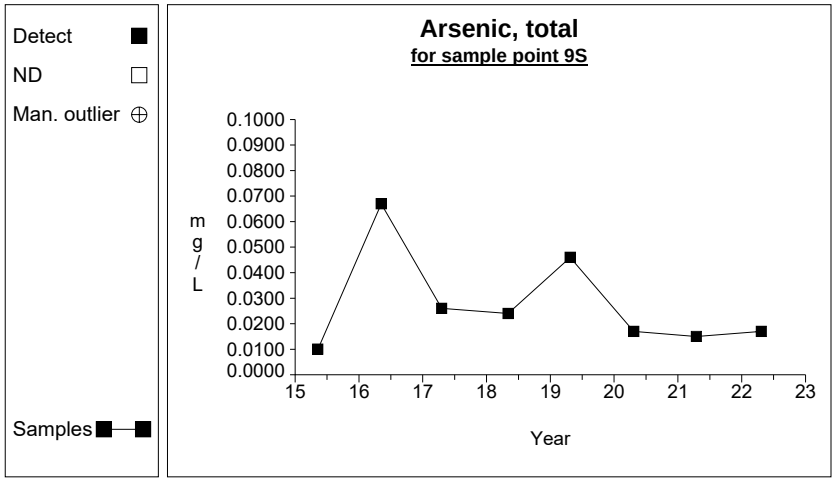
Graph 45



Graph 46

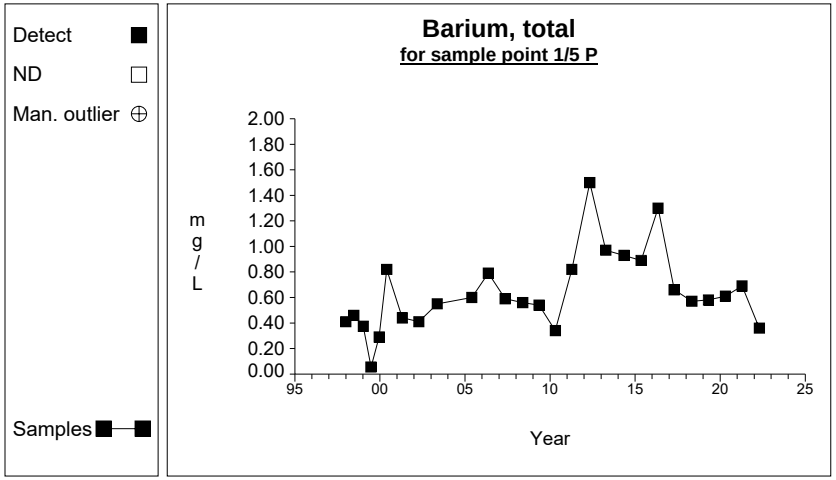


Graph 47

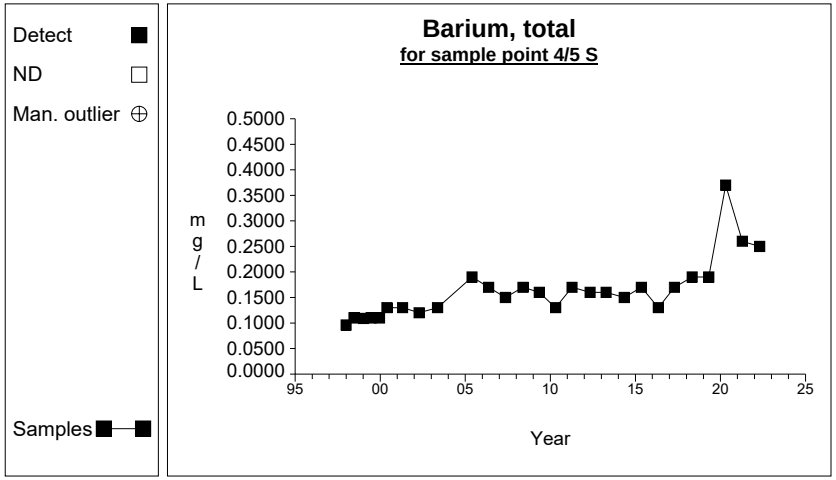


Graph 48

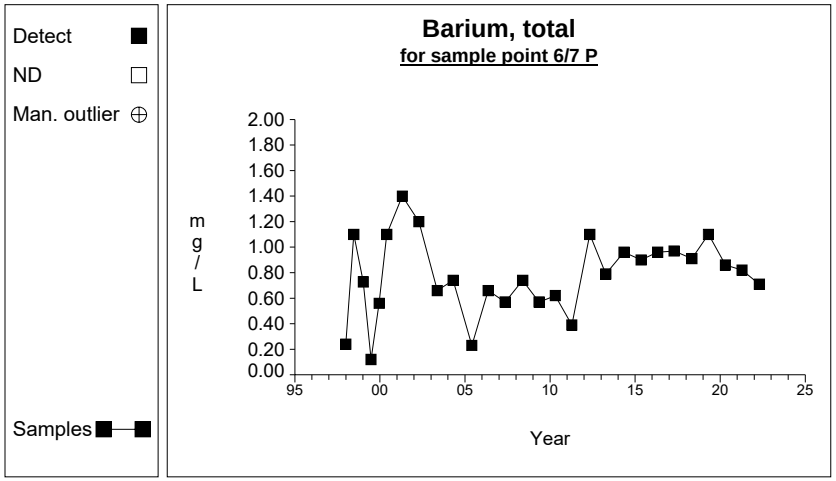
Time Series



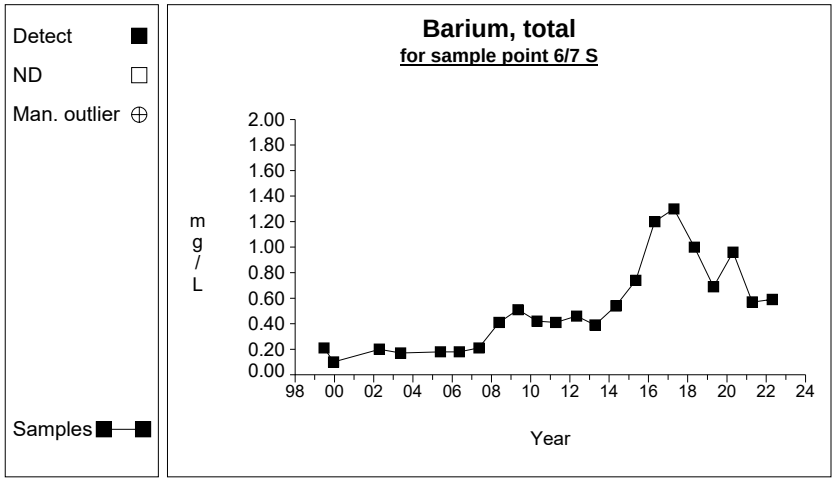
Graph 49



Graph 50

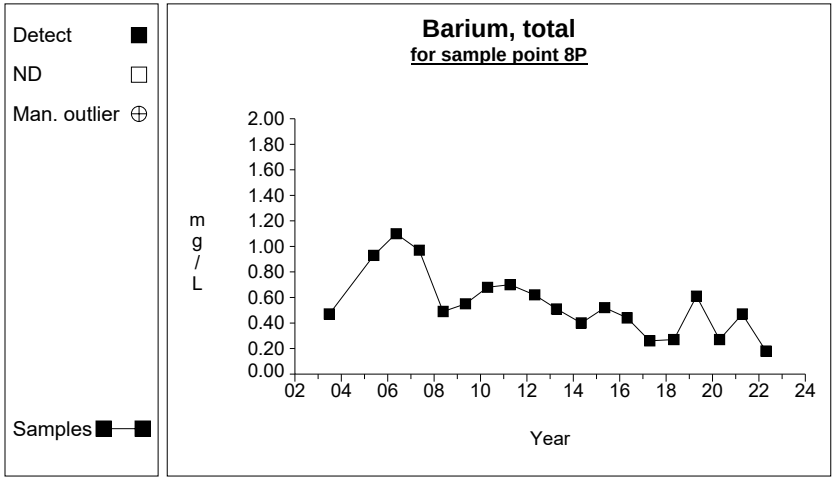


Graph 51

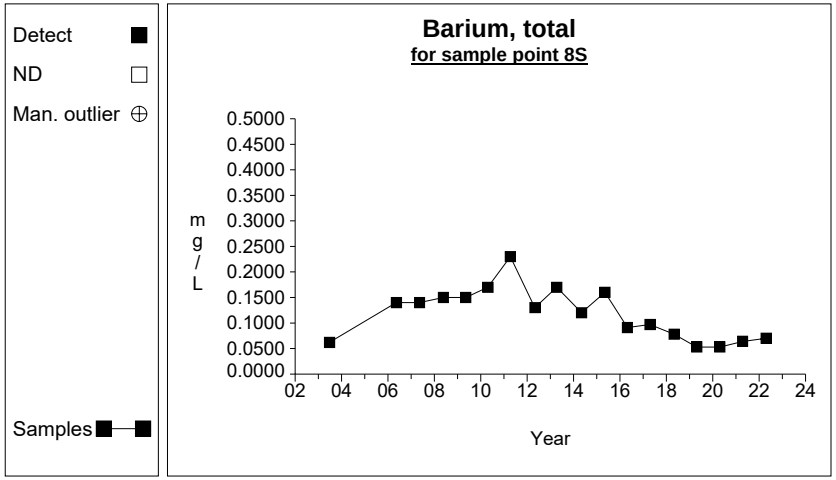


Graph 52

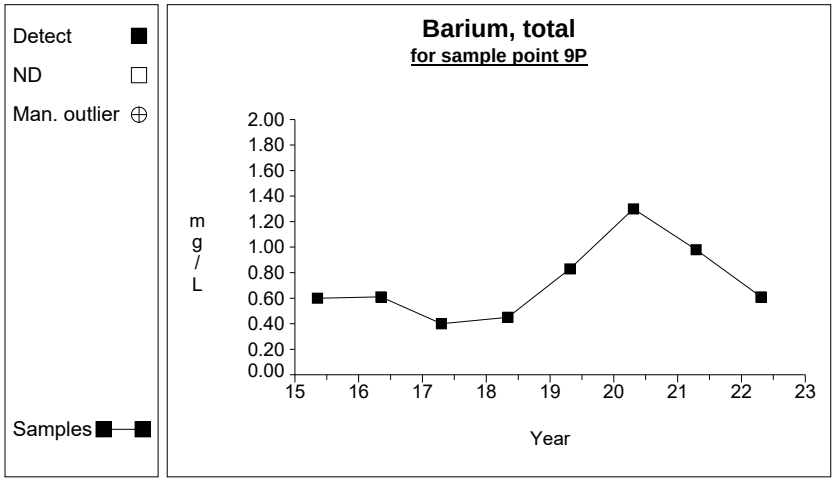
Time Series



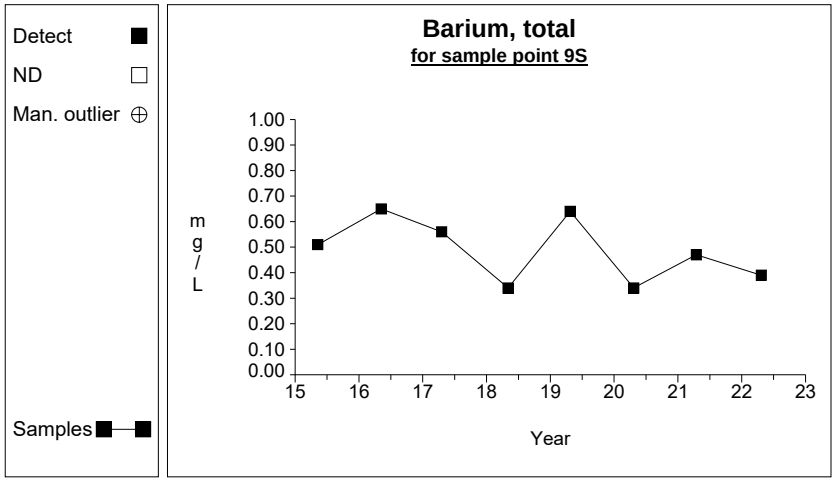
Graph 53



Graph 54

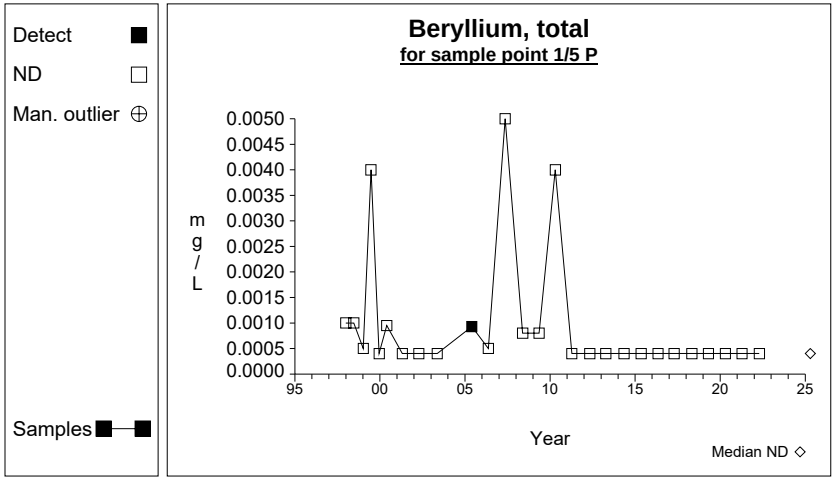


Graph 55

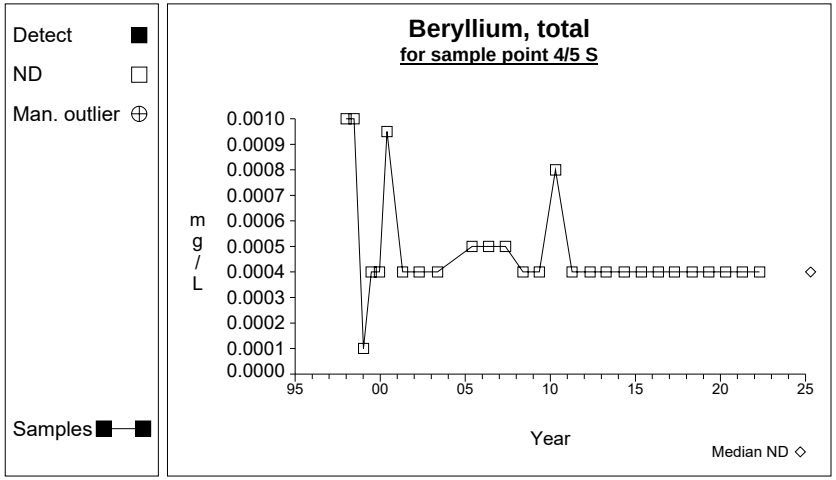


Graph 56

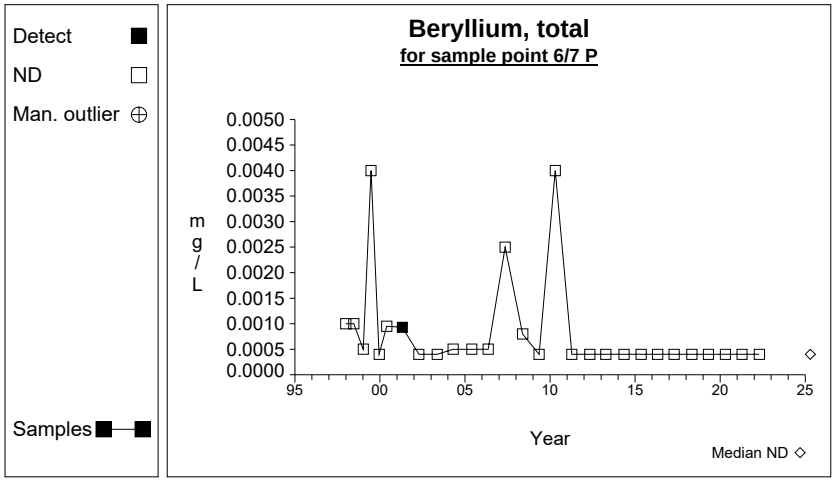
Time Series



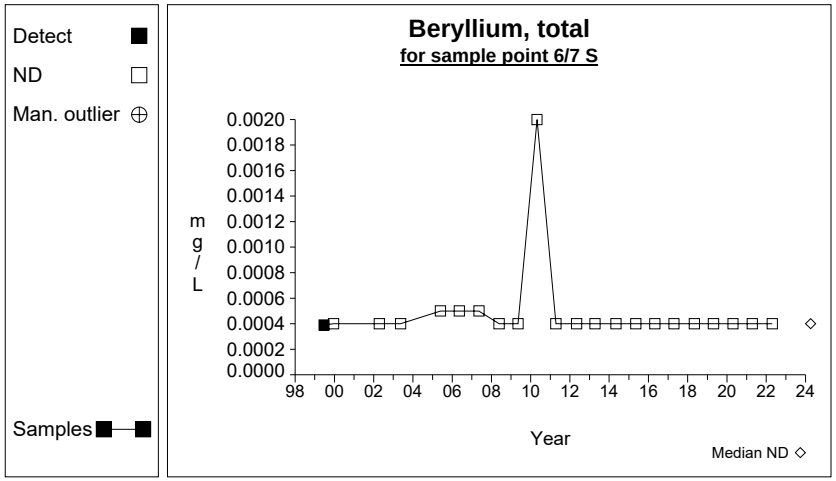
Graph 57



Graph 58

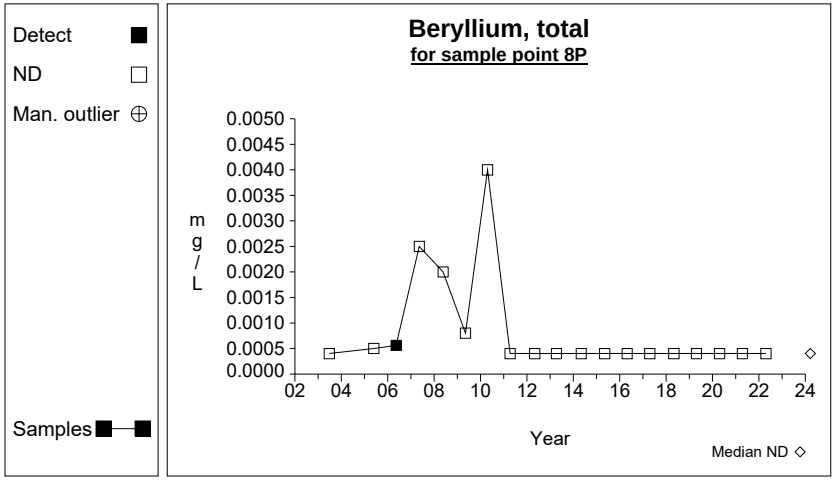


Graph 59

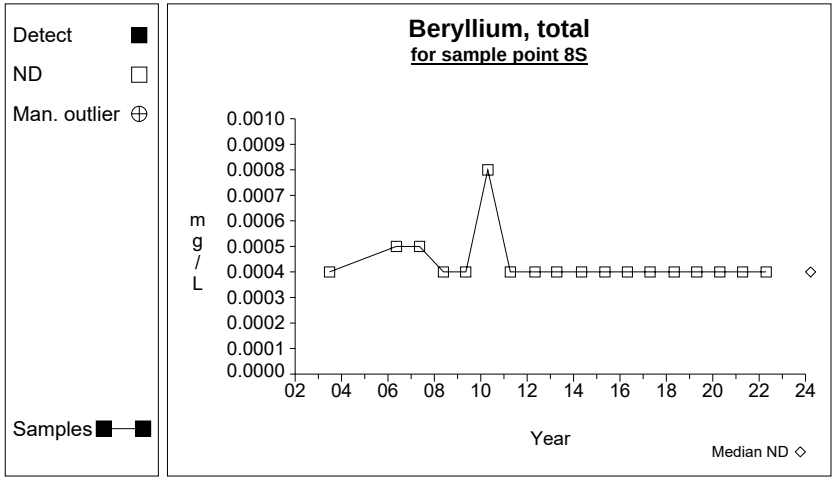


Graph 60

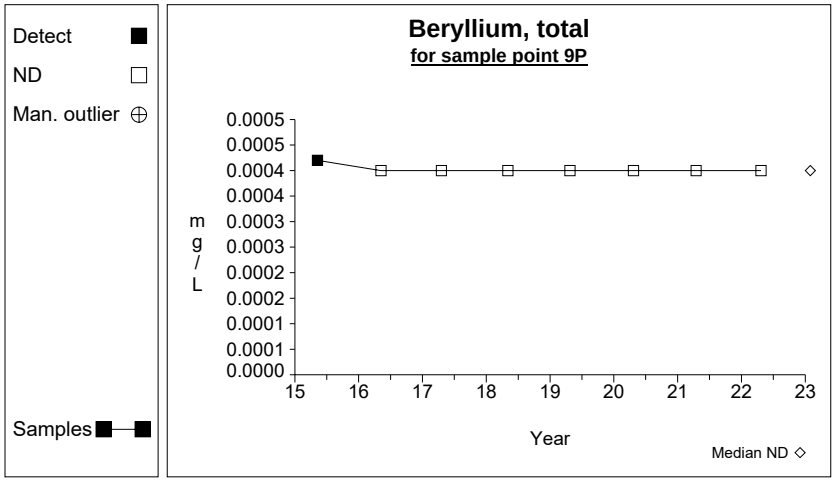
Time Series



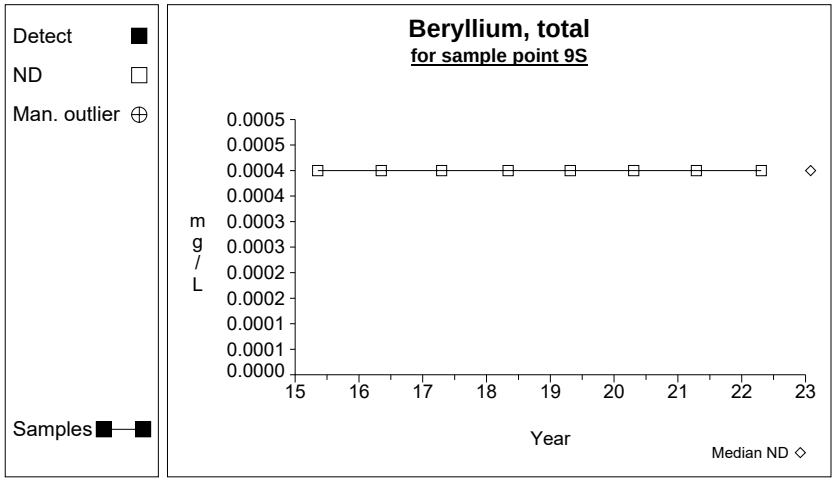
Graph 61



Graph 62

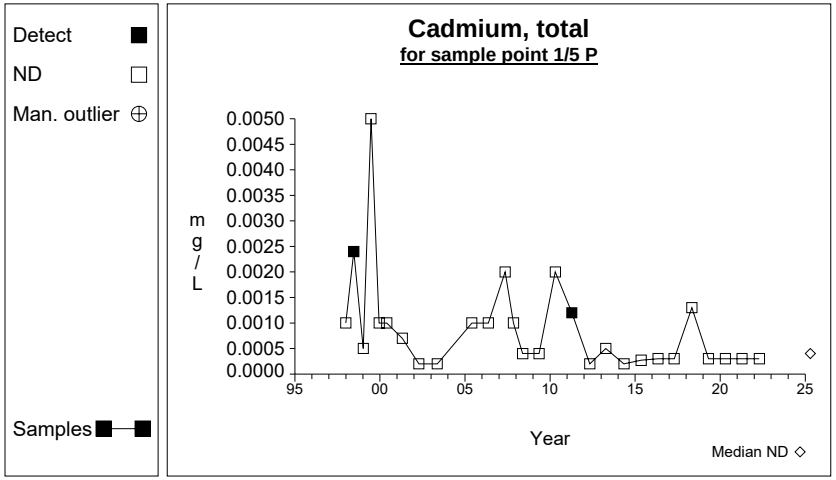


Graph 63

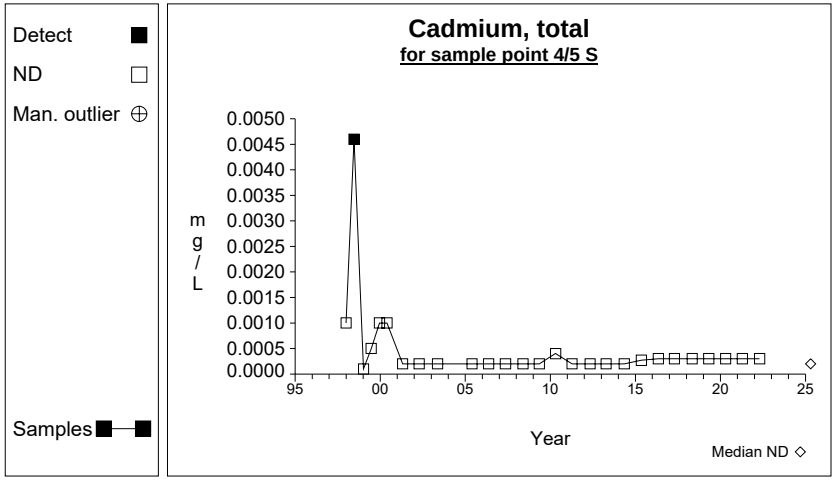


Graph 64

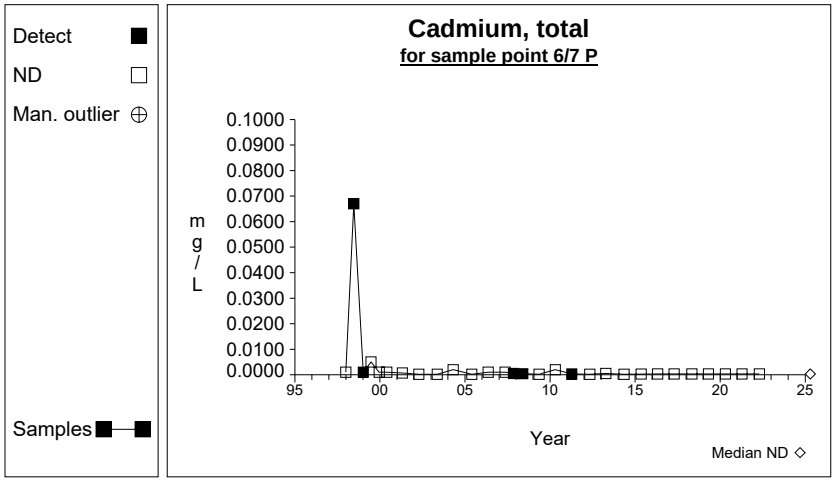
Time Series



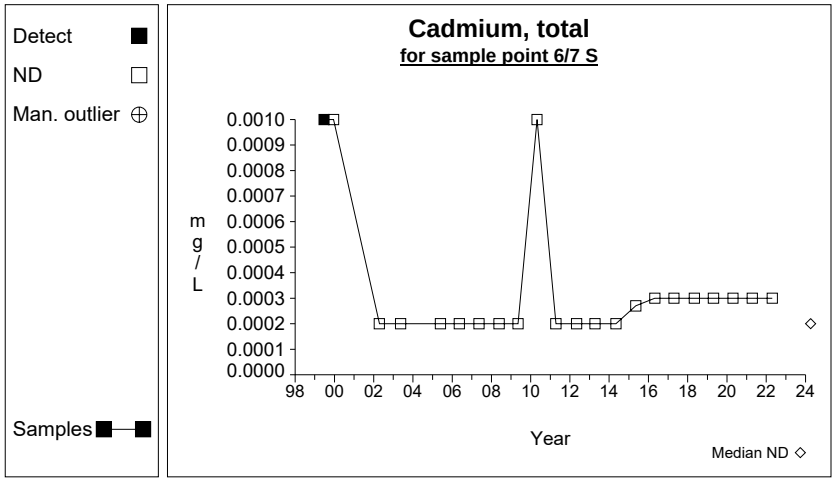
Graph 65



Graph 66

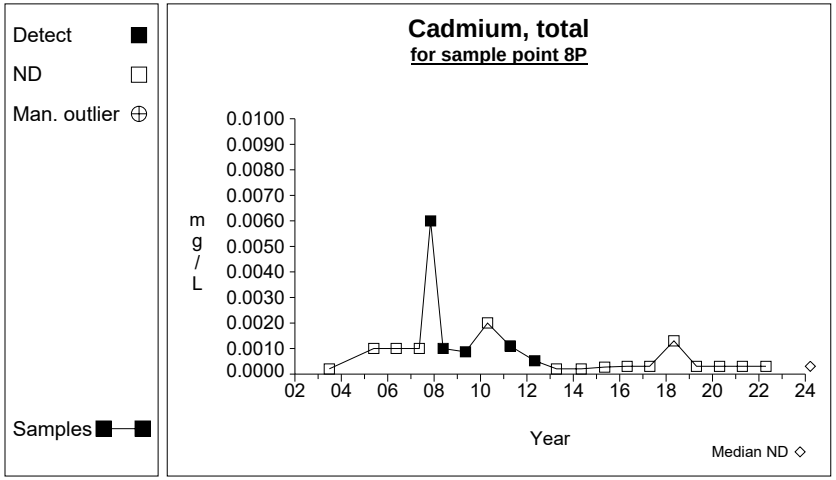


Graph 67

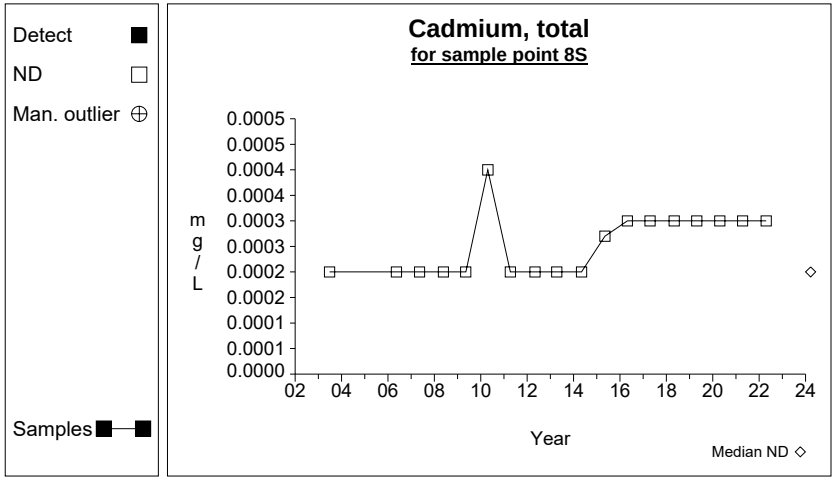


Graph 68

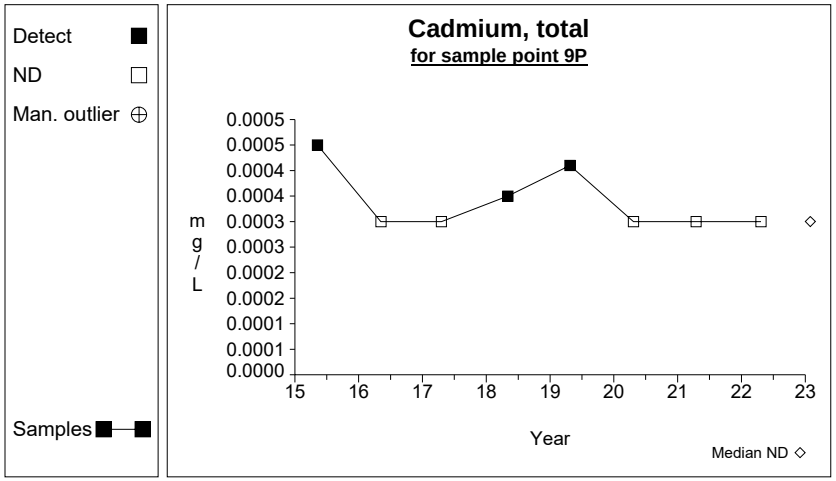
Time Series



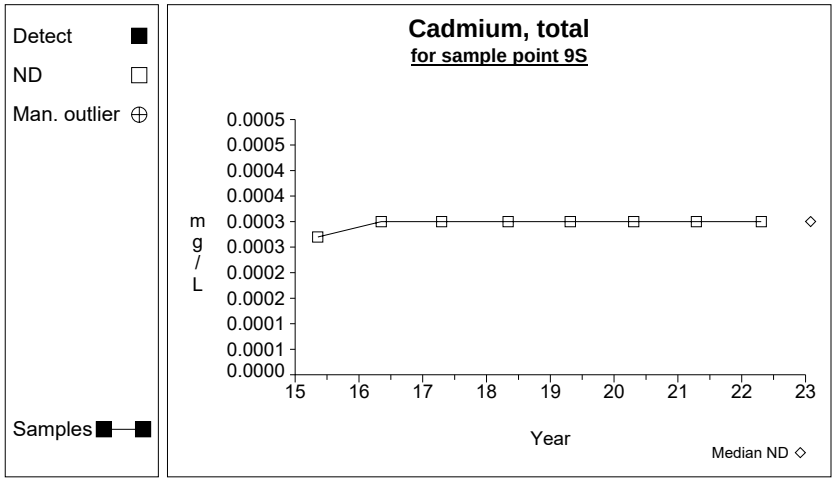
Graph 69



Graph 70

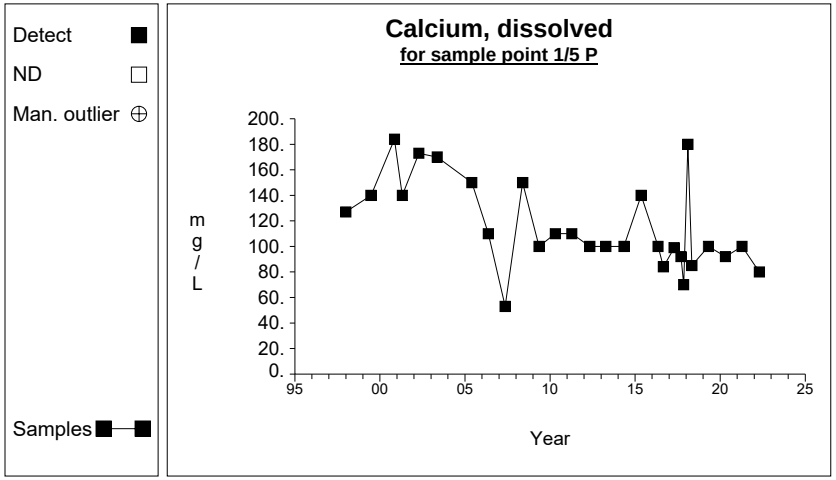


Graph 71

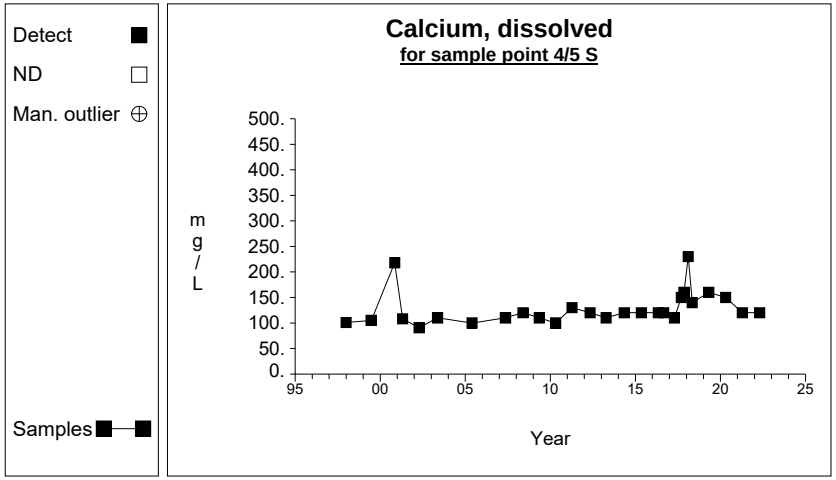


Graph 72

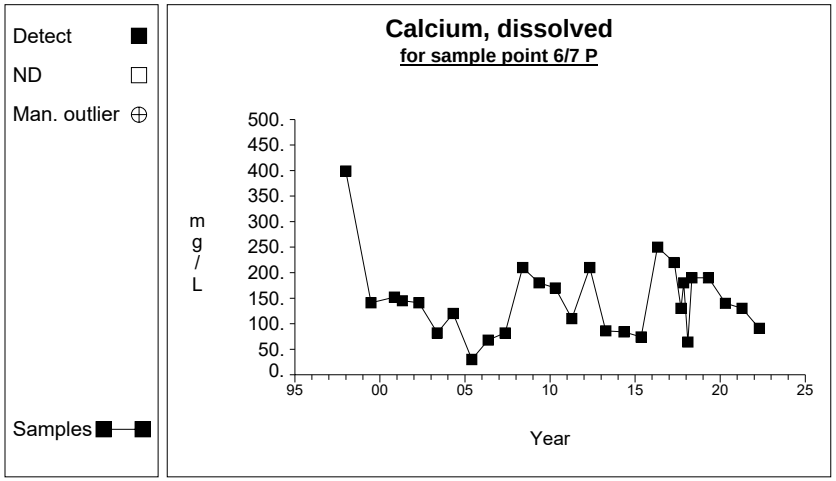
Time Series



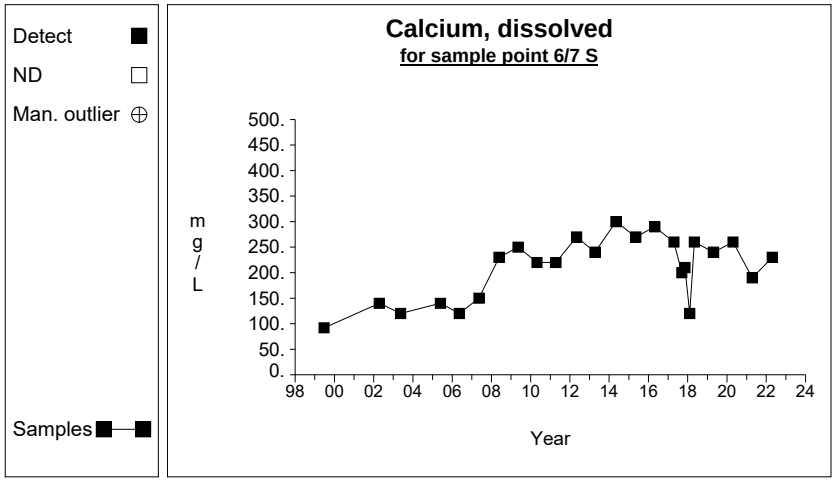
Graph 73



Graph 74

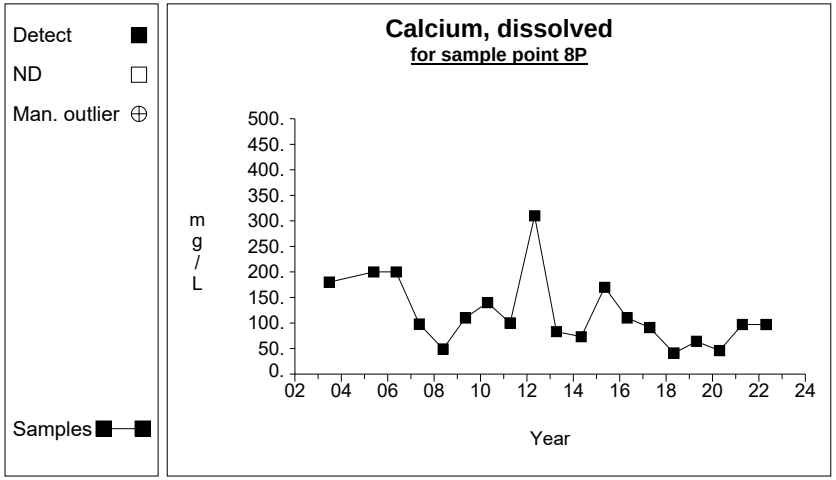


Graph 75

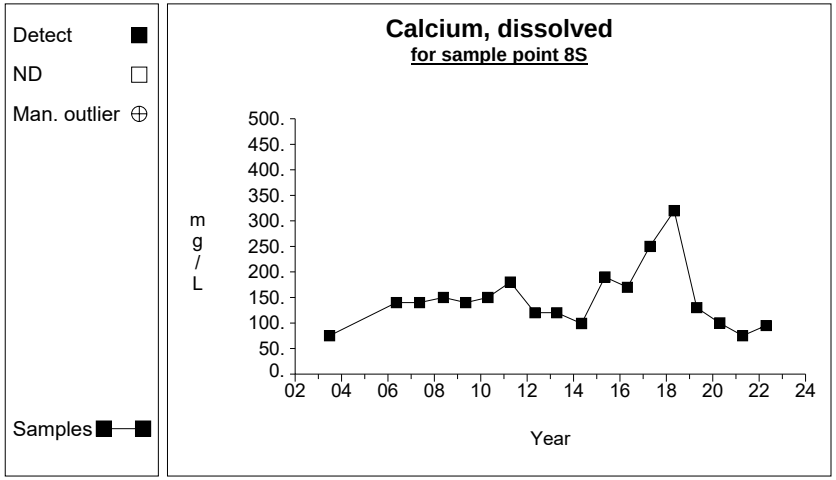


Graph 76

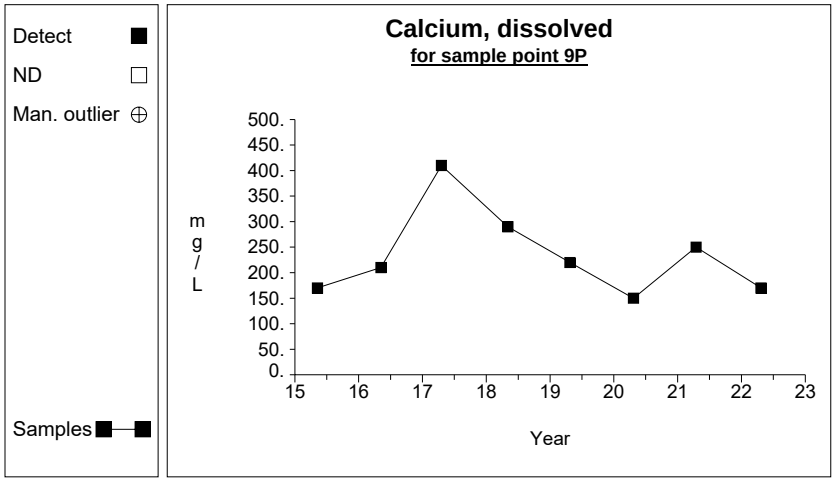
Time Series



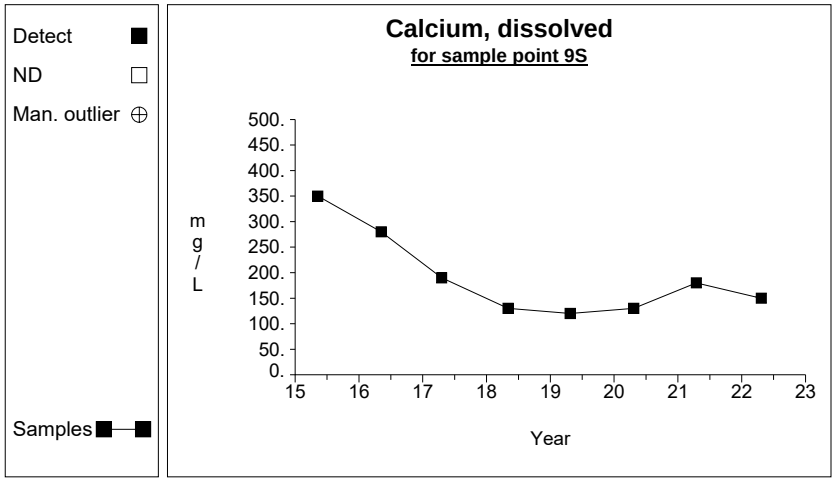
Graph 77



Graph 78

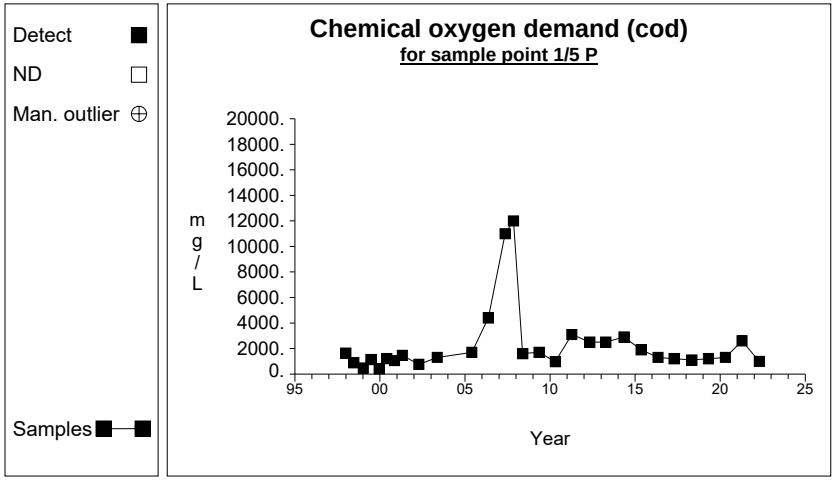


Graph 79

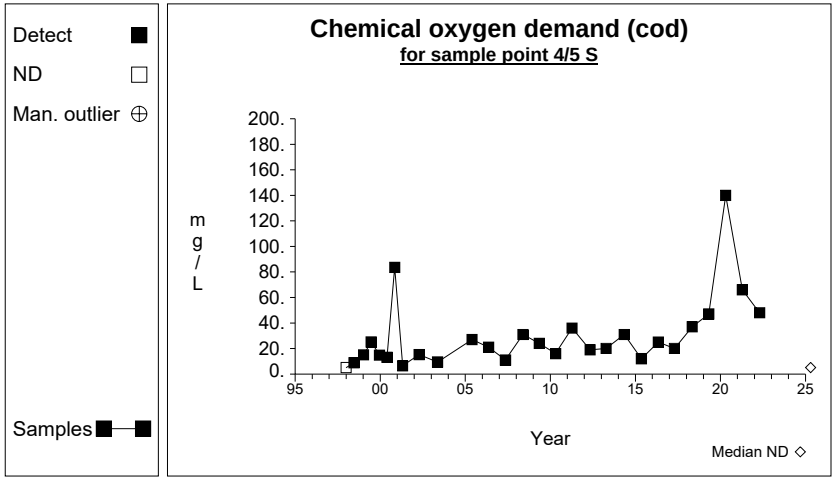


Graph 80

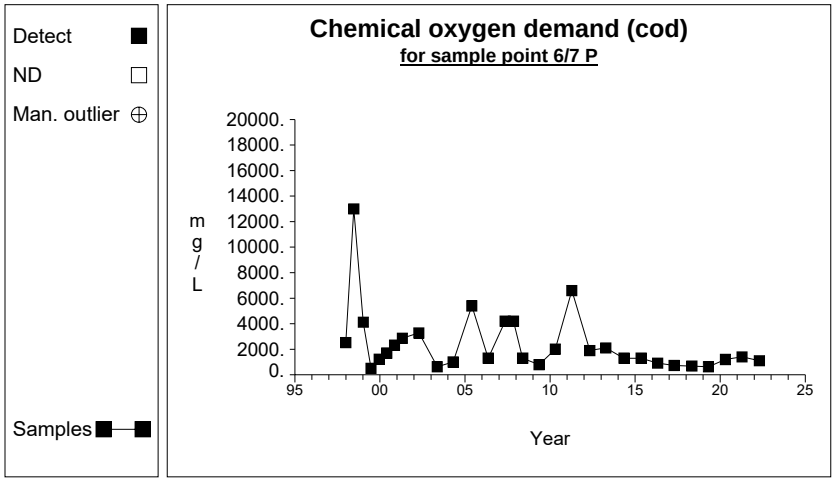
Time Series



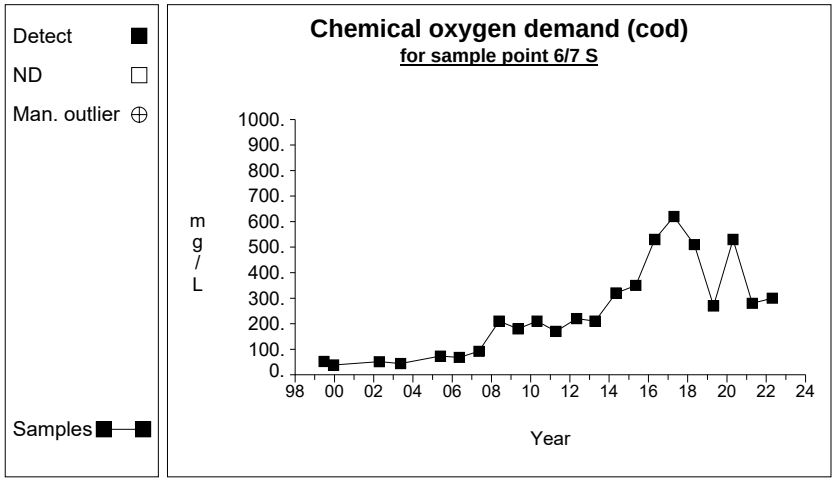
Graph 81



Graph 82

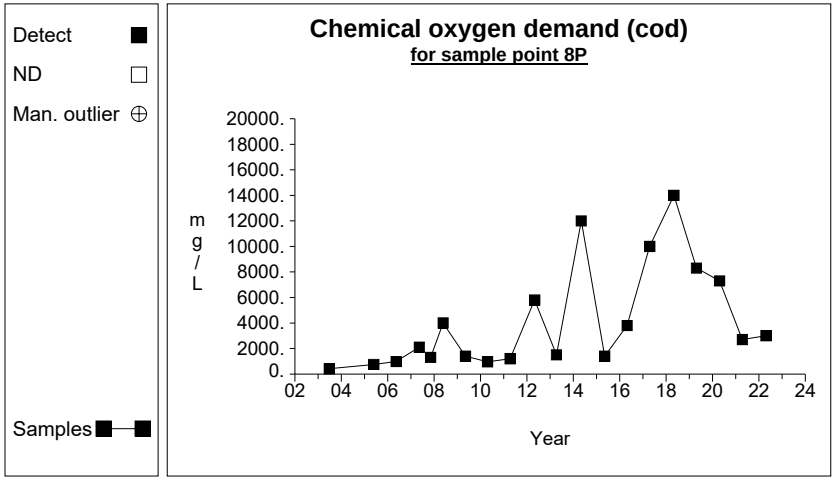


Graph 83

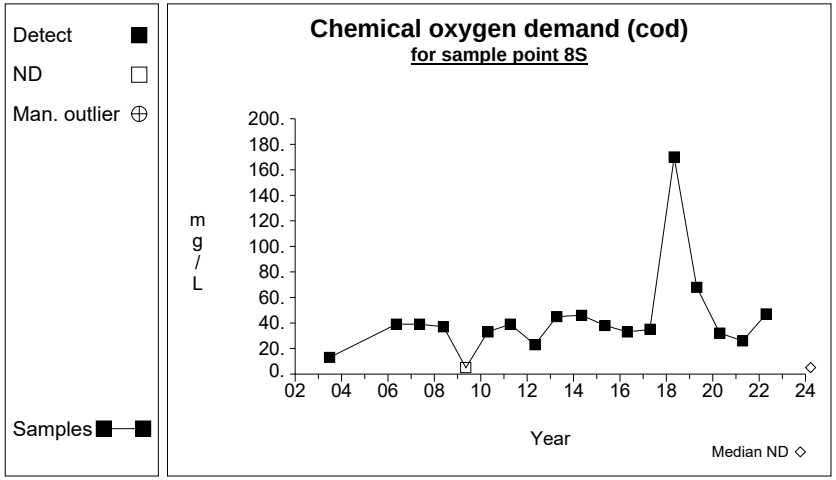


Graph 84

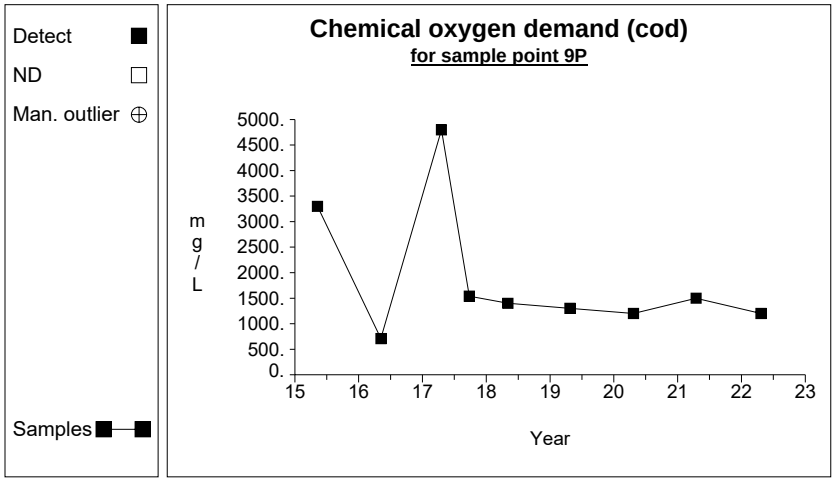
Time Series



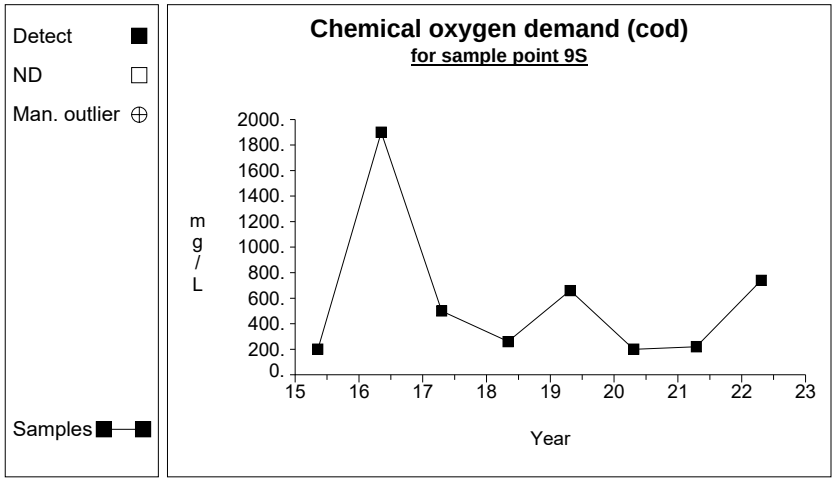
Graph 85



Graph 86

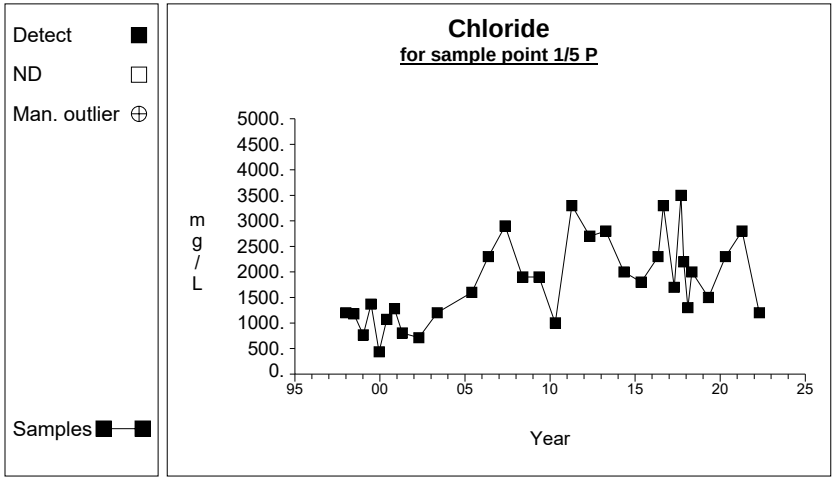


Graph 87

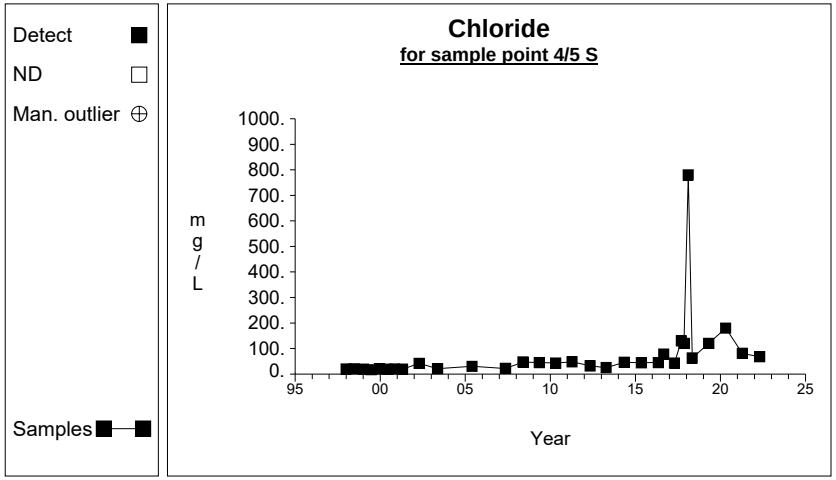


Graph 88

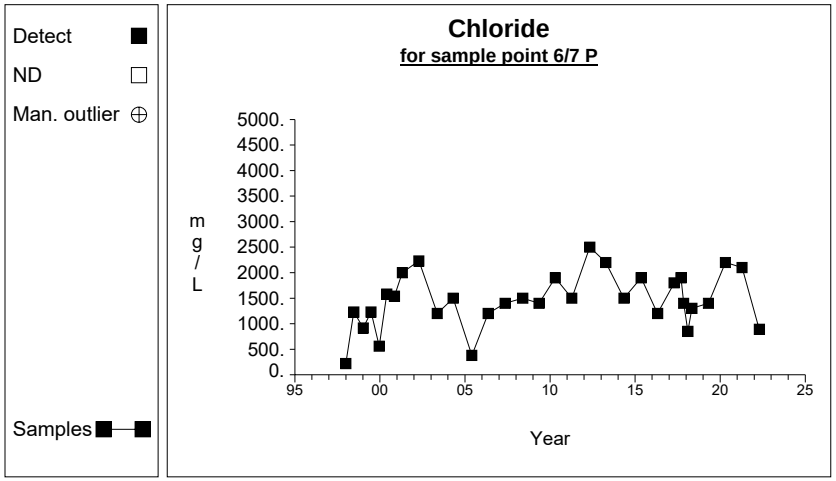
Time Series



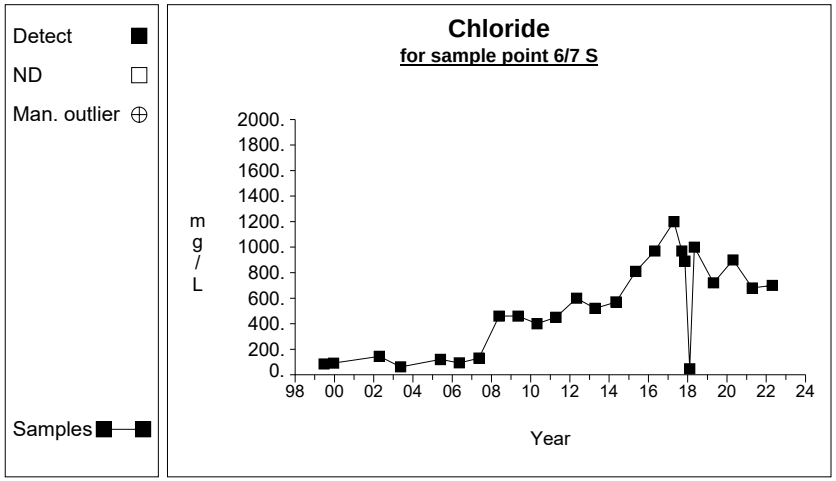
Graph 89



Graph 90

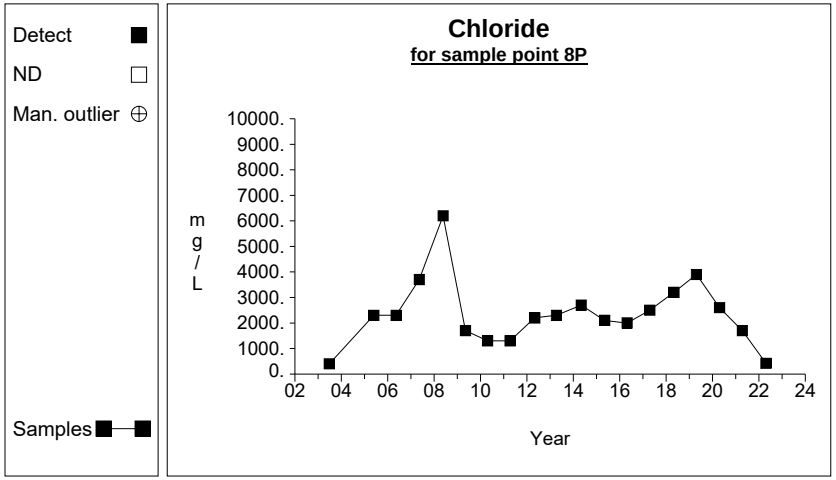


Graph 91

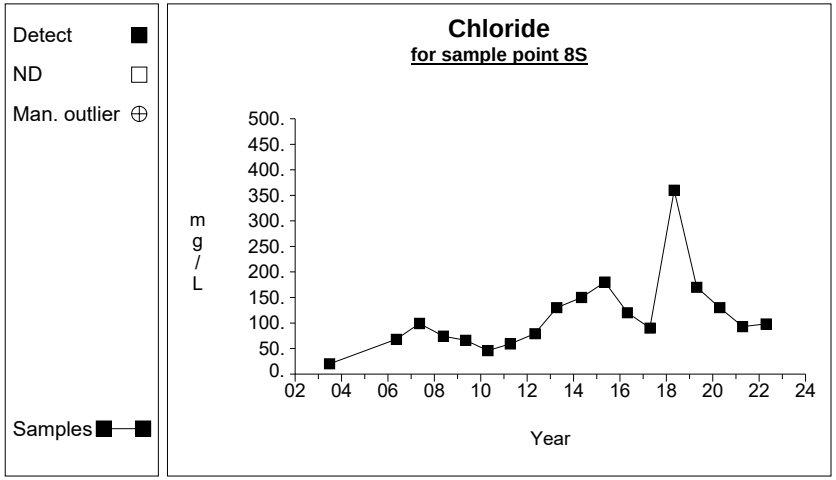


Graph 92

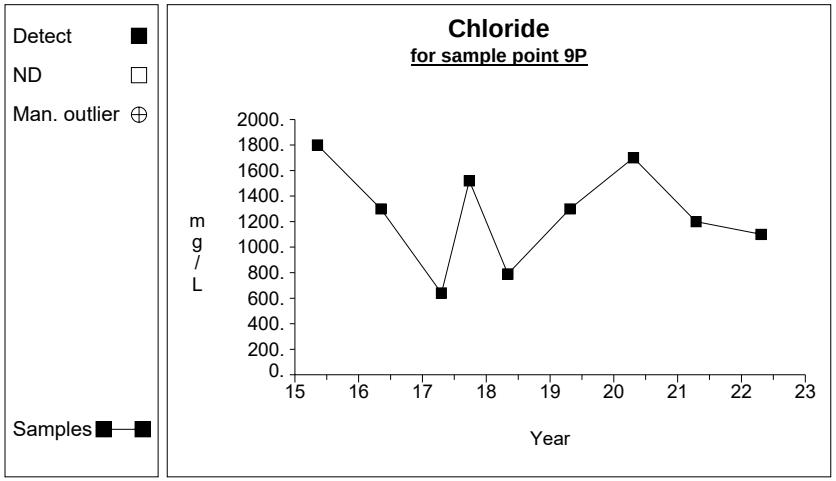
Time Series



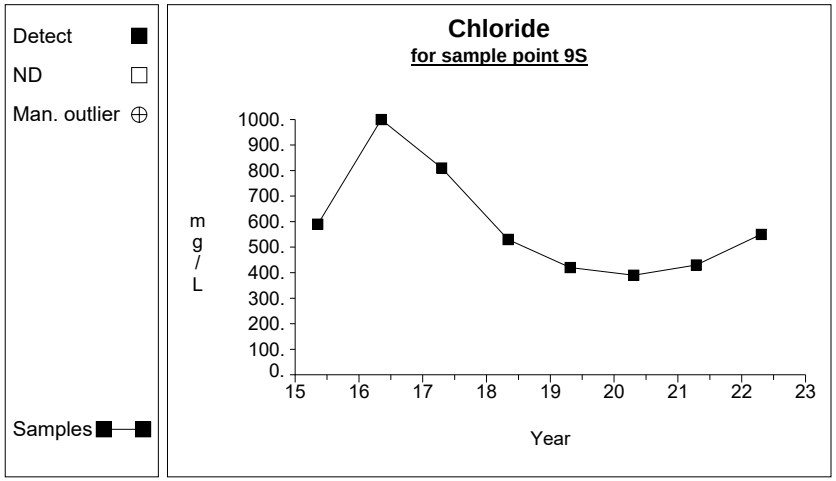
Graph 93



Graph 94

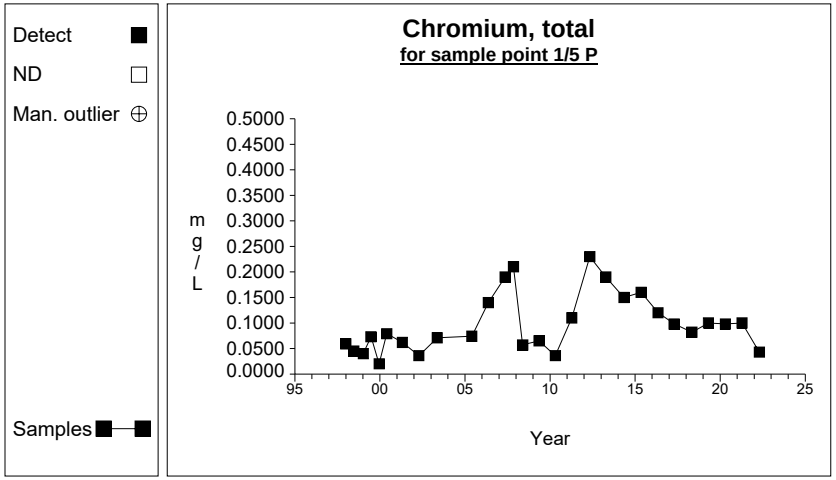


Graph 95

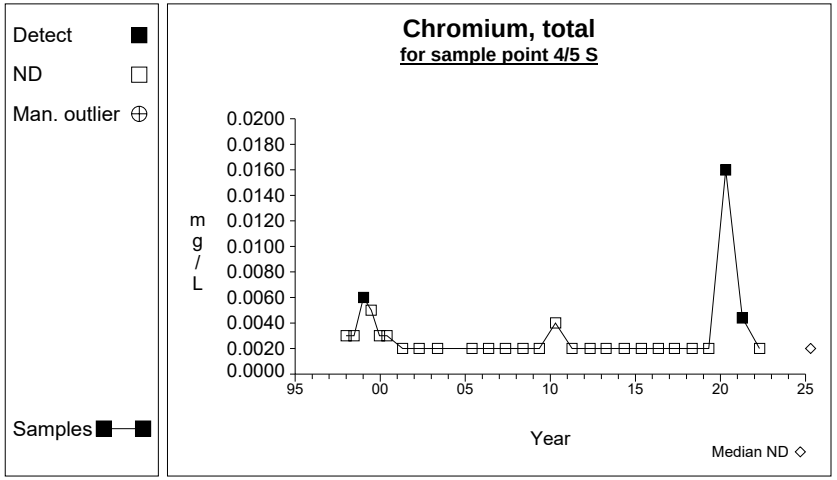


Graph 96

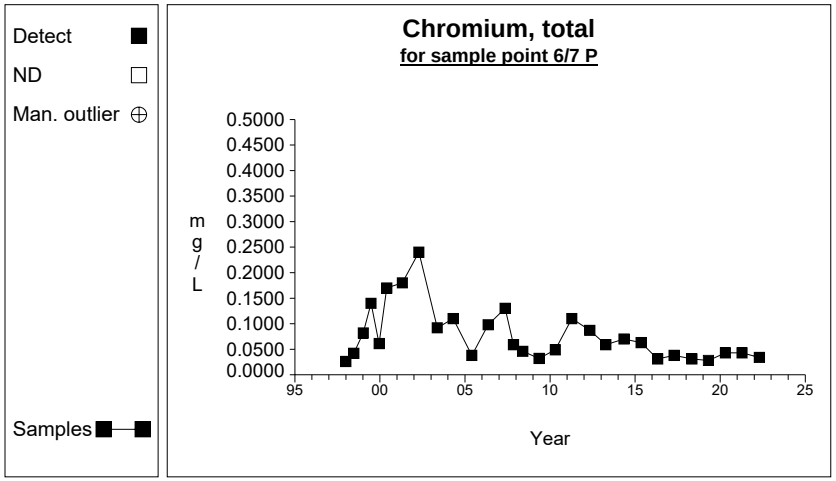
Time Series



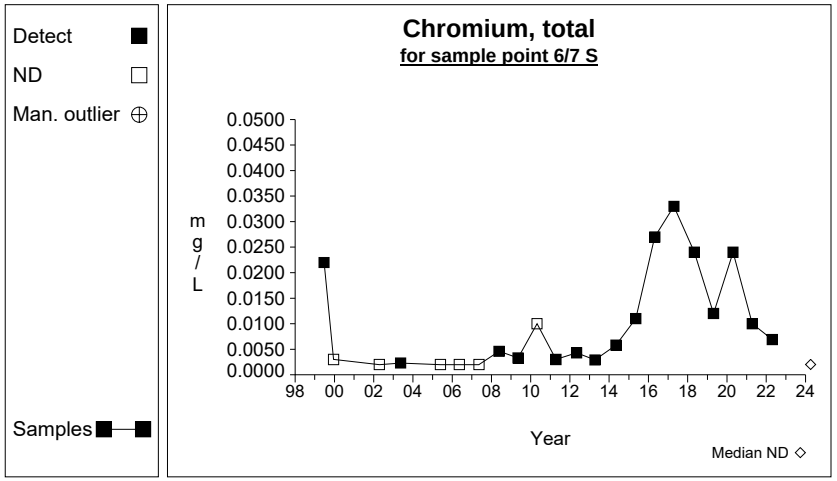
Graph 97



Graph 98

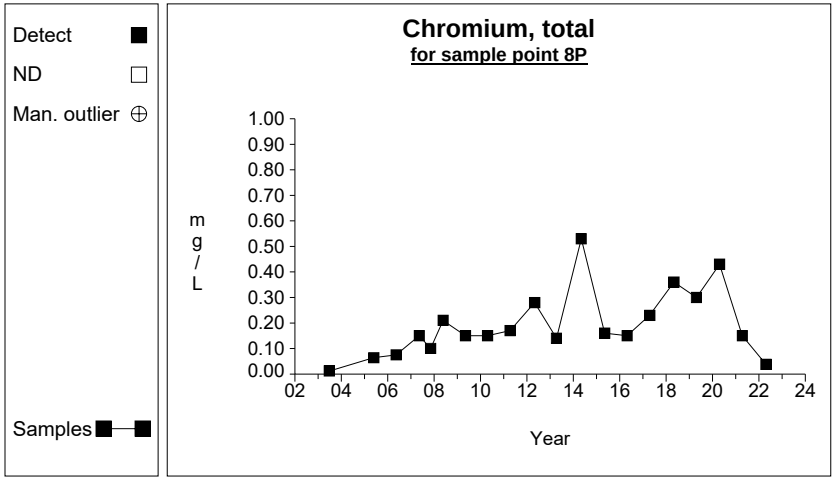


Graph 99

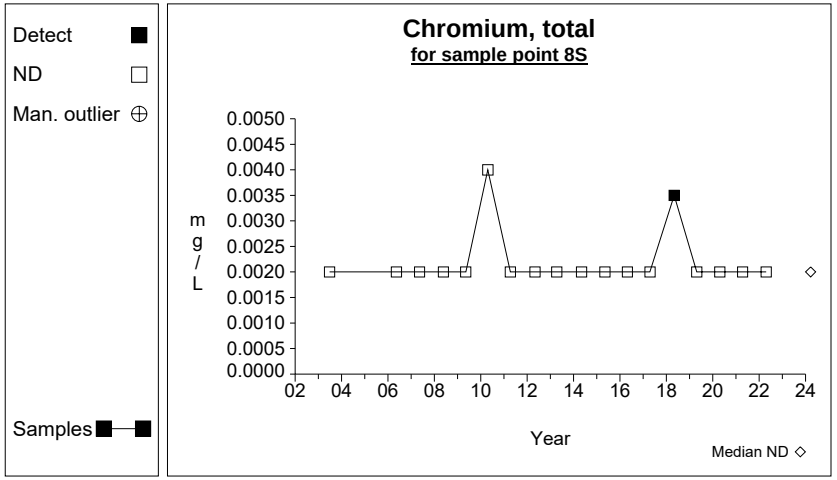


Graph 100

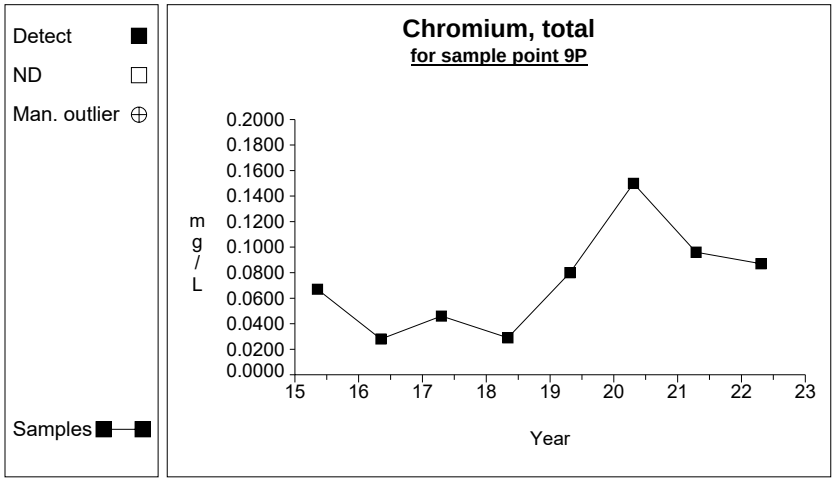
Time Series



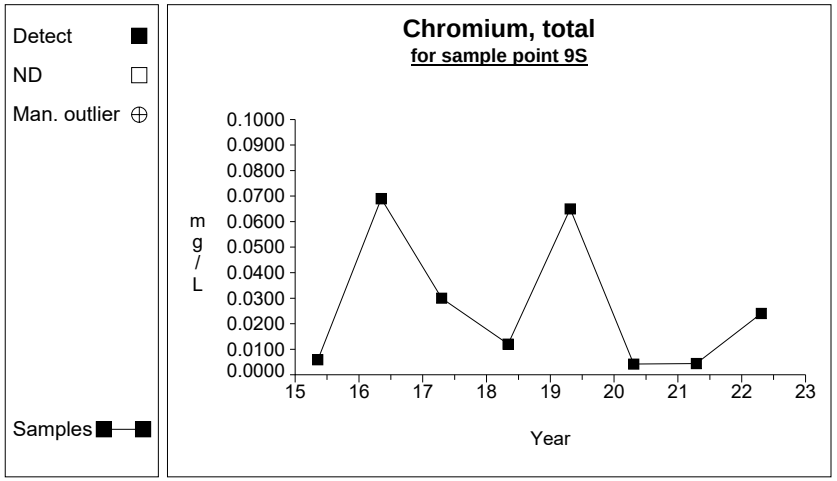
Graph 101



Graph 102

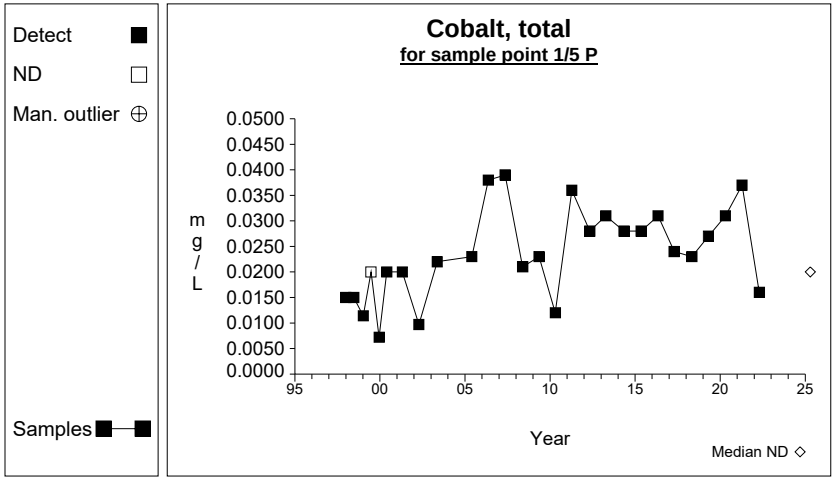


Graph 103

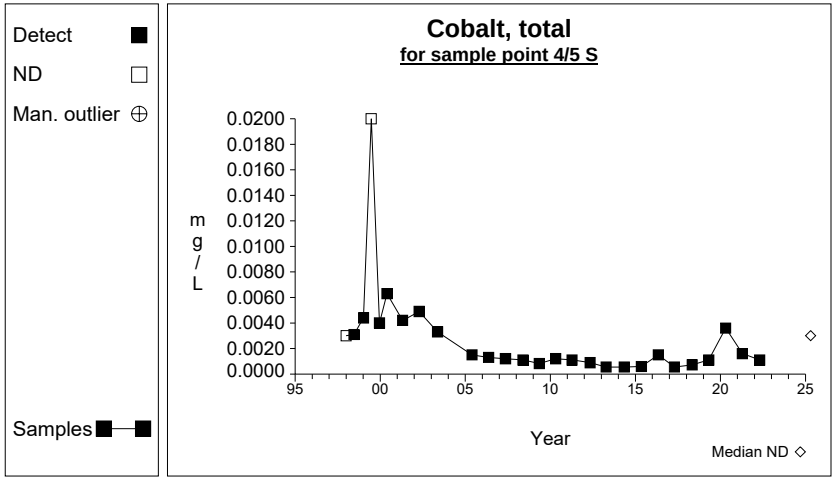


Graph 104

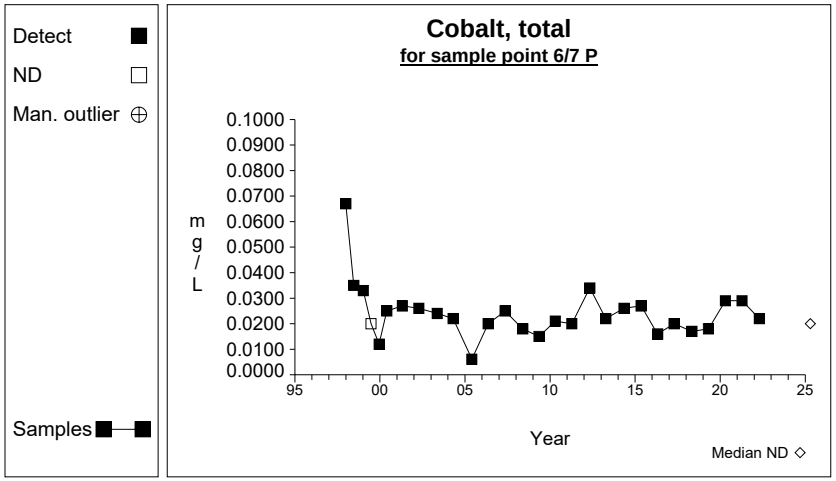
Time Series



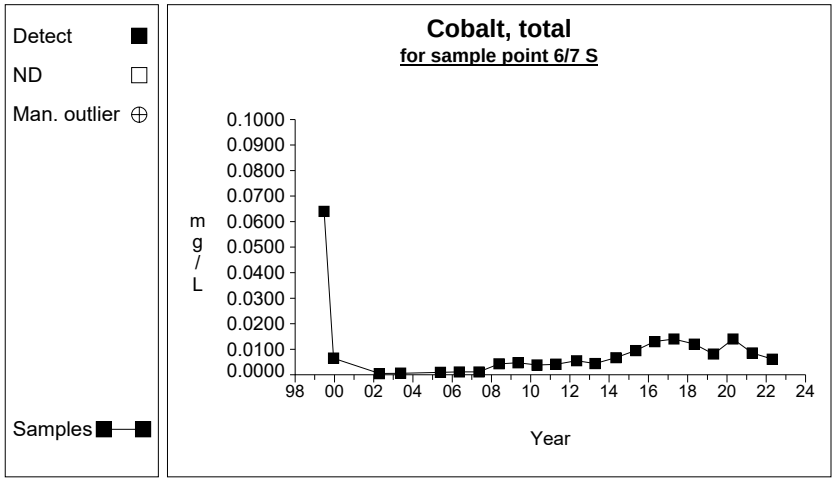
Graph 105



Graph 106

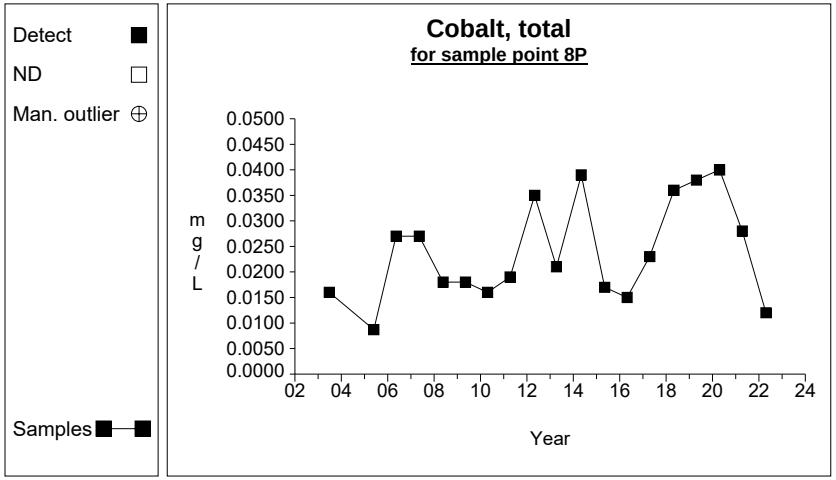


Graph 107

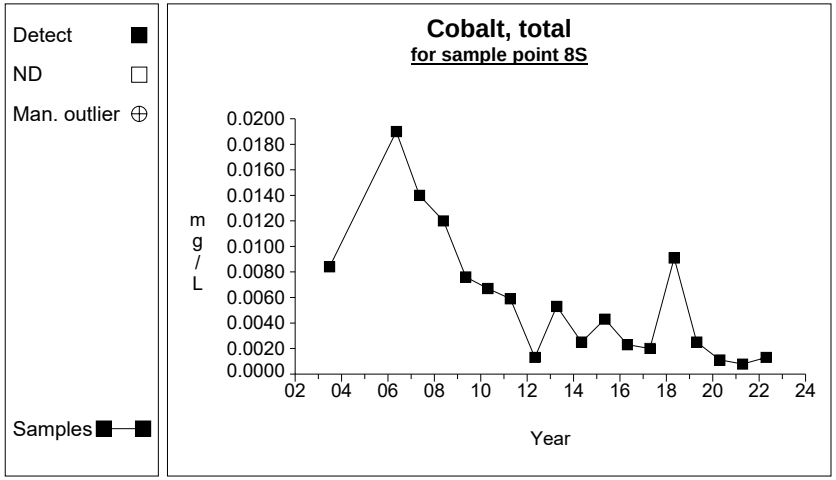


Graph 108

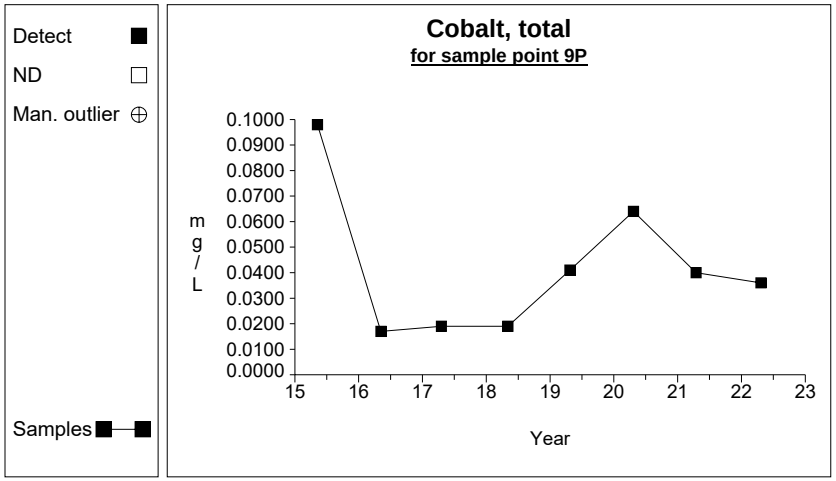
Time Series



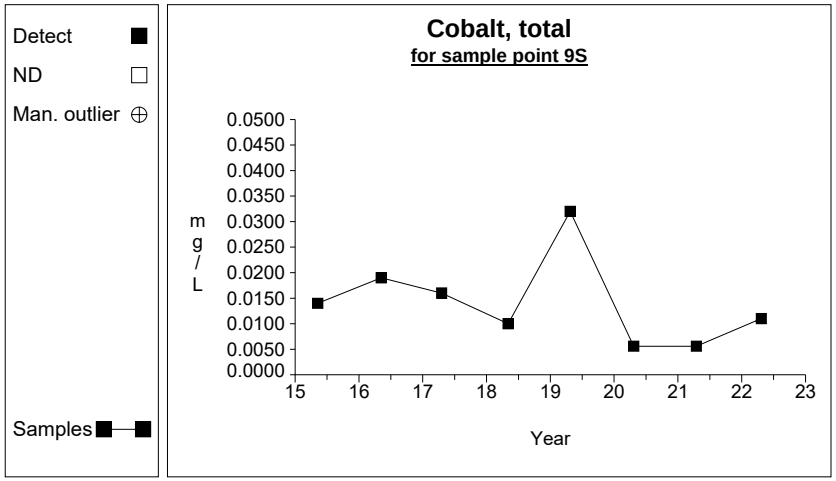
Graph 109



Graph 110

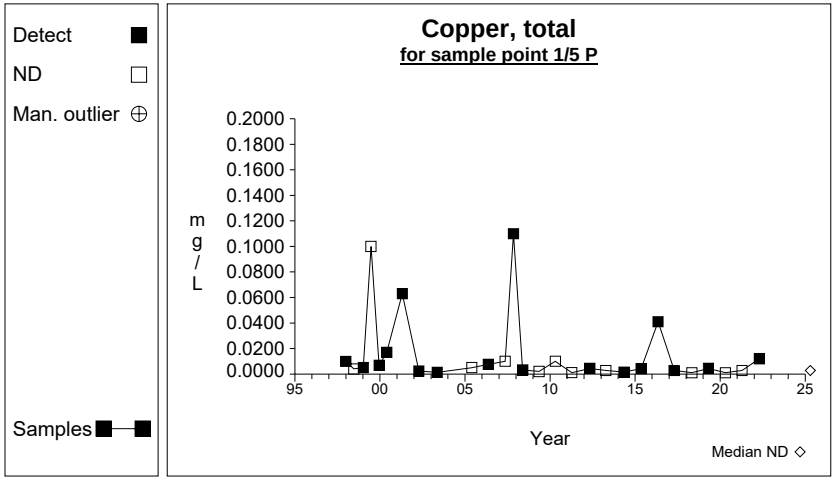


Graph 111

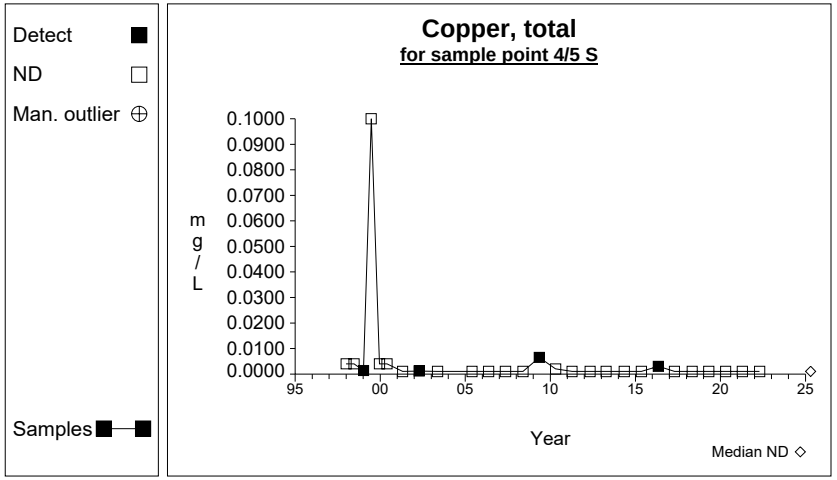


Graph 112

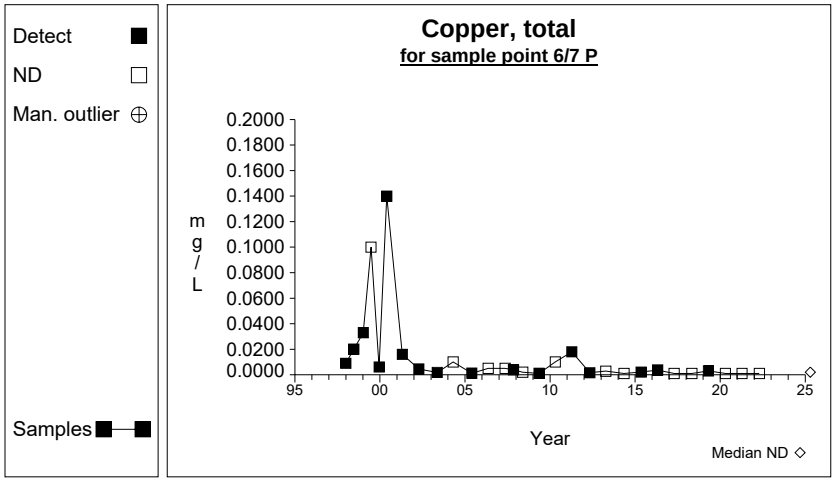
Time Series



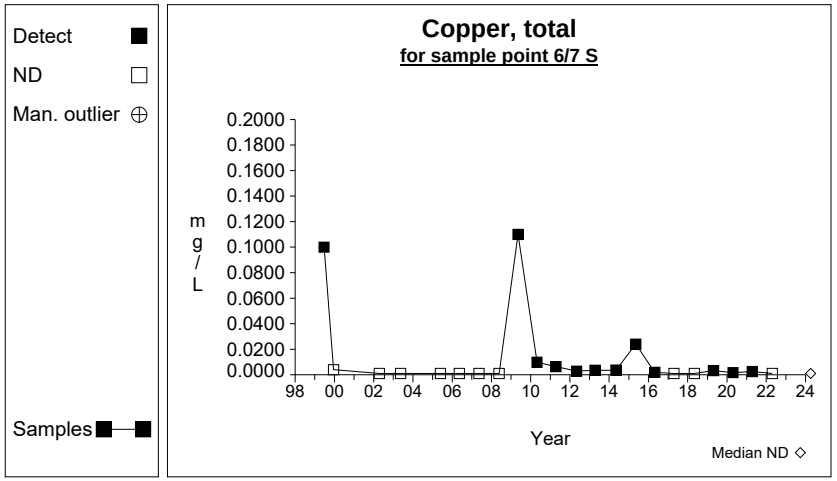
Graph 113



Graph 114

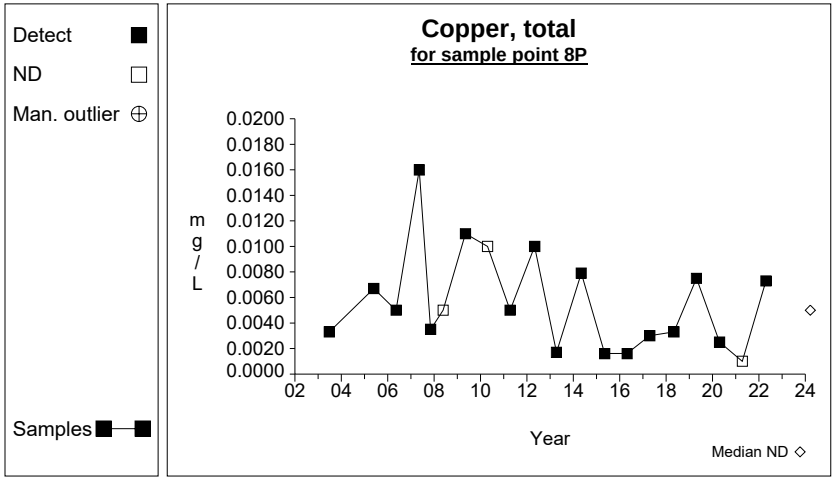


Graph 115

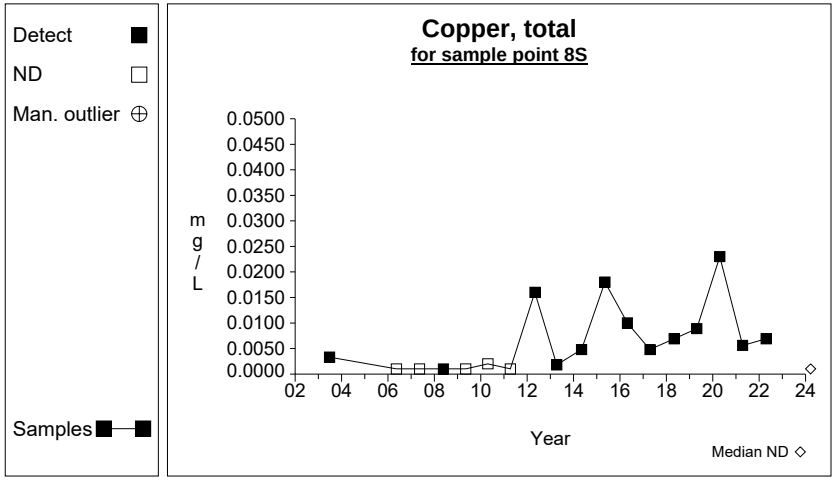


Graph 116

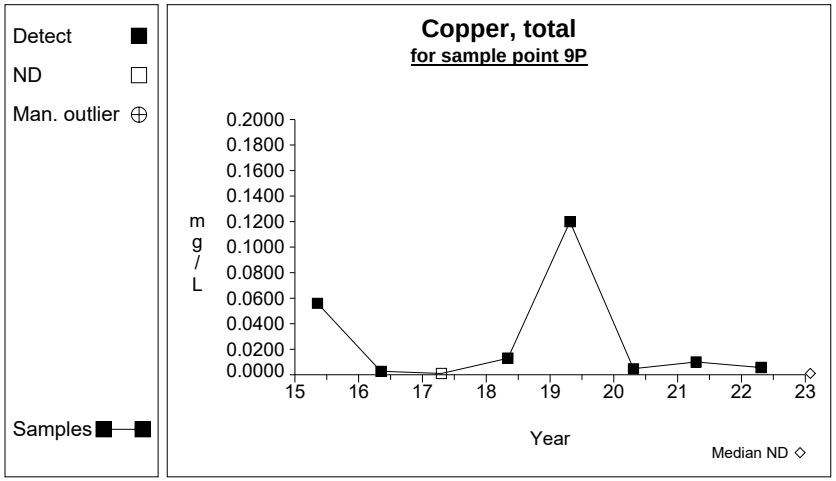
Time Series



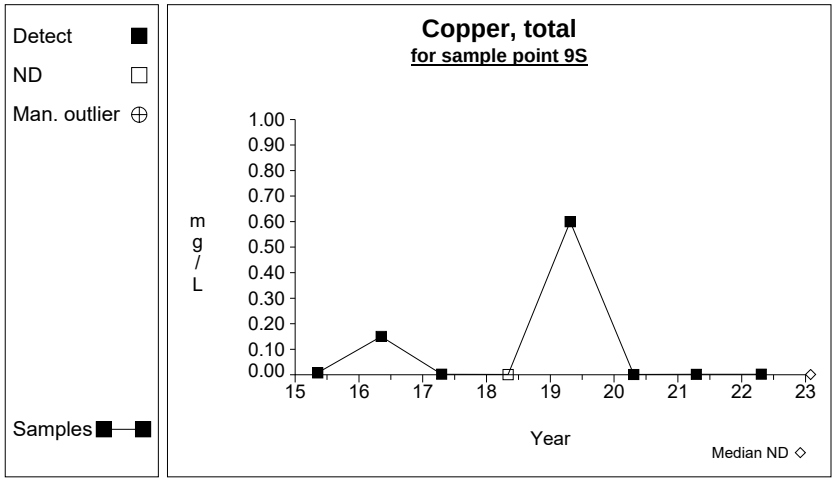
Graph 117



Graph 118

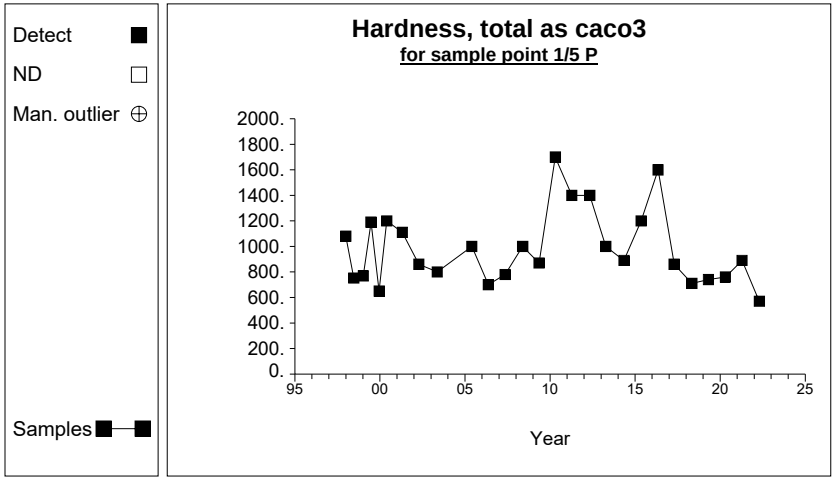


Graph 119

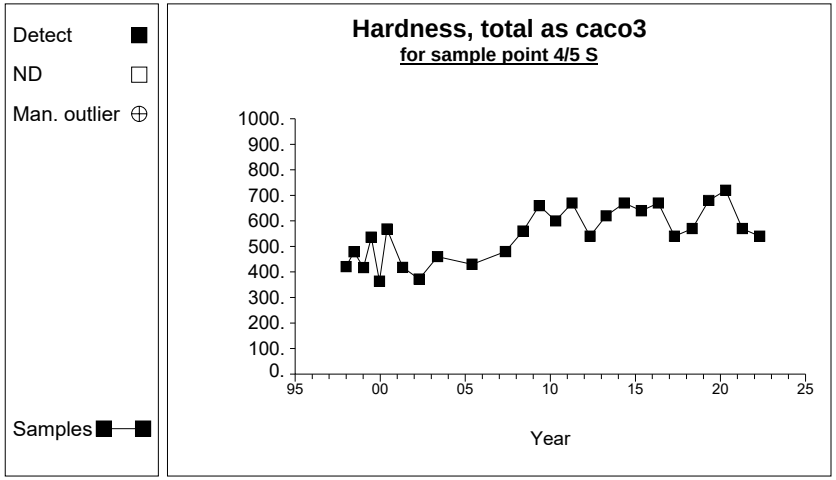


Graph 120

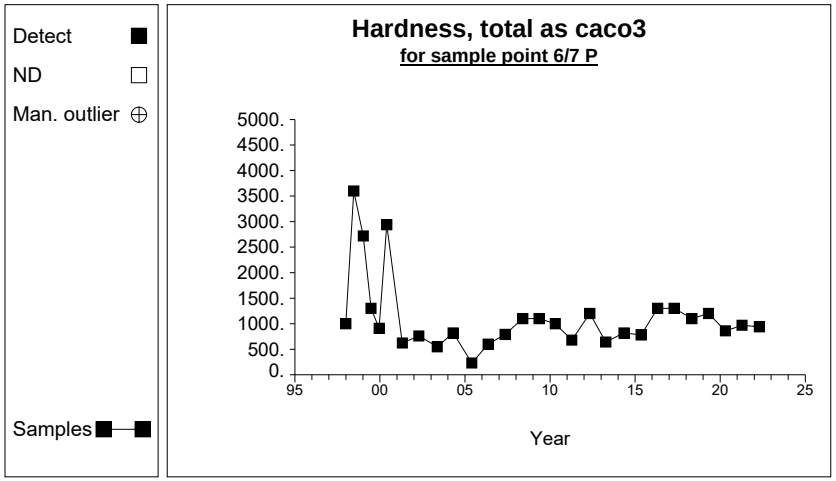
Time Series



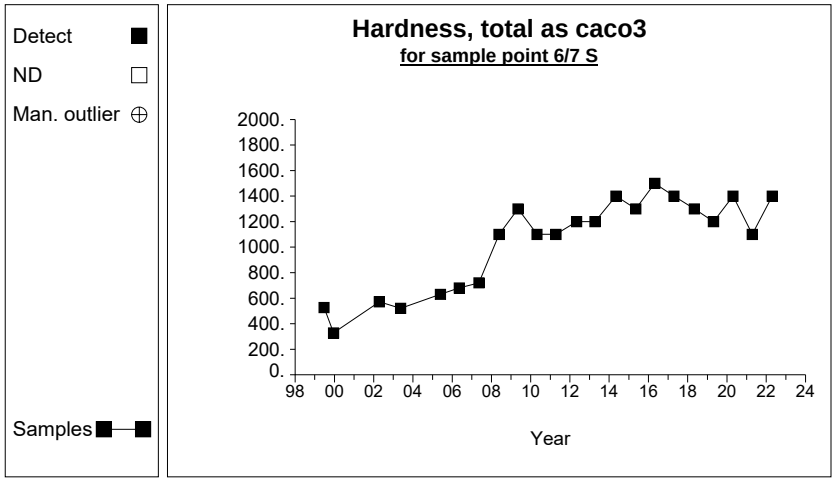
Graph 121



Graph 122

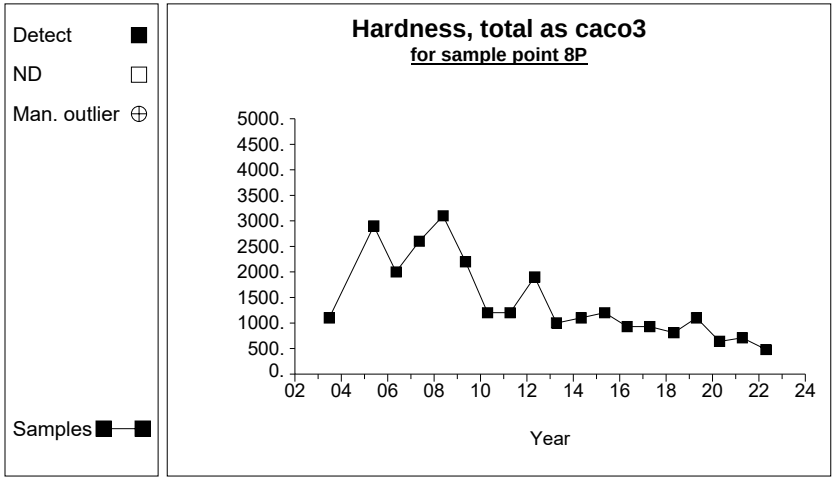


Graph 123

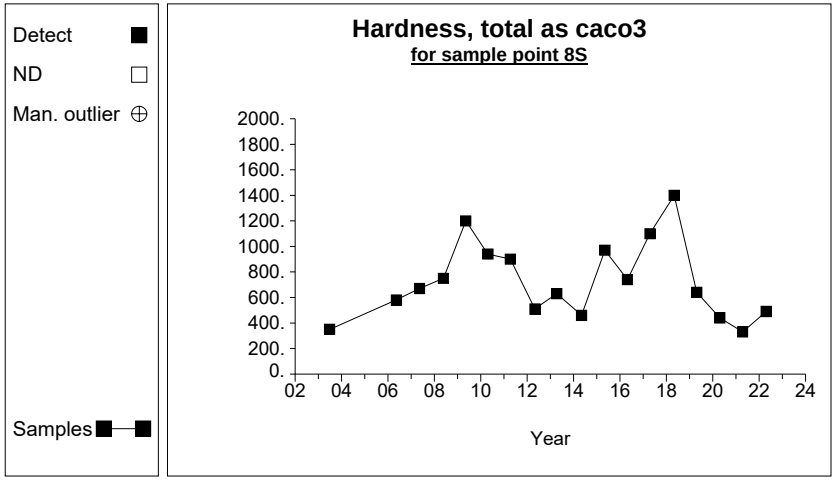


Graph 124

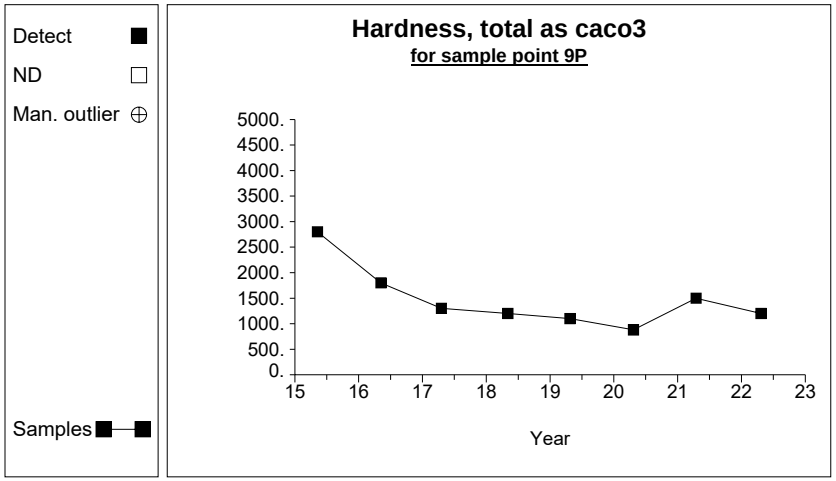
Time Series



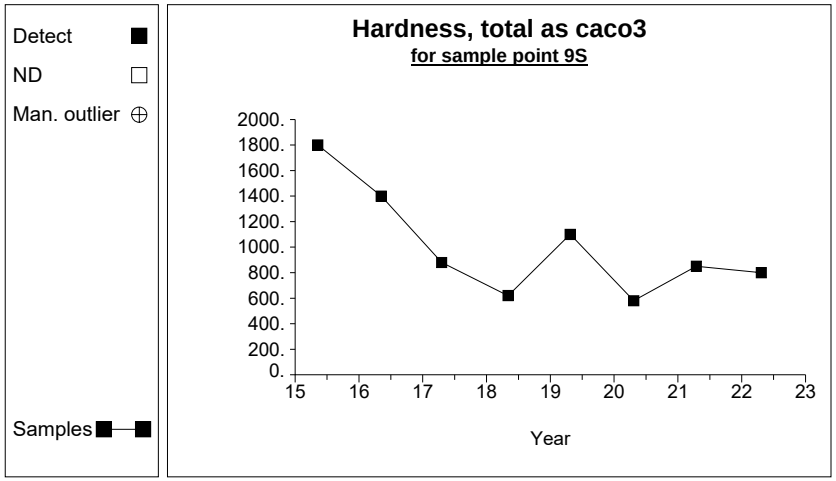
Graph 125



Graph 126

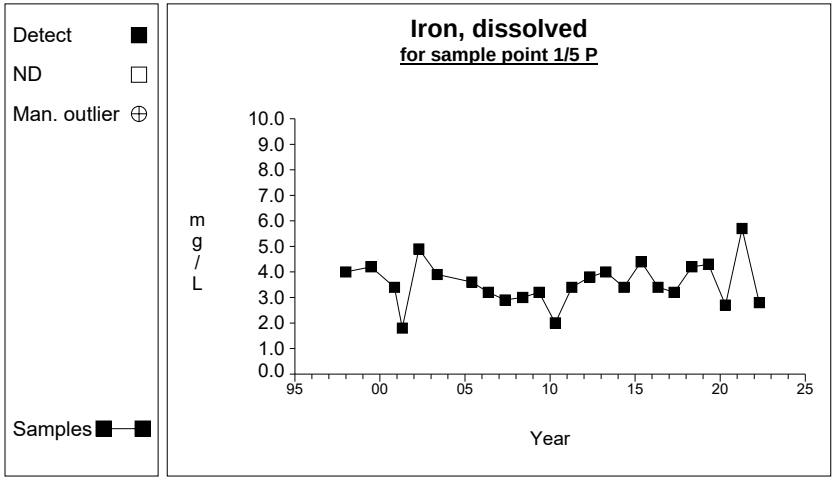


Graph 127

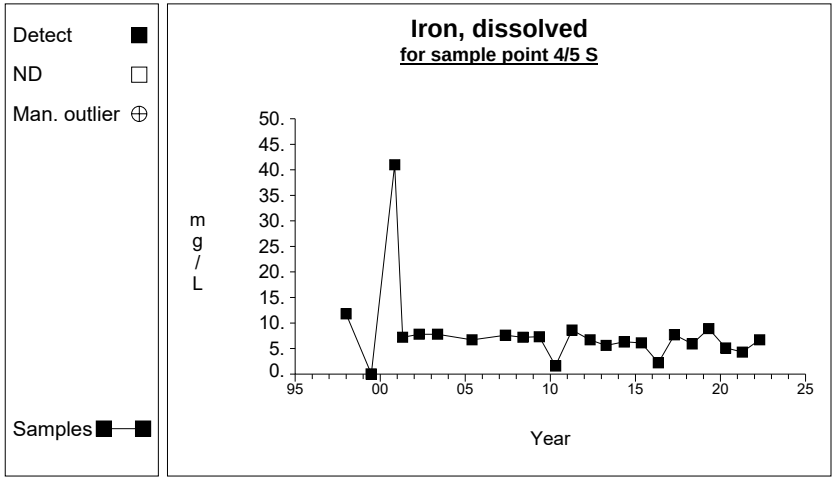


Graph 128

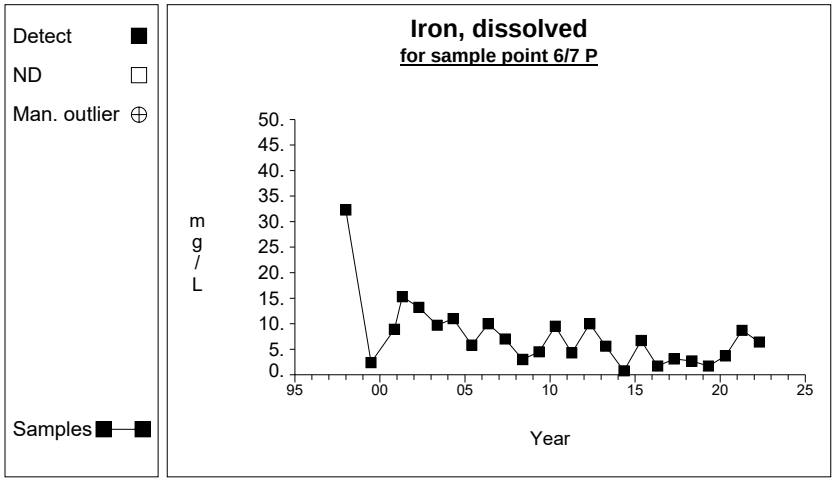
Time Series



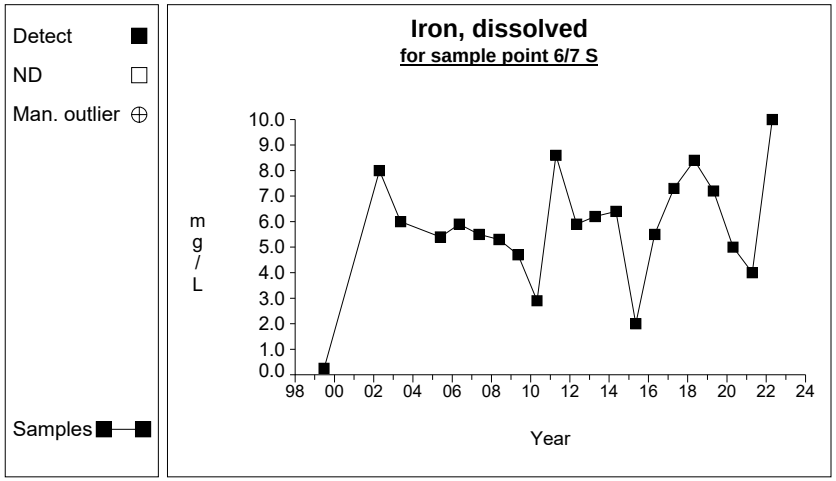
Graph 129



Graph 130

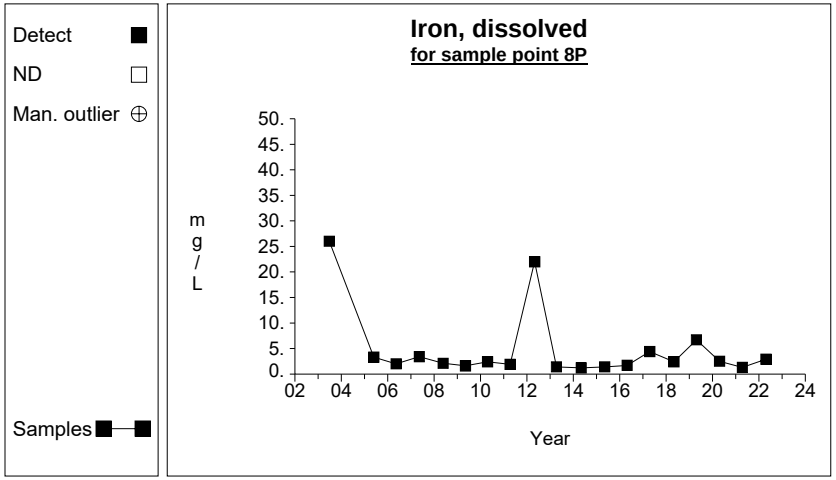


Graph 131

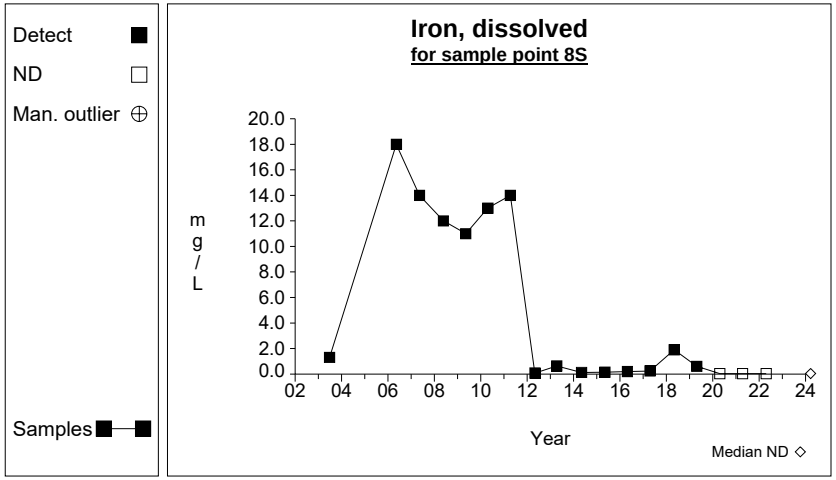


Graph 132

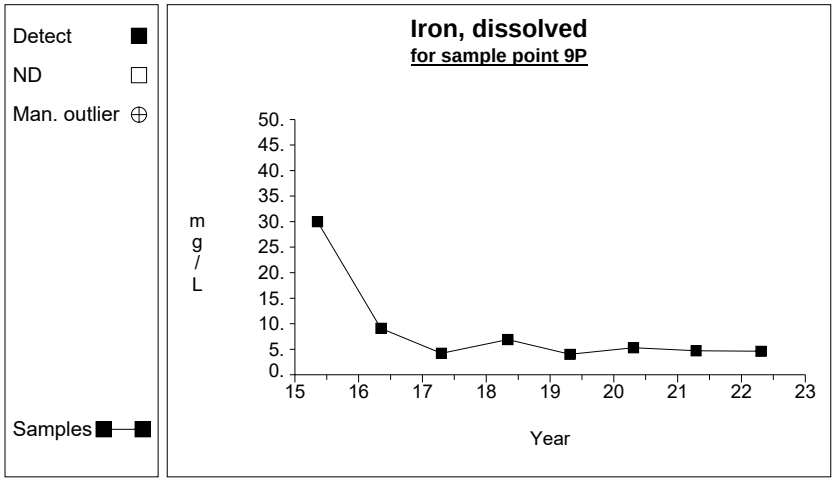
Time Series



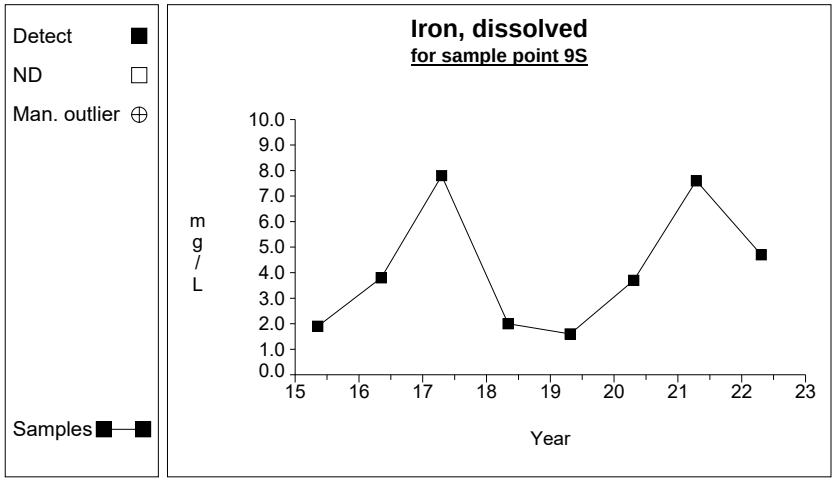
Graph 133



Graph 134

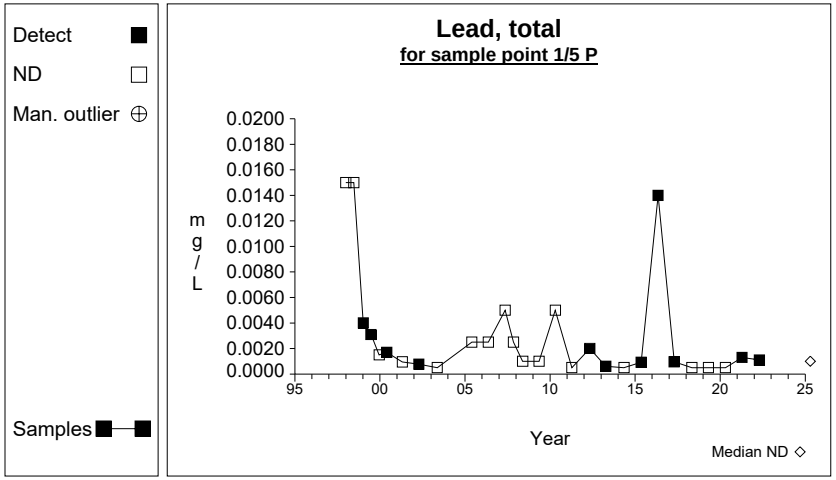


Graph 135

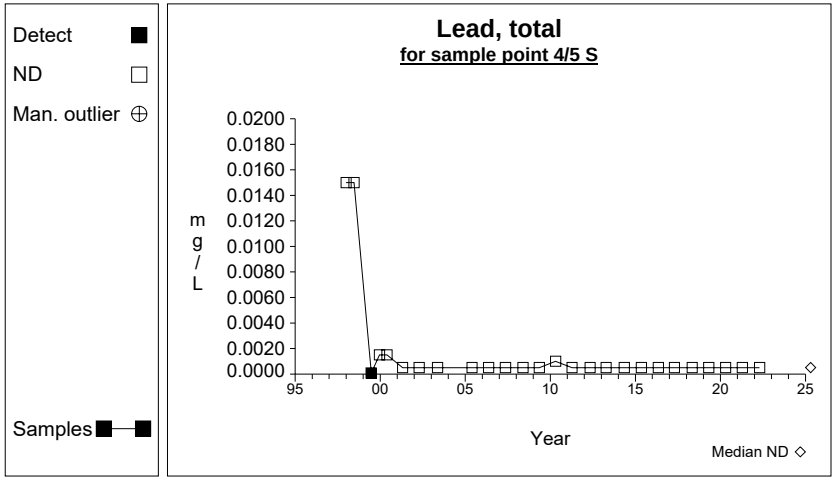


Graph 136

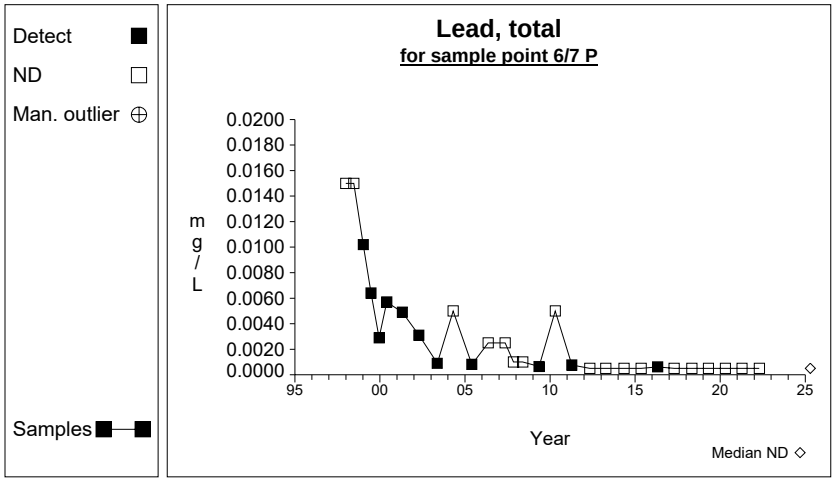
Time Series



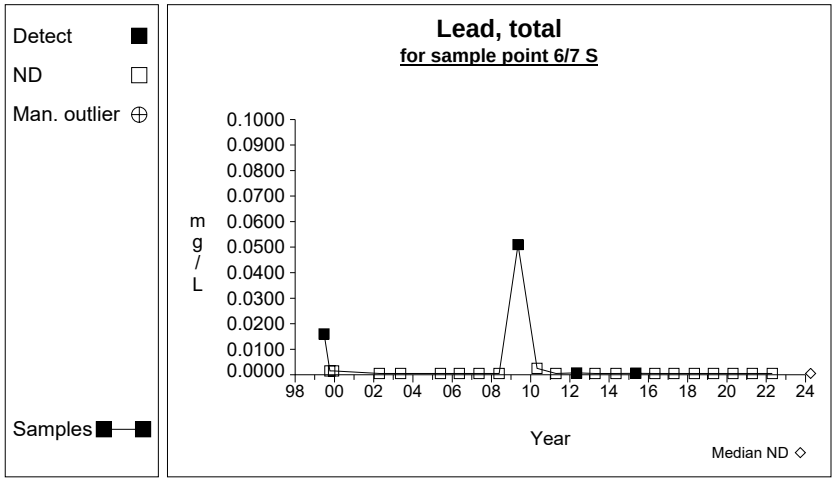
Graph 137



Graph 138

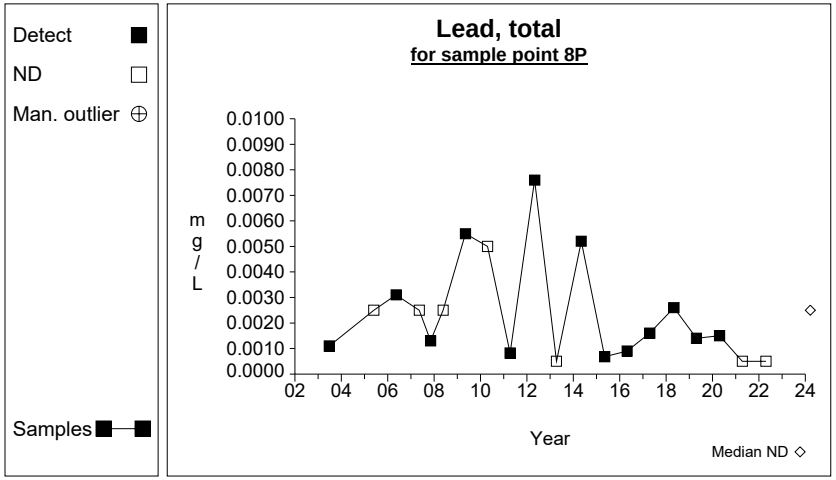


Graph 139

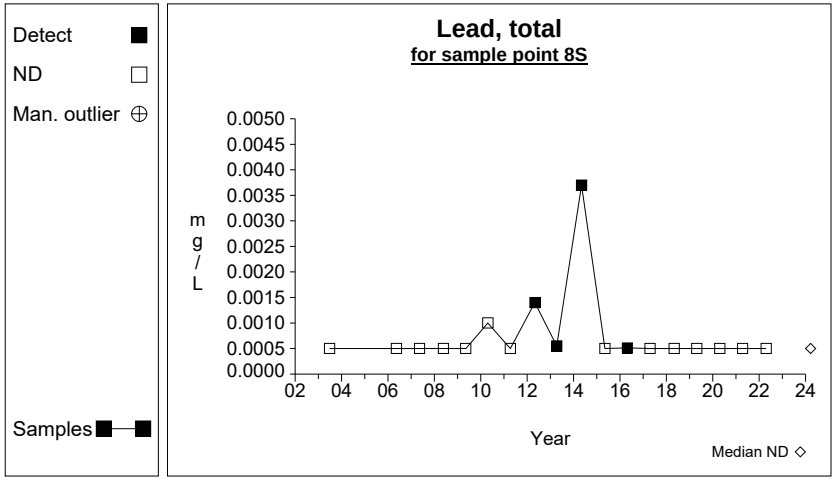


Graph 140

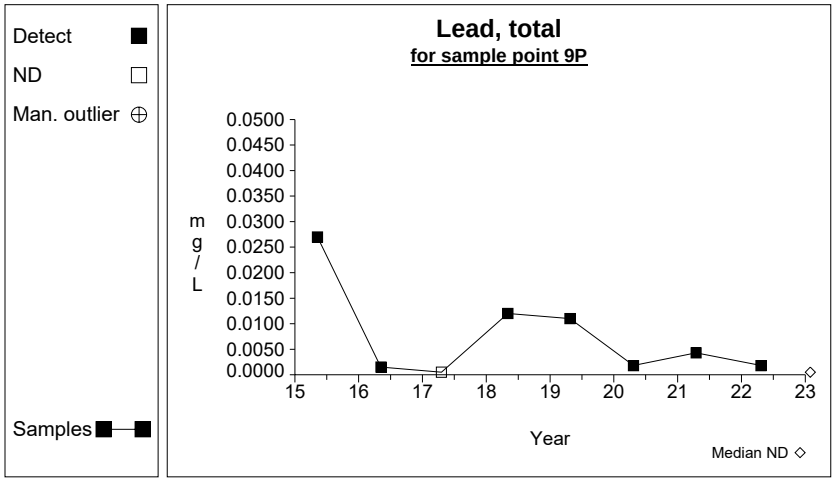
Time Series



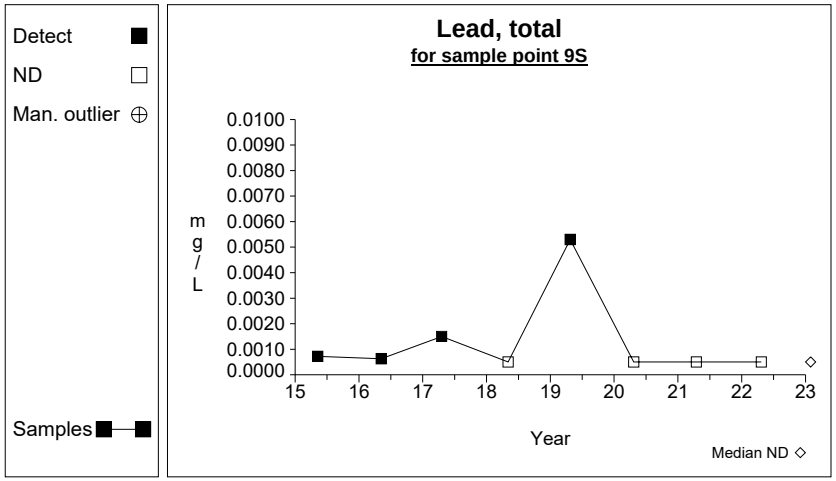
Graph 141



Graph 142

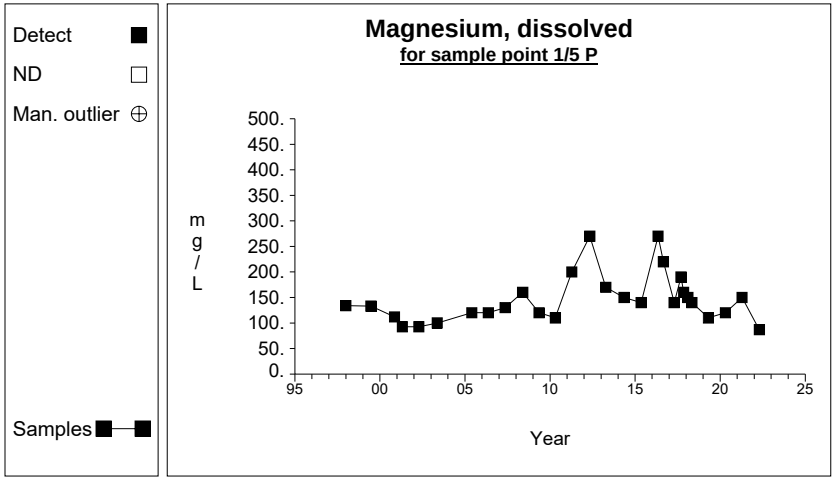


Graph 143

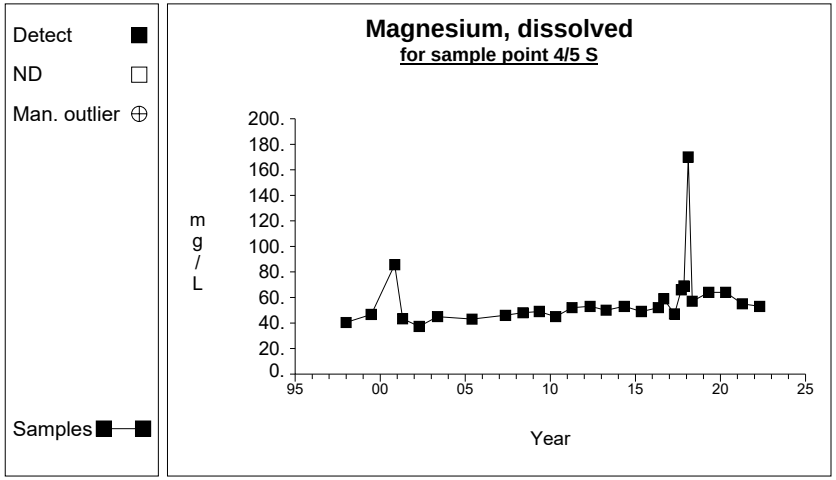


Graph 144

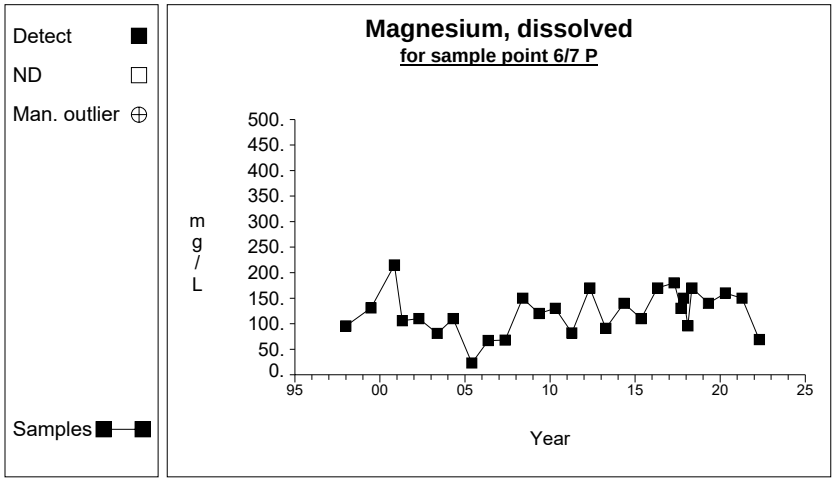
Time Series



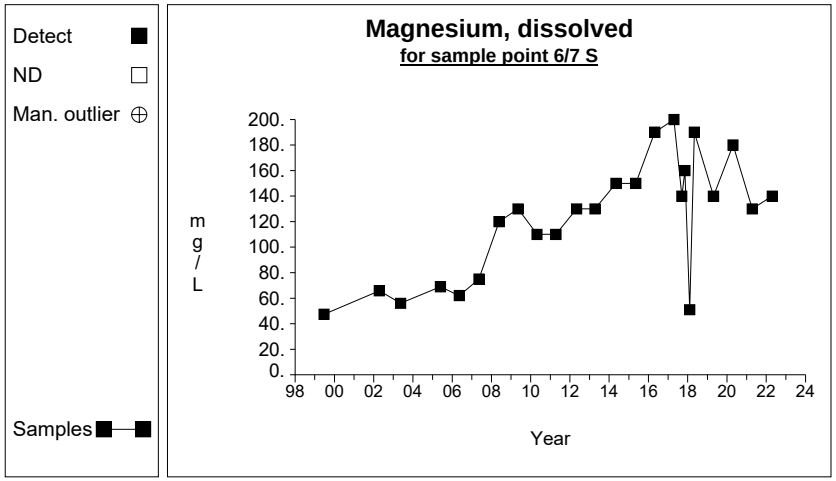
Graph 145



Graph 146

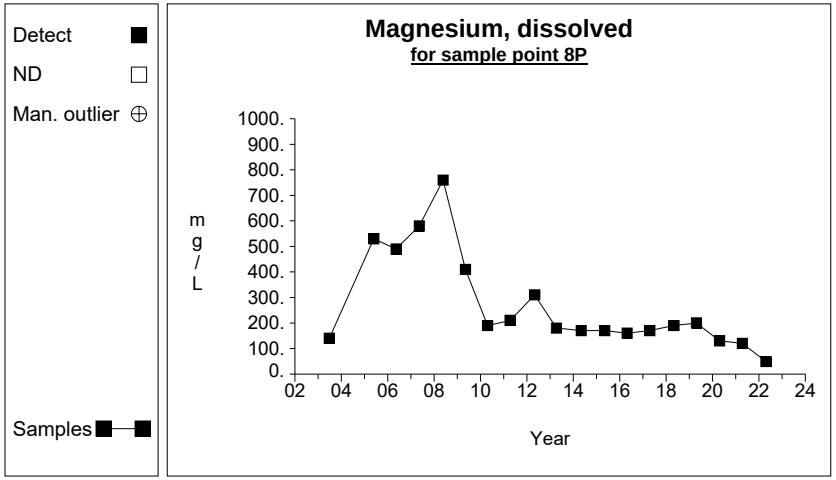


Graph 147

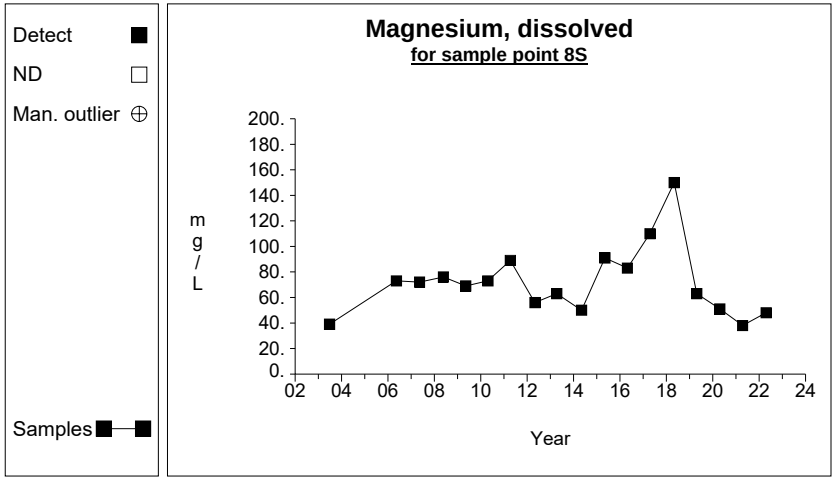


Graph 148

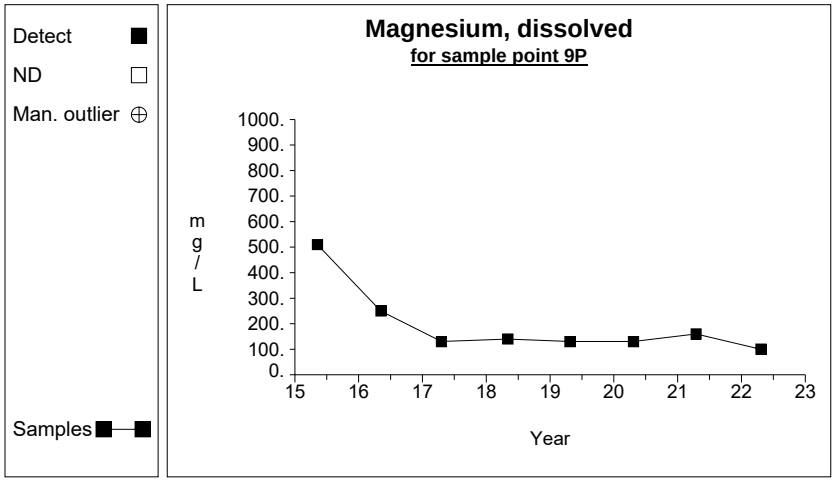
Time Series



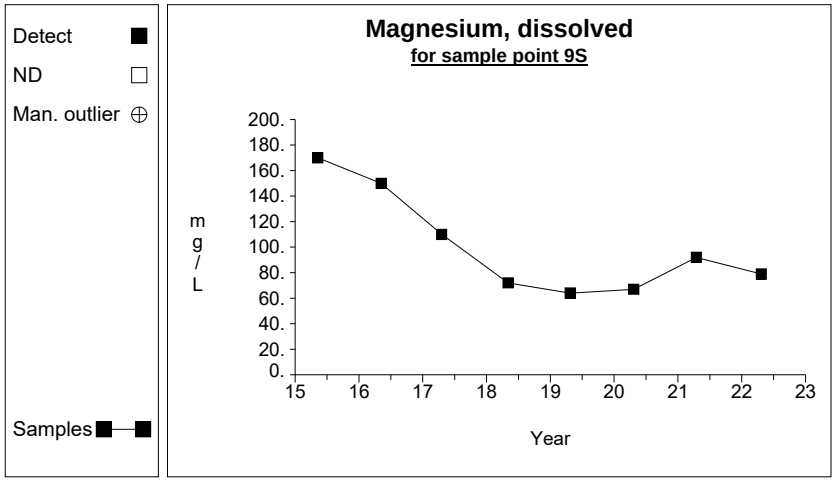
Graph 149



Graph 150

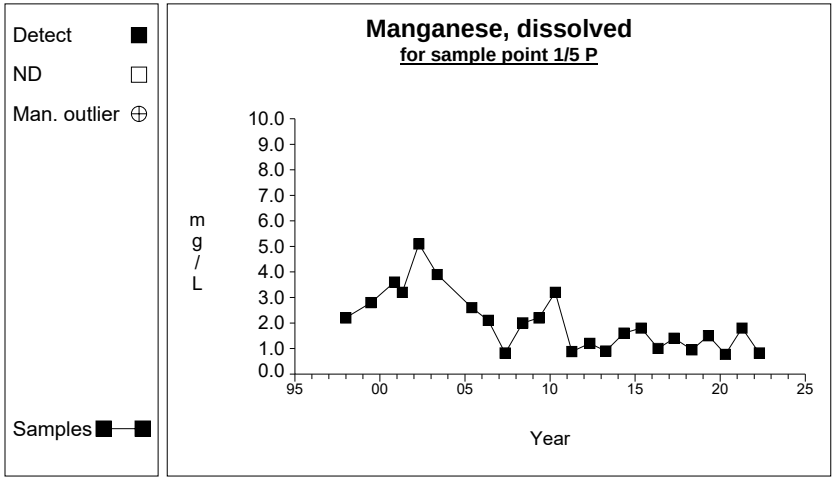


Graph 151

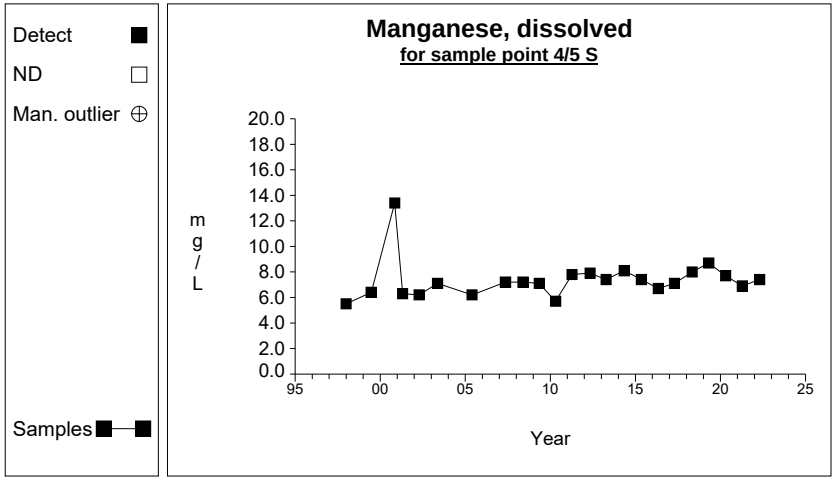


Graph 152

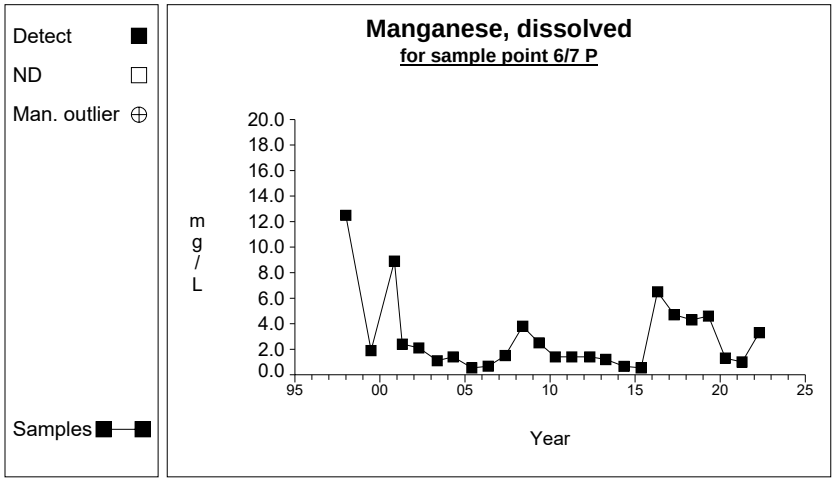
Time Series



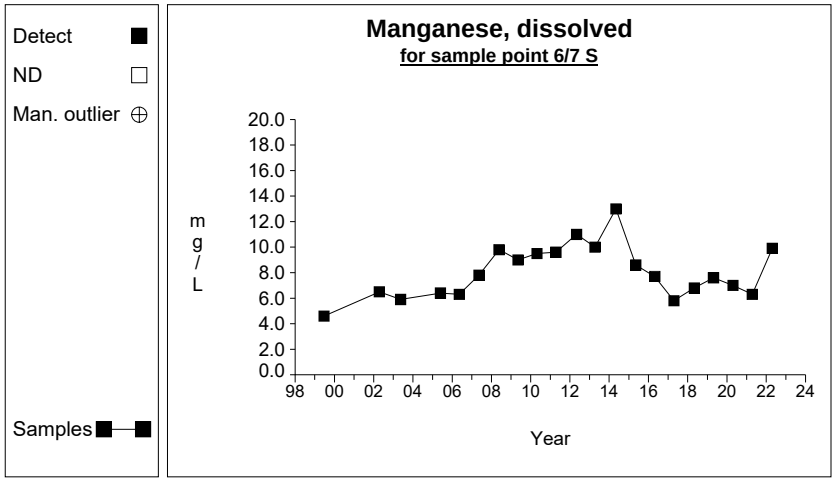
Graph 153



Graph 154

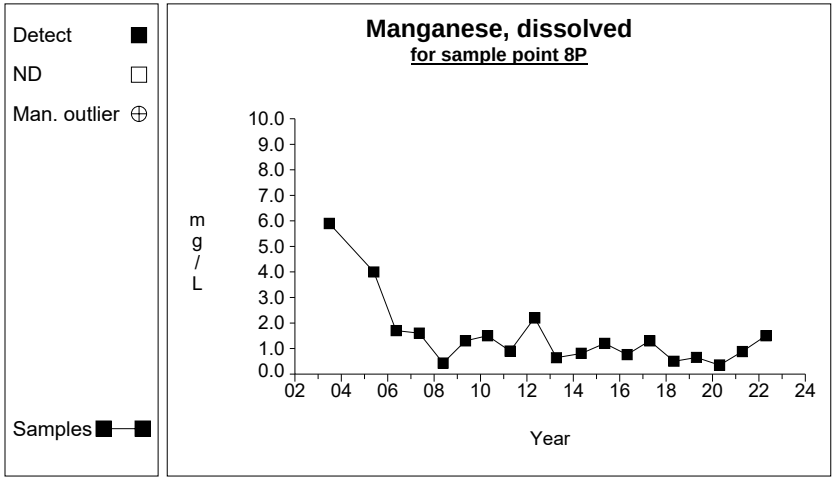


Graph 155

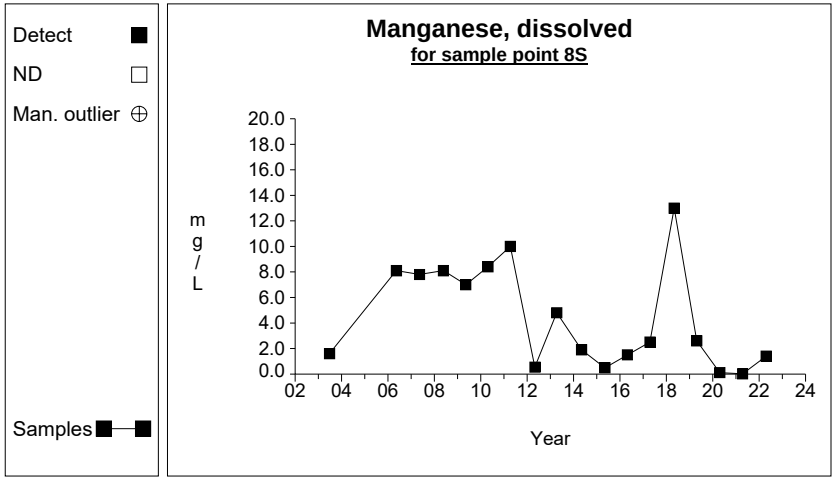


Graph 156

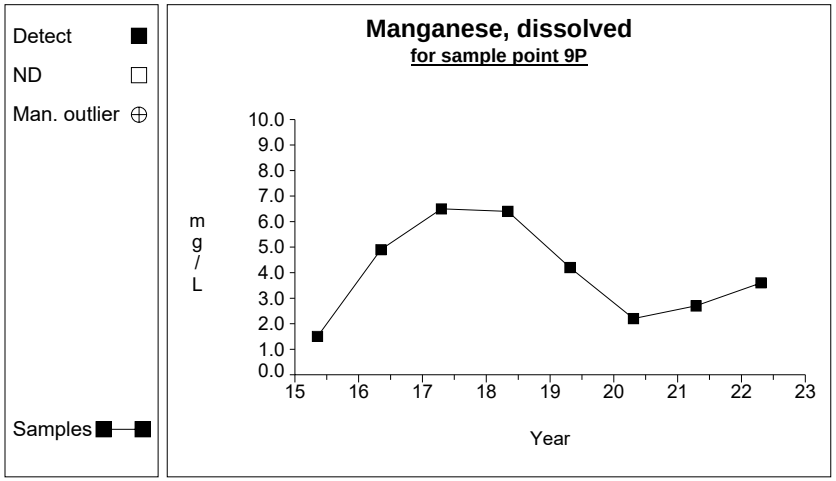
Time Series



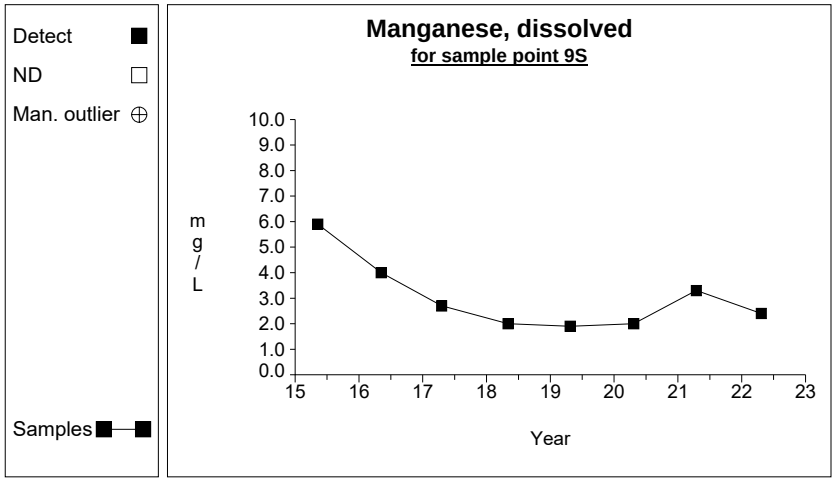
Graph 157



Graph 158

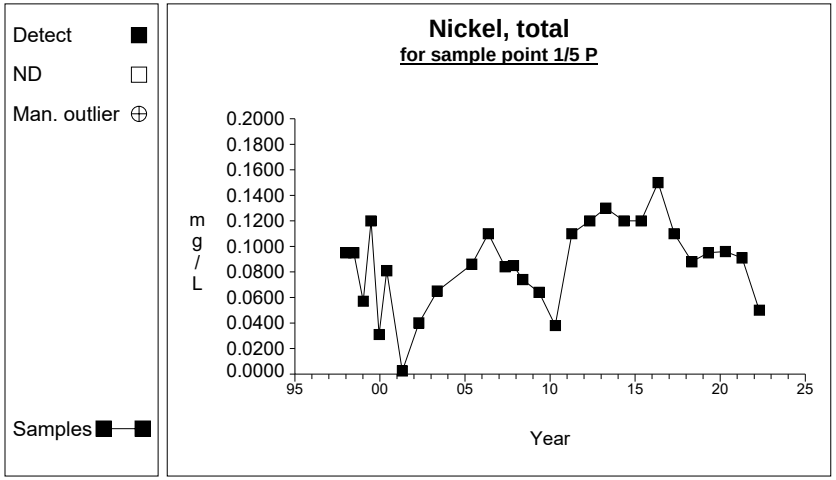


Graph 159

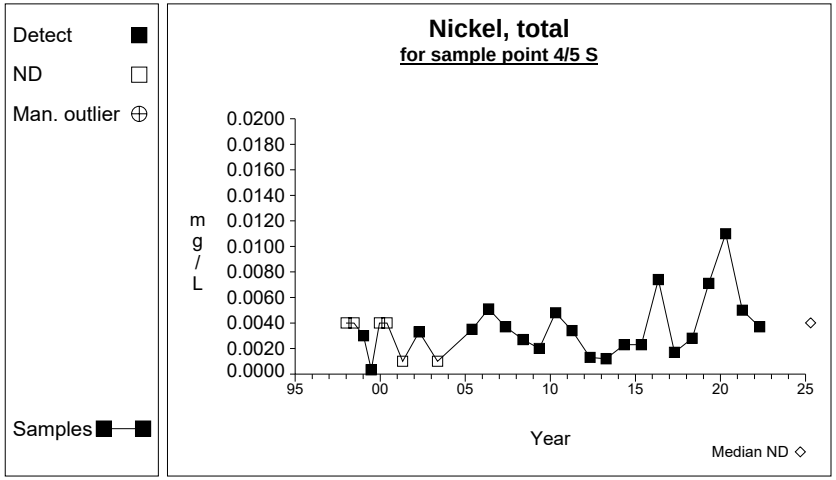


Graph 160

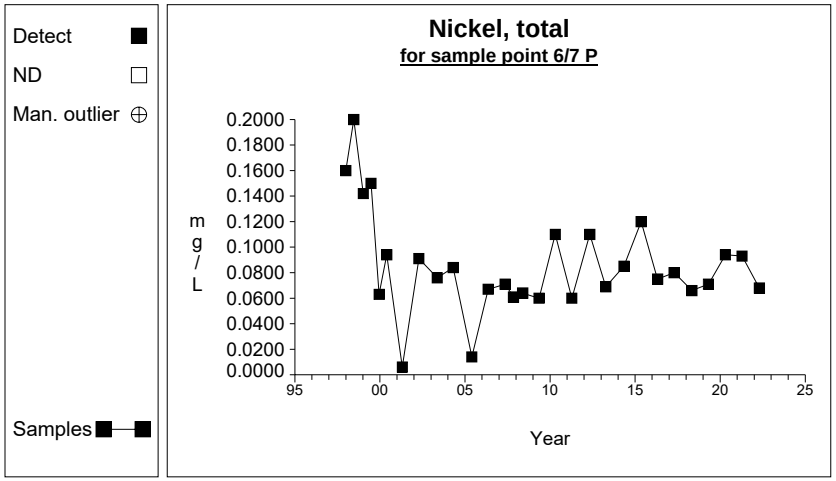
Time Series



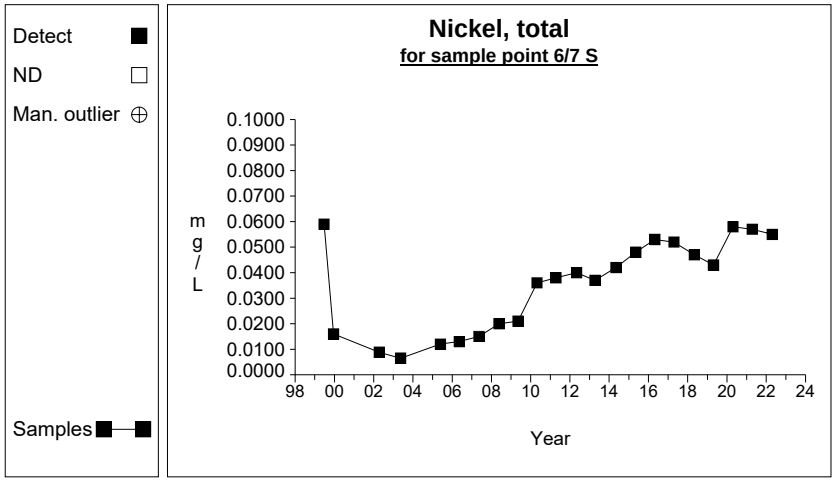
Graph 161



Graph 162

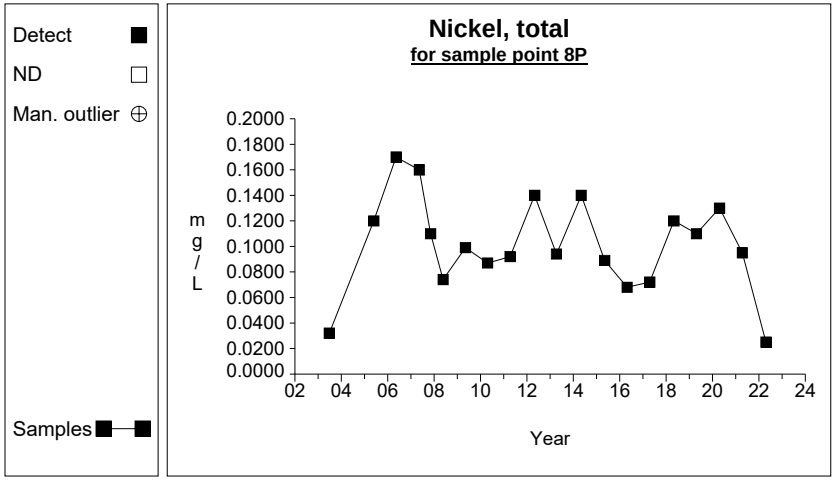


Graph 163

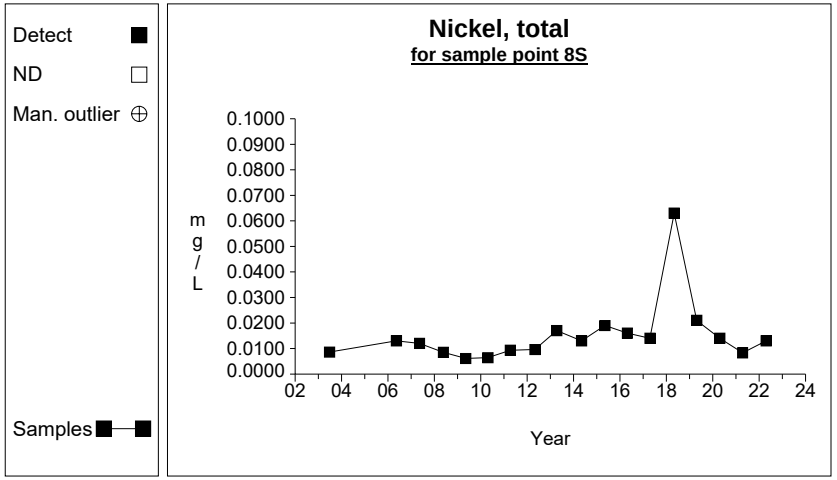


Graph 164

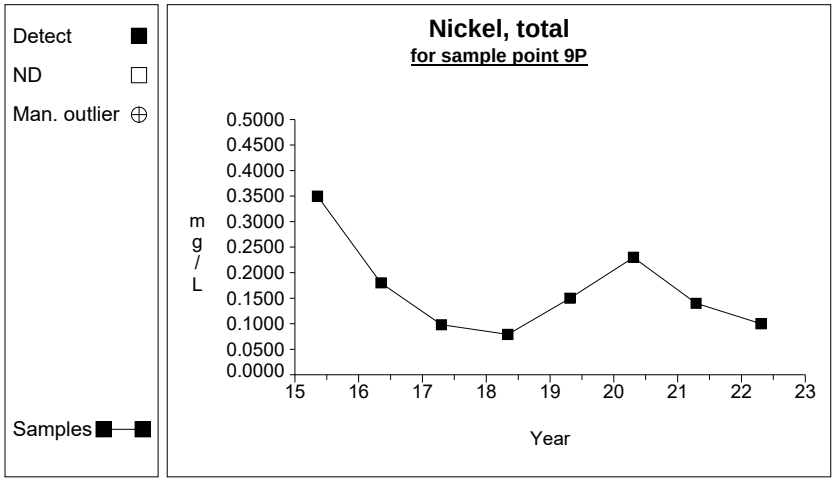
Time Series



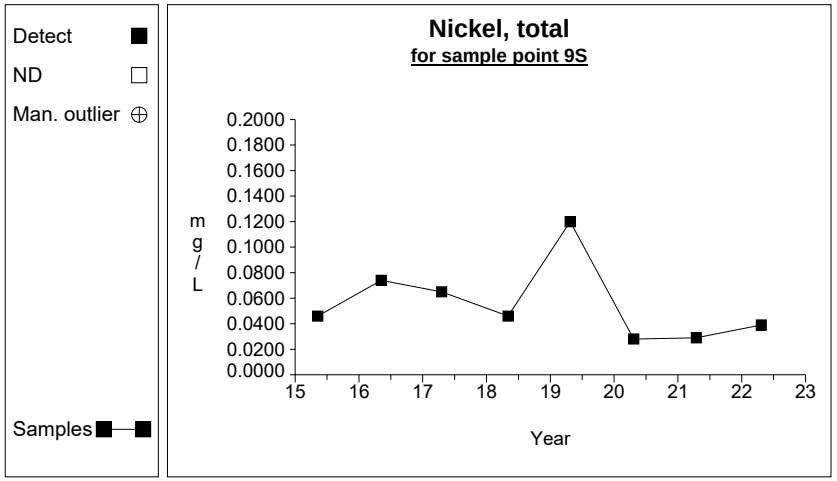
Graph 165



Graph 166

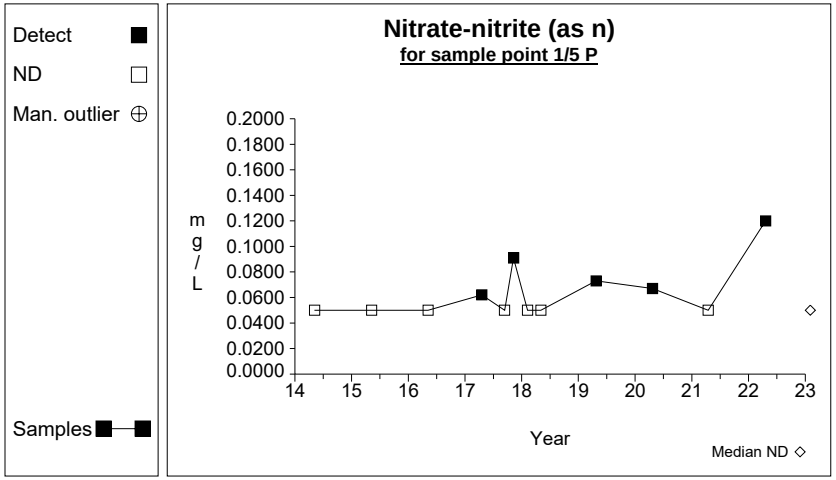


Graph 167

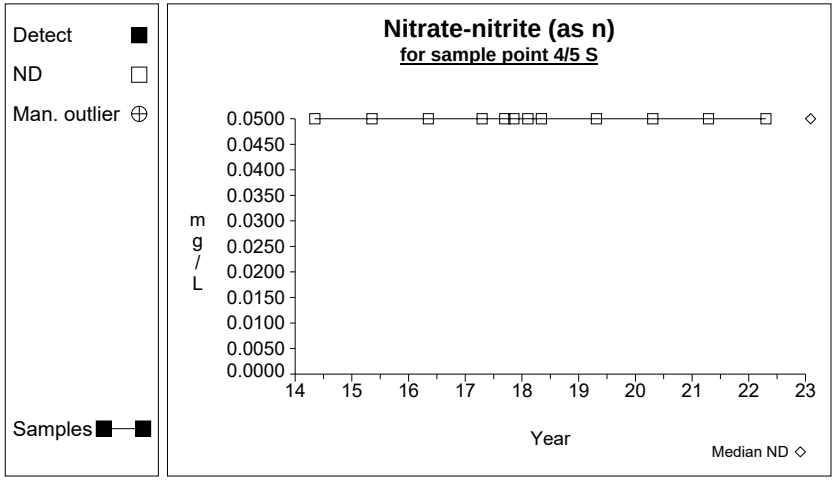


Graph 168

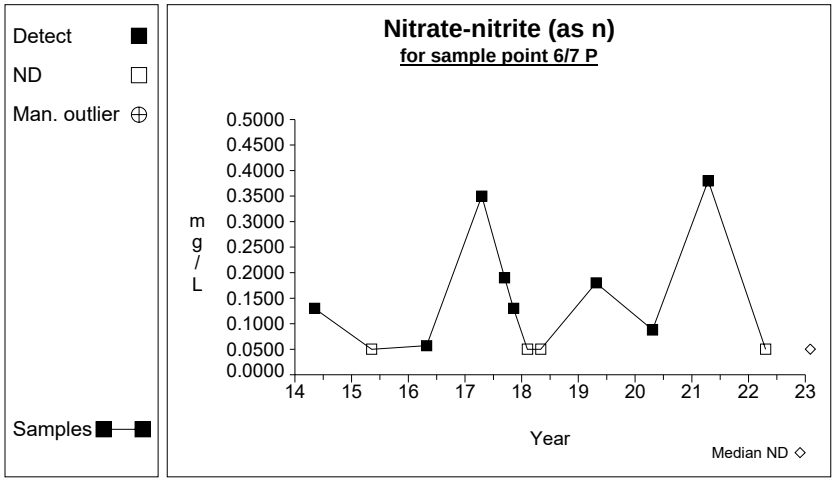
Time Series



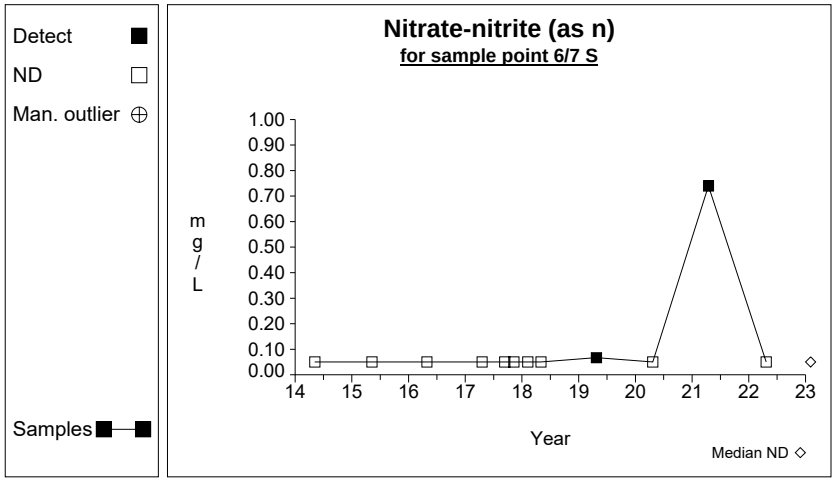
Graph 169



Graph 170

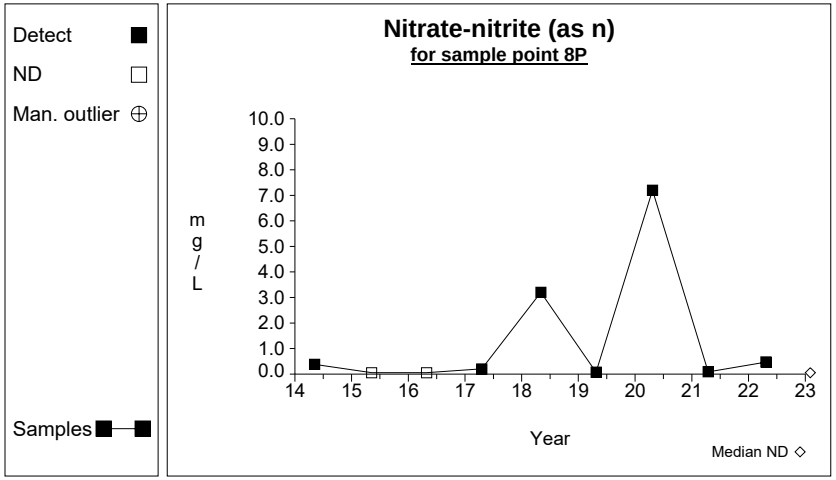


Graph 171

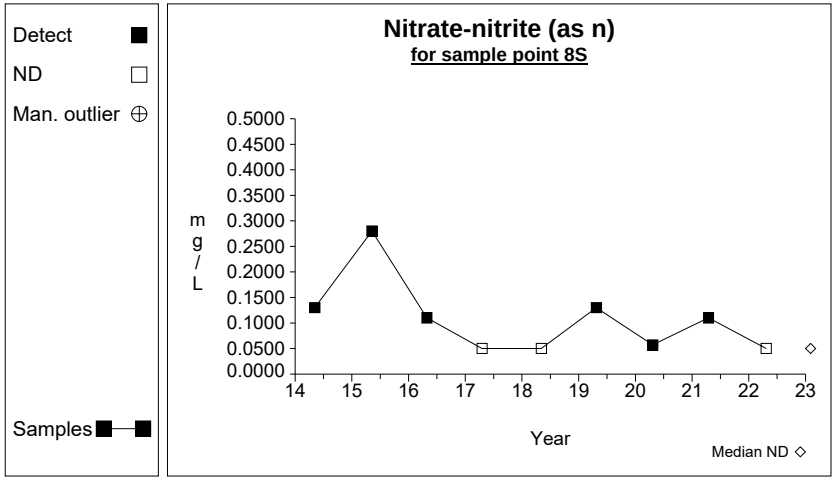


Graph 172

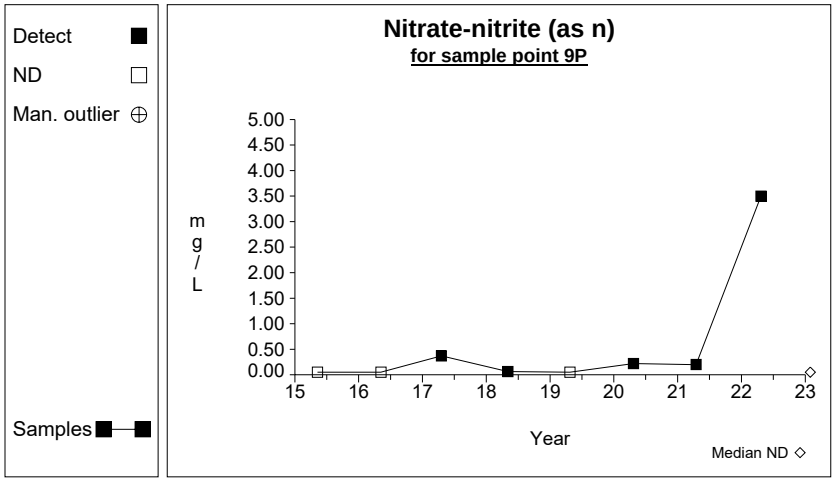
Time Series



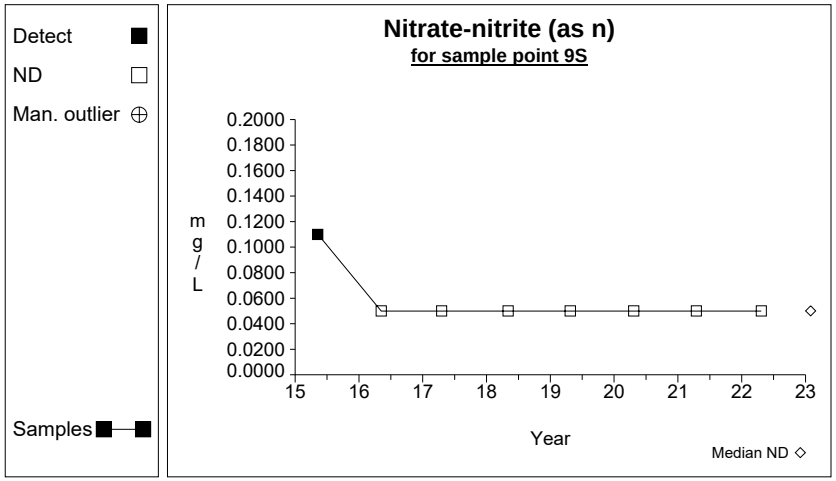
Graph 173



Graph 174

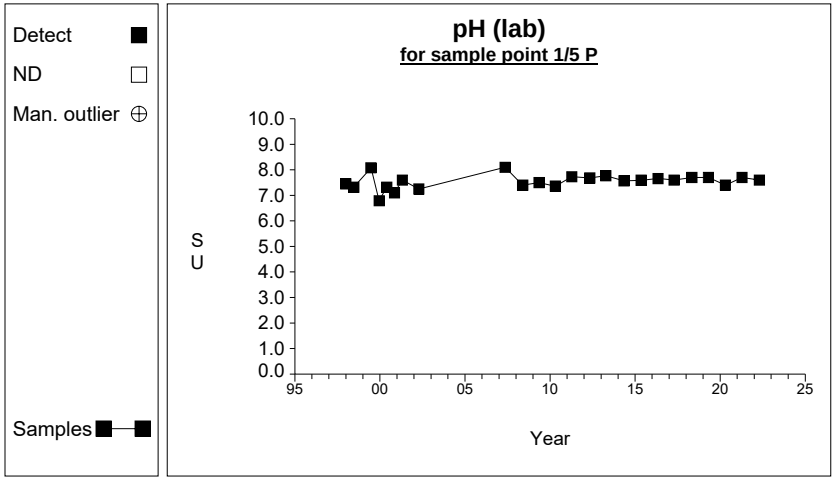


Graph 175

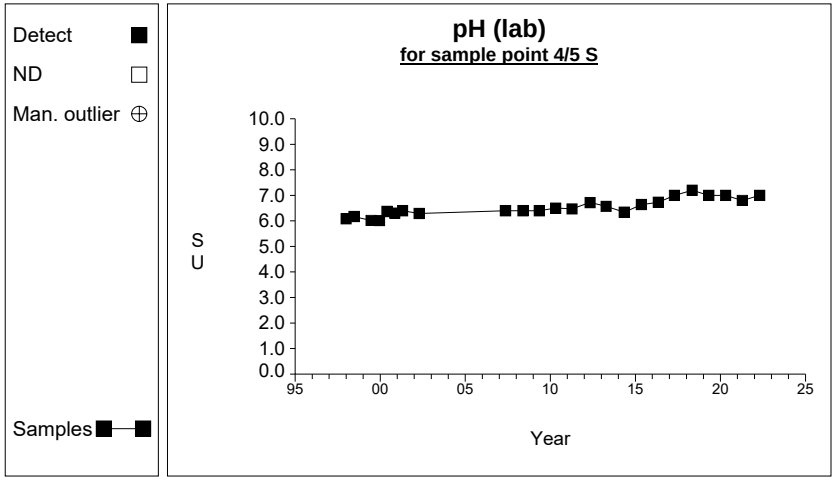


Graph 176

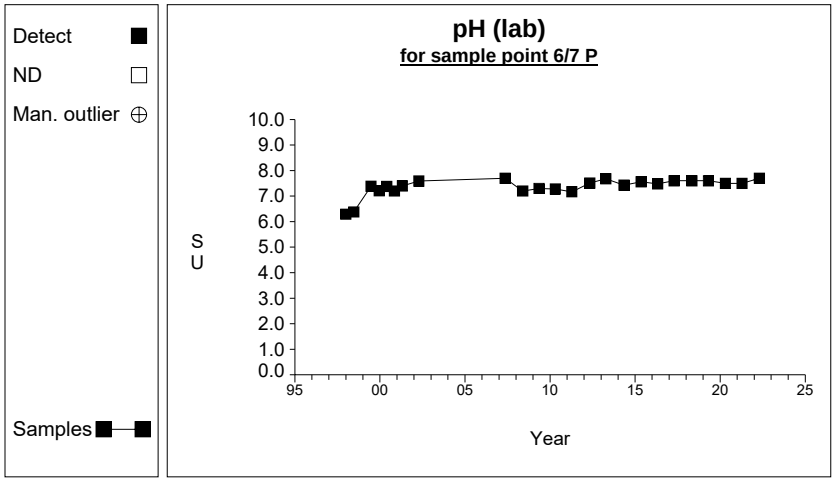
Time Series



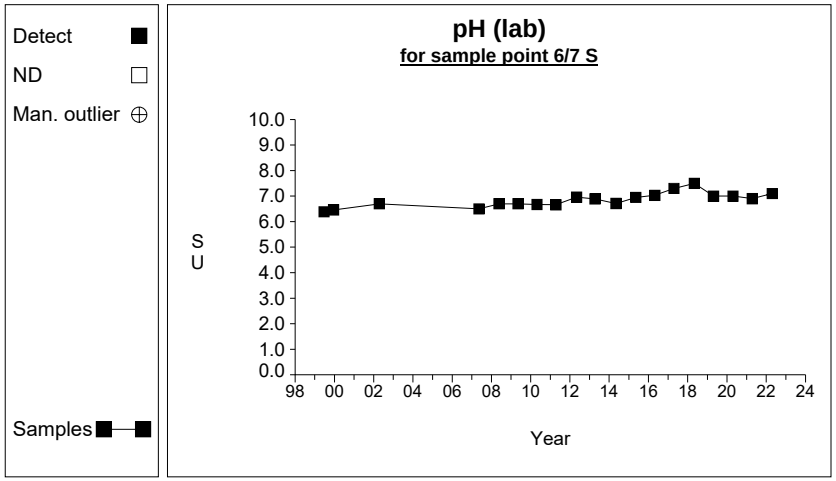
Graph 177



Graph 178

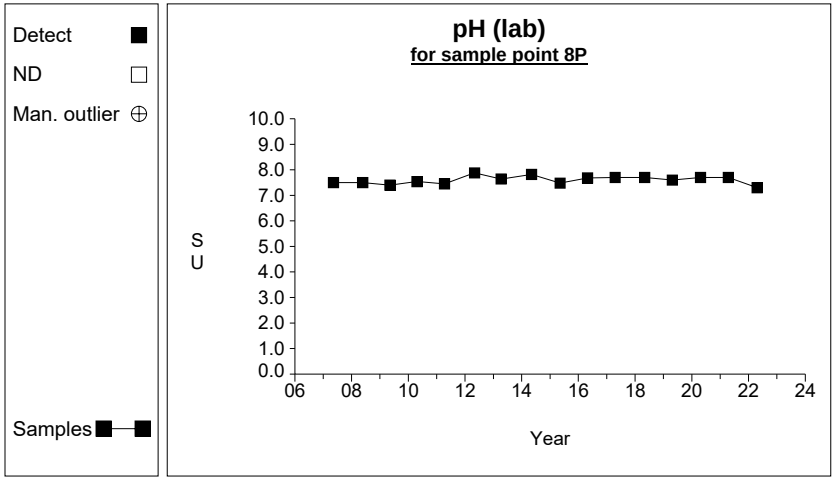


Graph 179

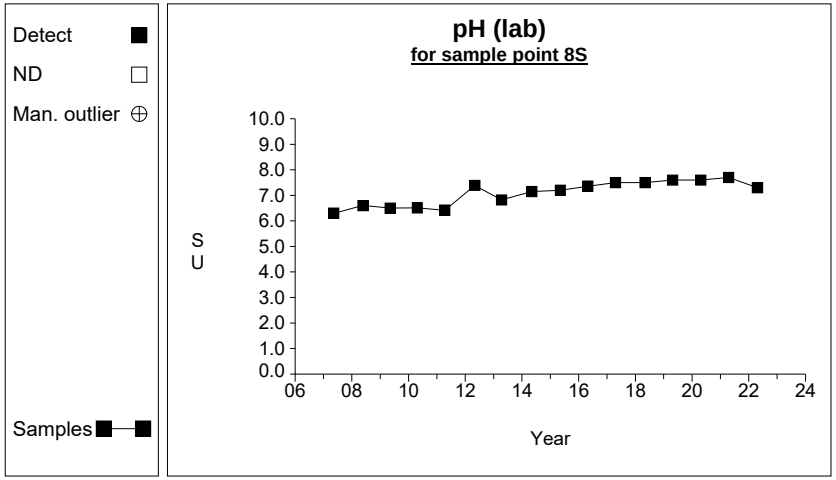


Graph 180

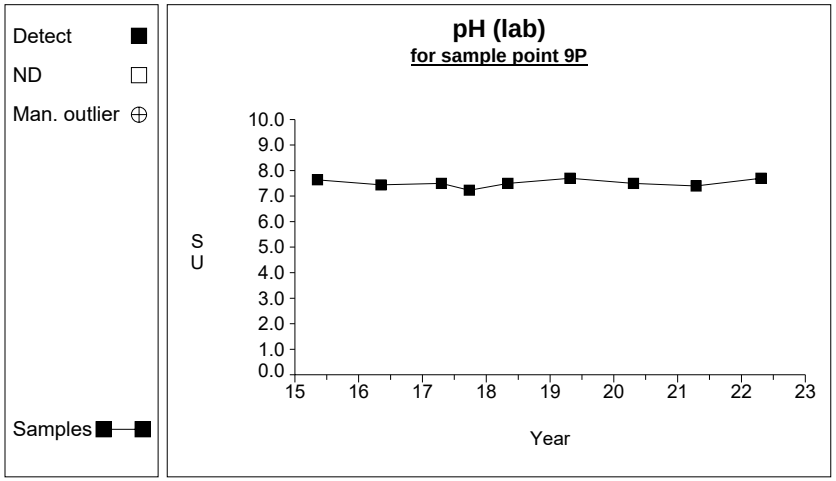
Time Series



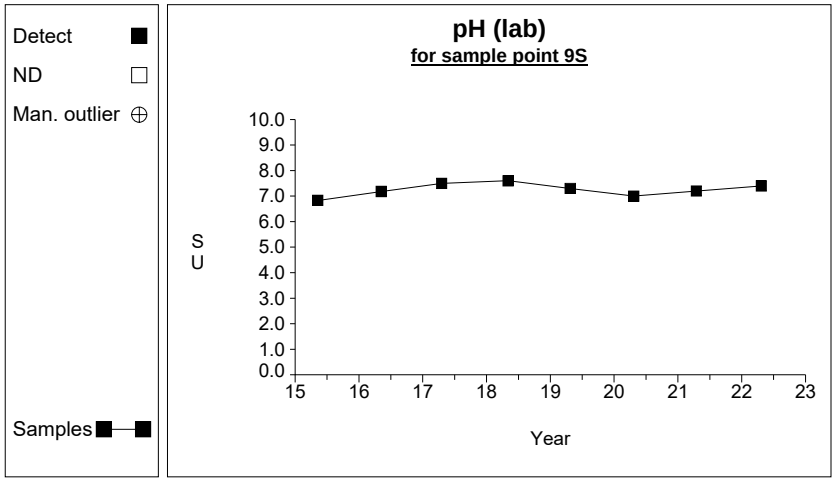
Graph 181



Graph 182

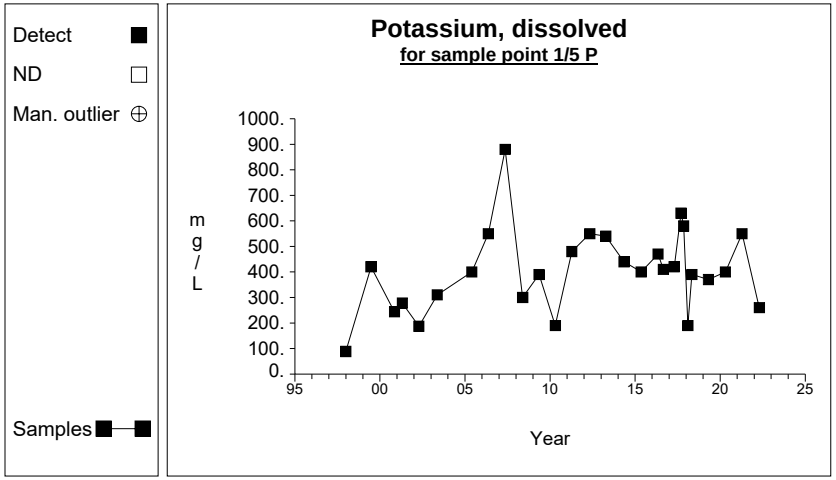


Graph 183

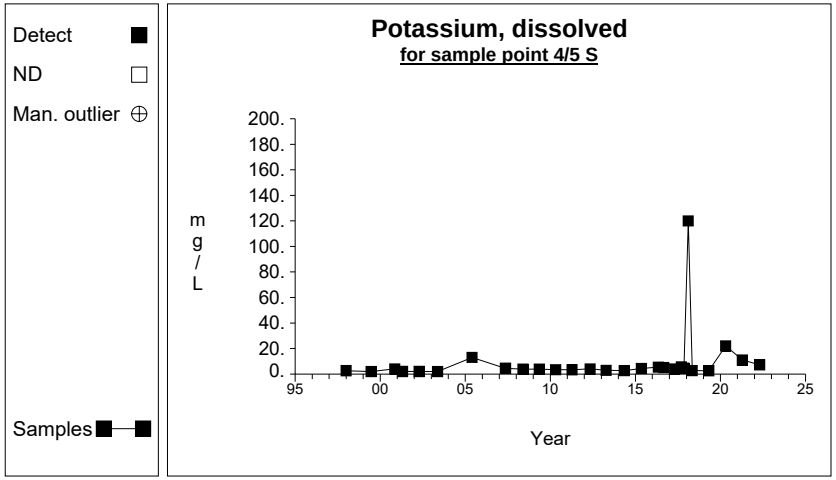


Graph 184

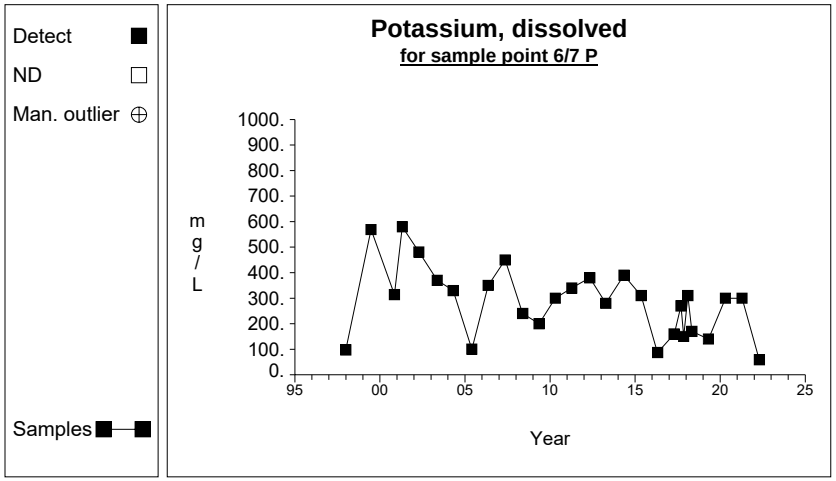
Time Series



Graph 185



Graph 186



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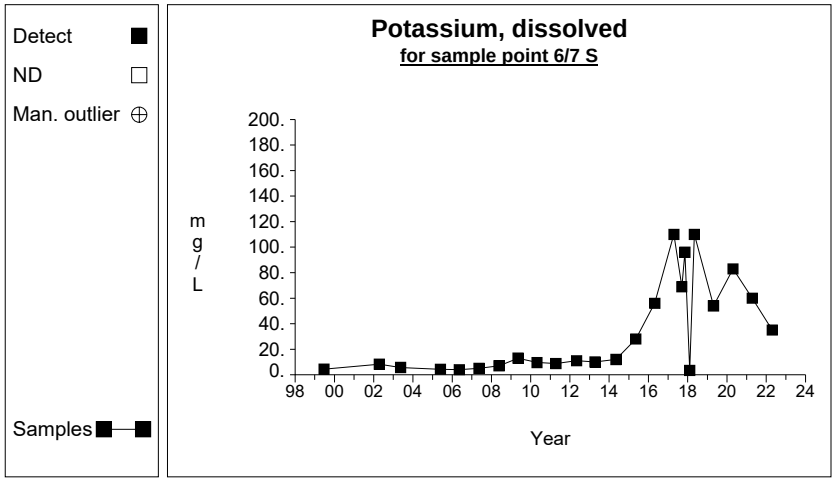
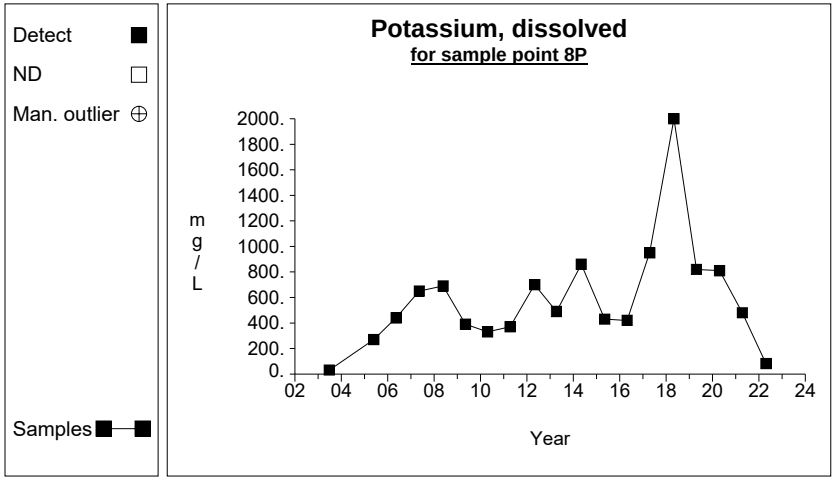
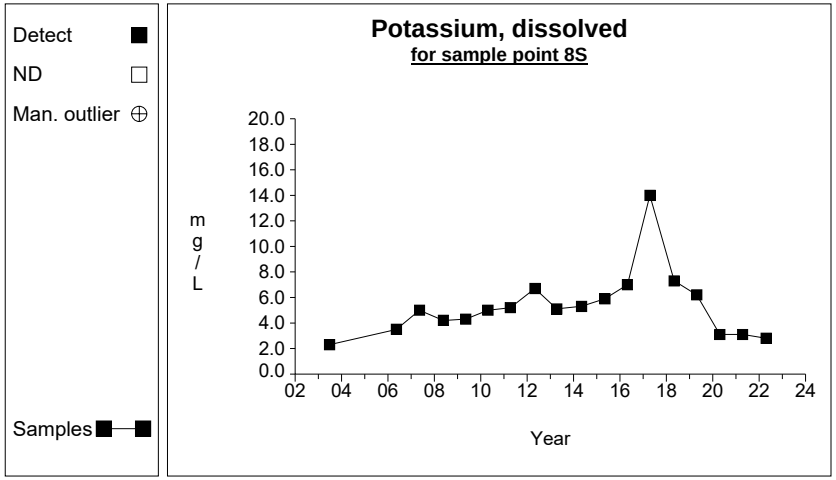


Graph 188

Time Series



Graph 189



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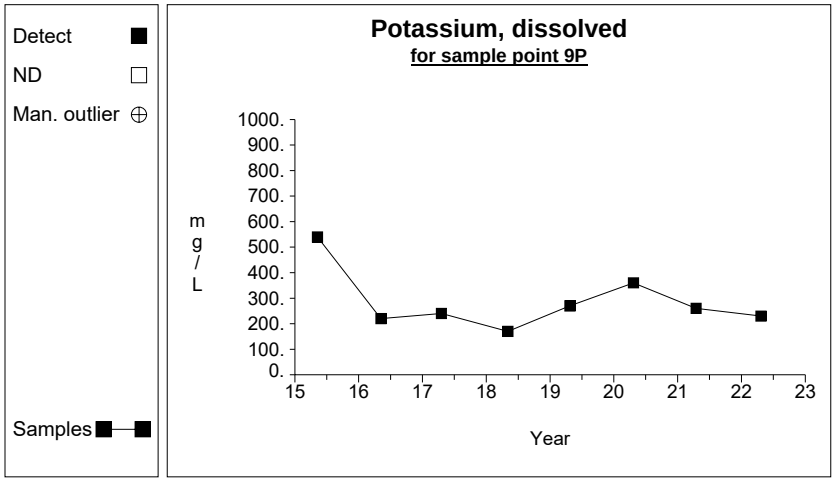
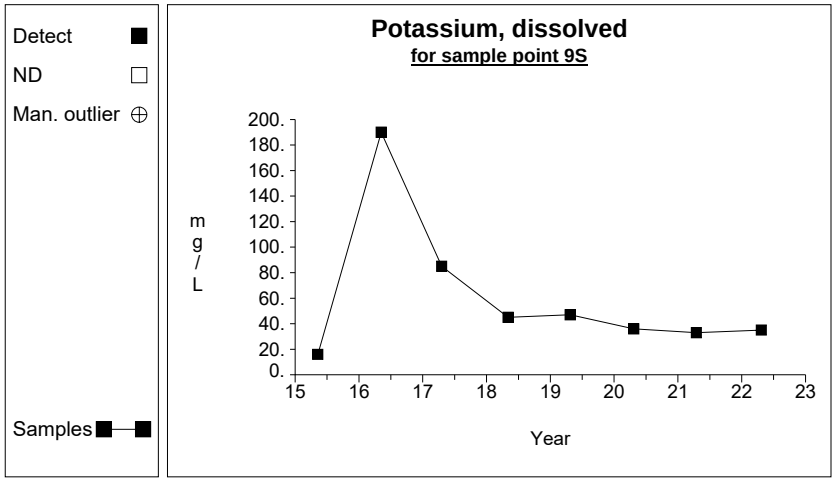
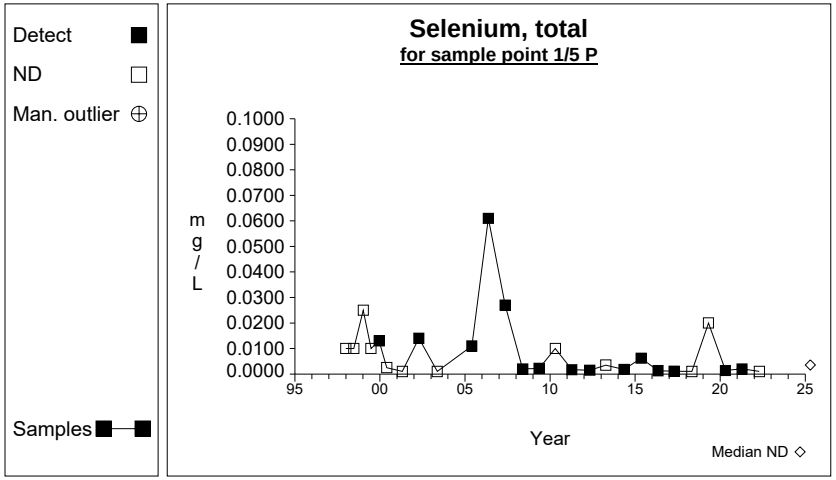


Graph 191

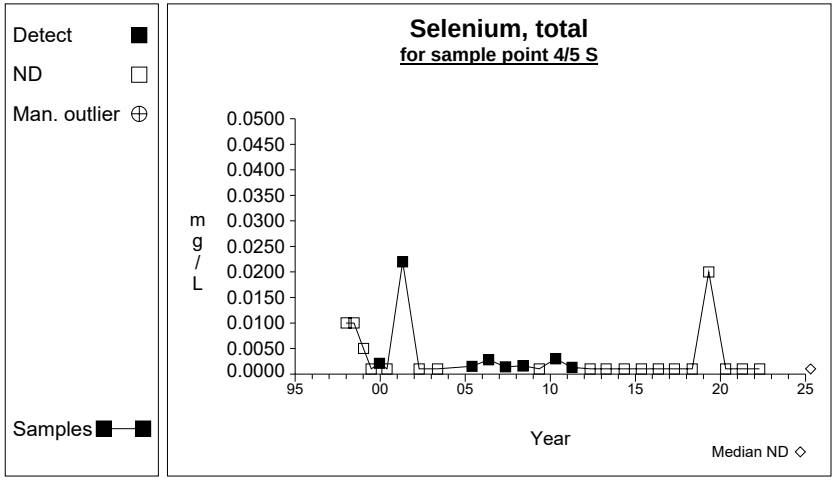


Graph 192

Time Series



Graph 193



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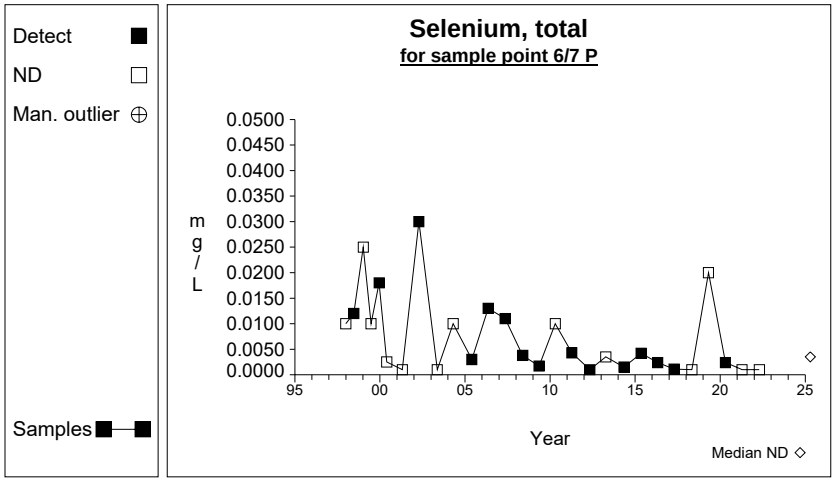

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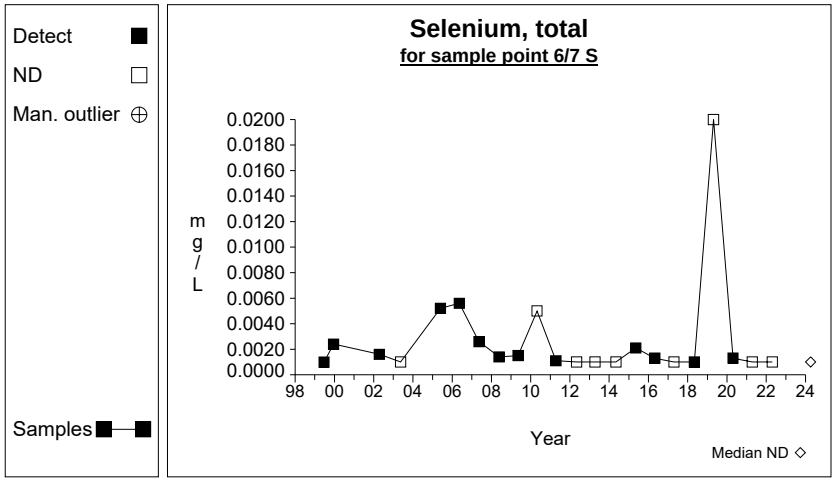
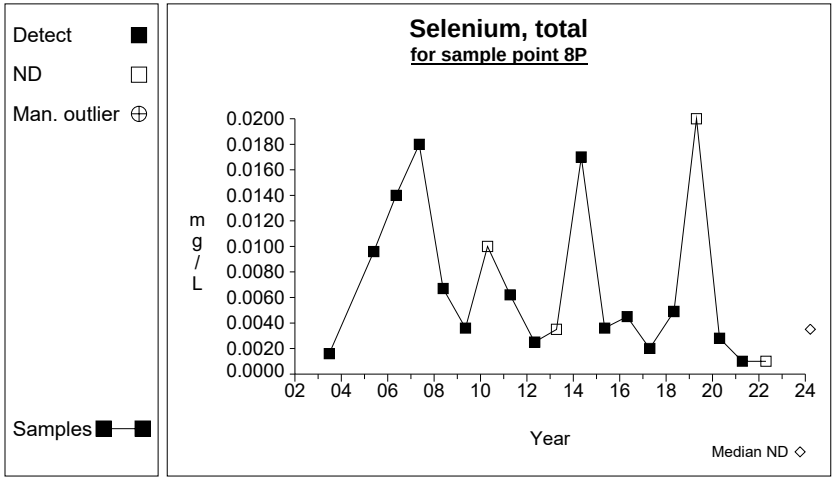
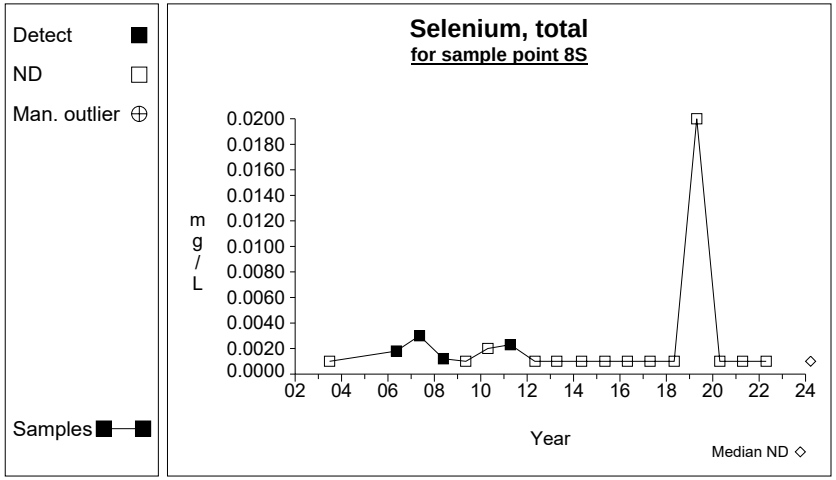


Graph 196

Time Series



Graph 197



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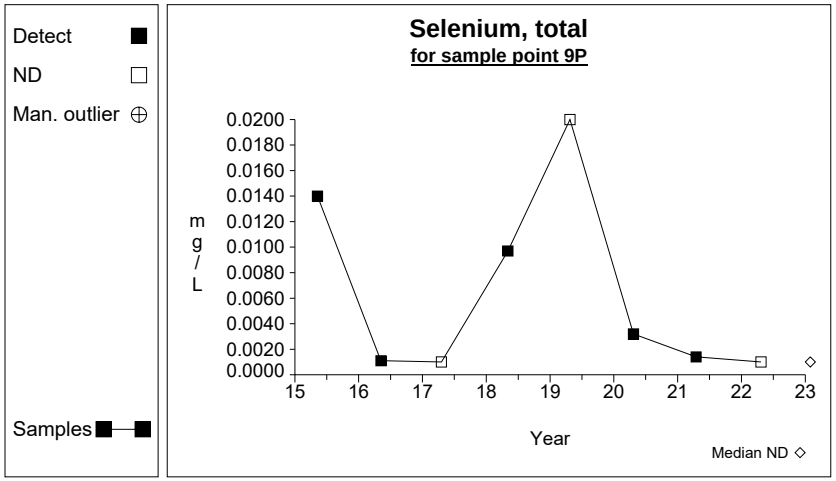
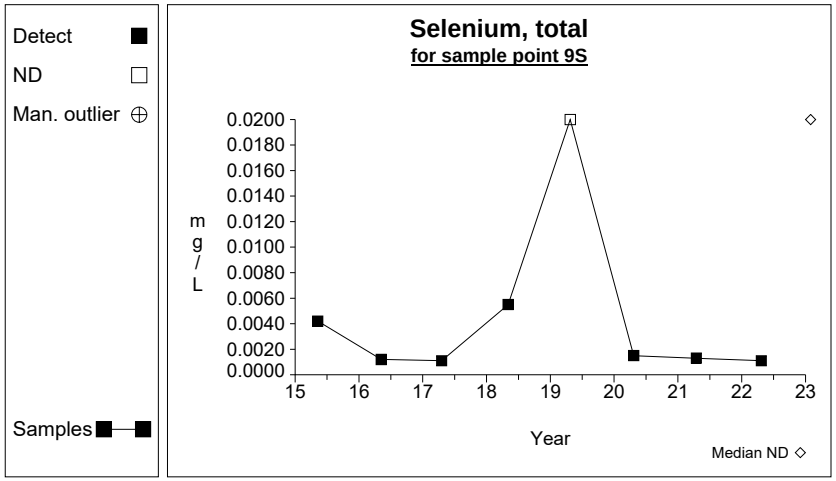
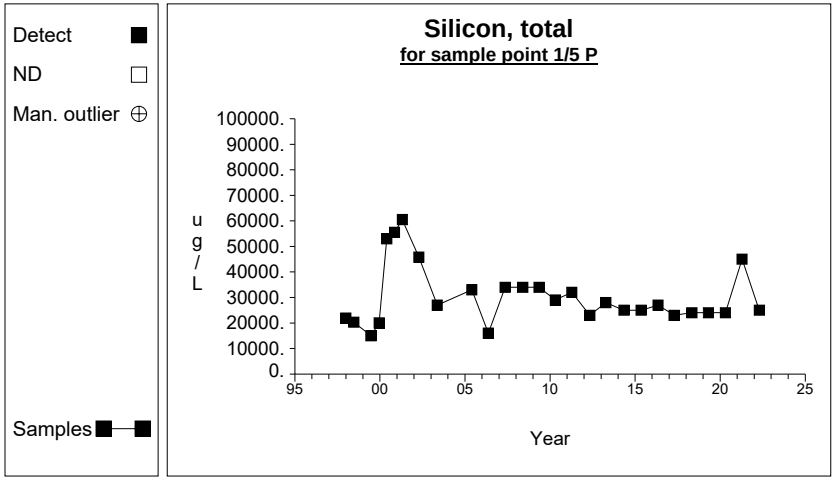


Graph 199

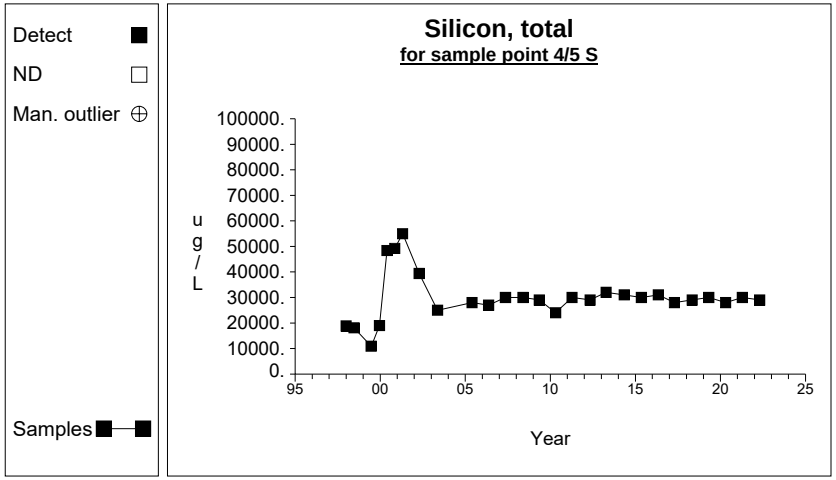


Graph 200

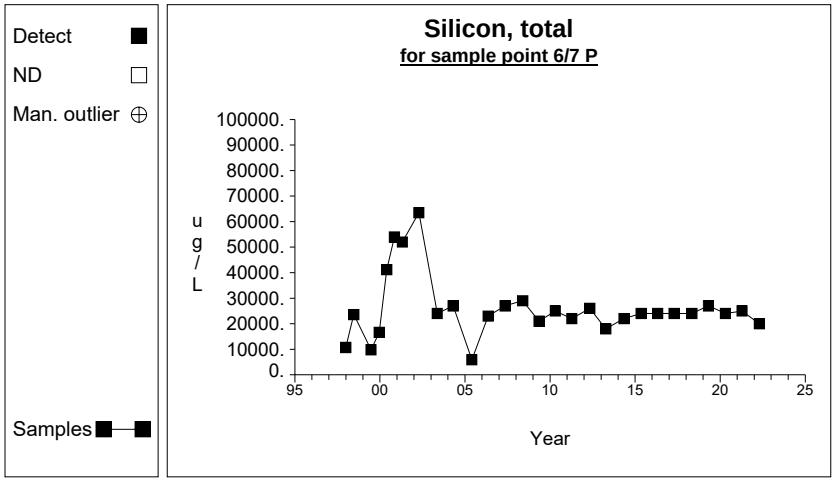
Time Series



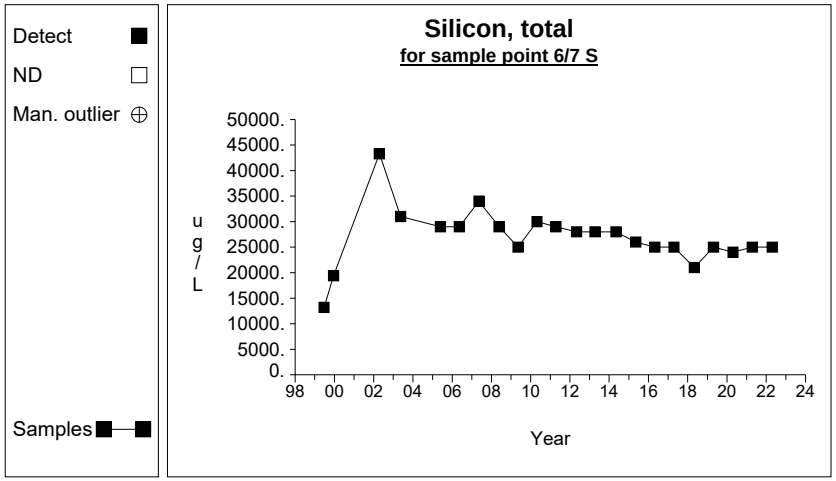
Graph 201



Graph 202

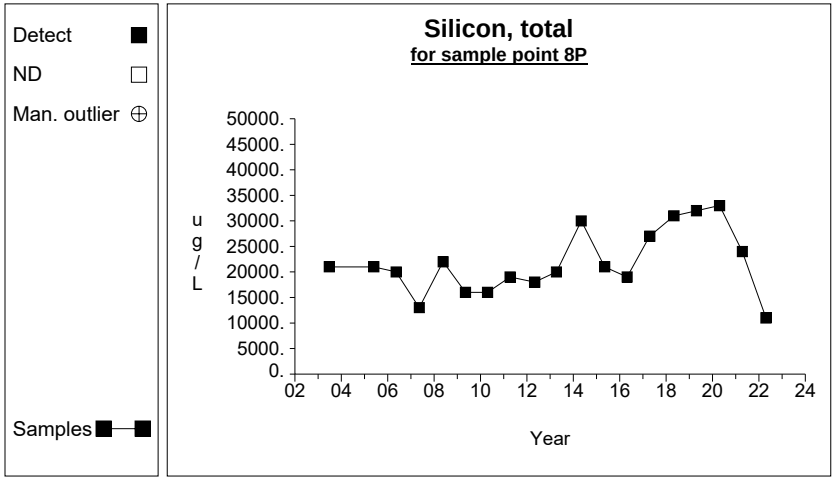


Graph 203

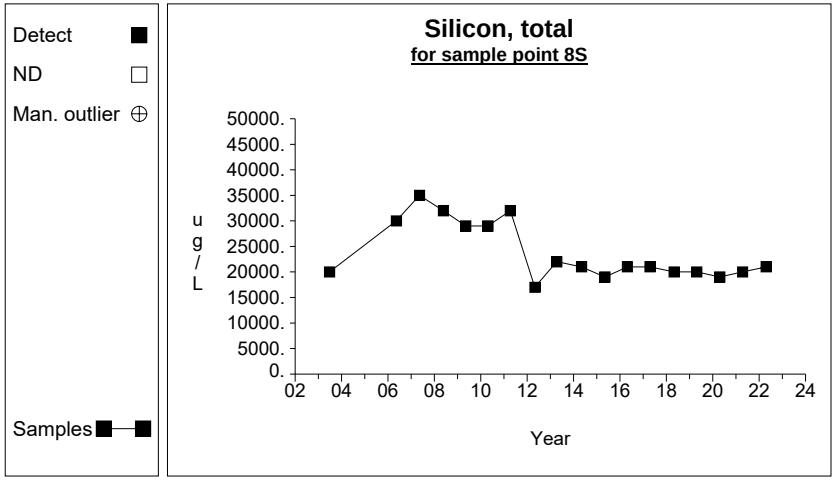


Graph 204

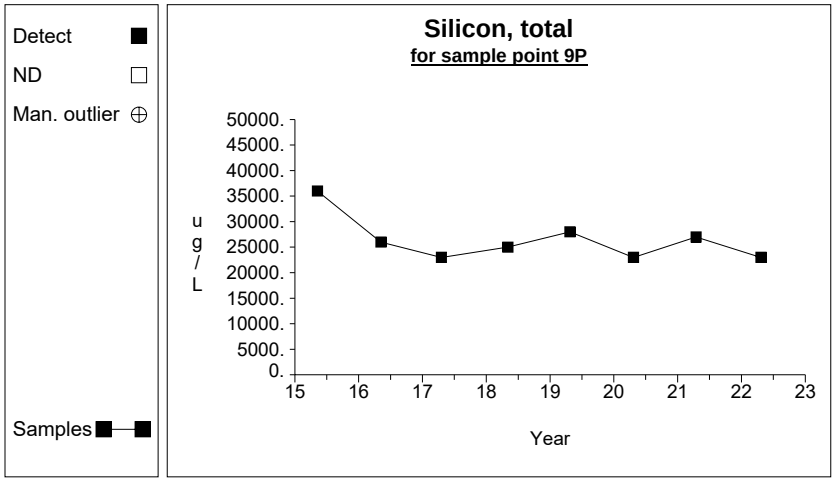
Time Series



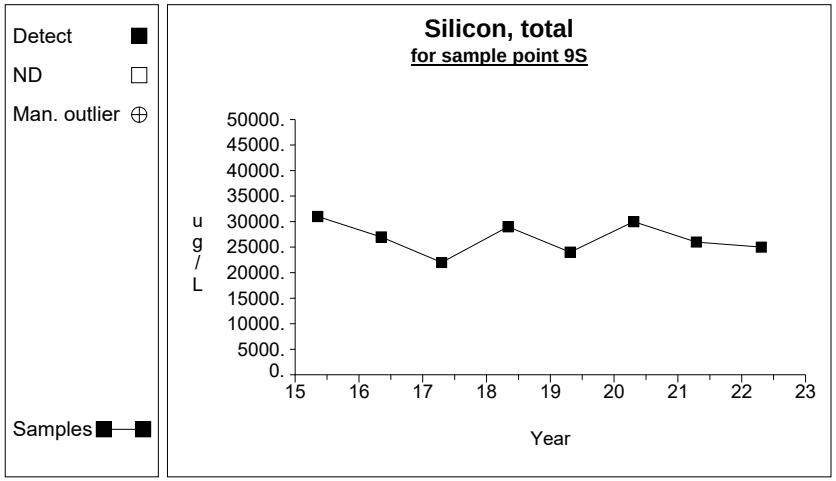
Graph 205



Graph 206

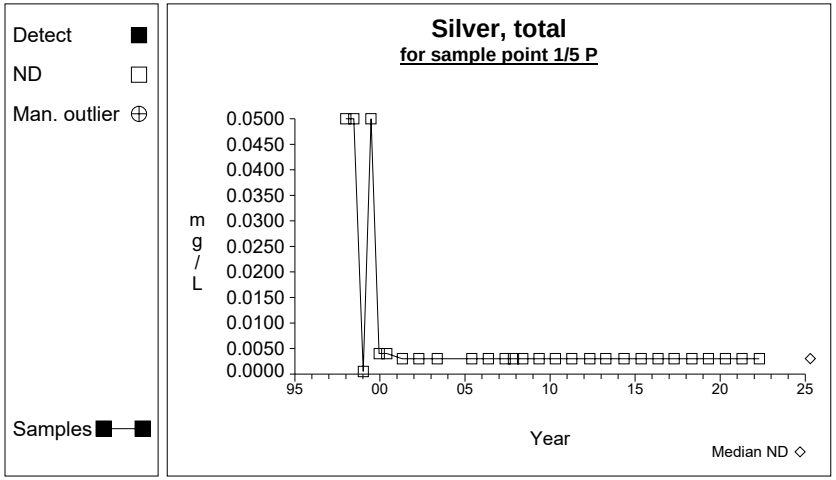


Graph 207

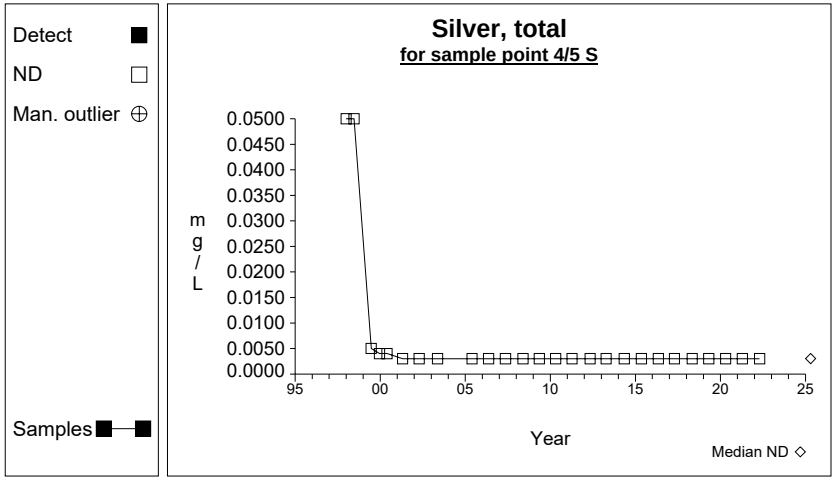


Graph 208

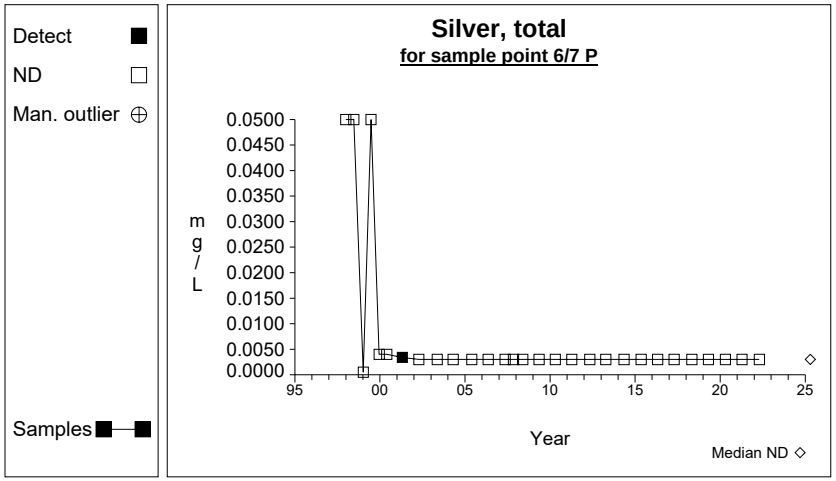
Time Series



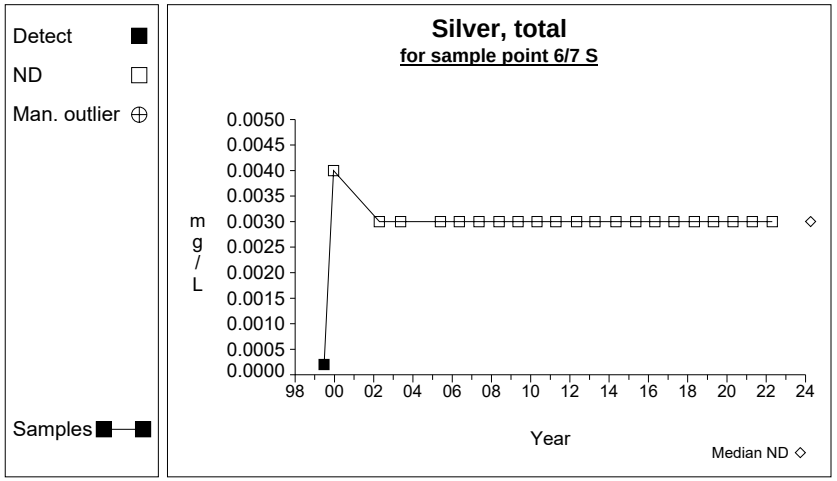
Graph 209



Graph 210

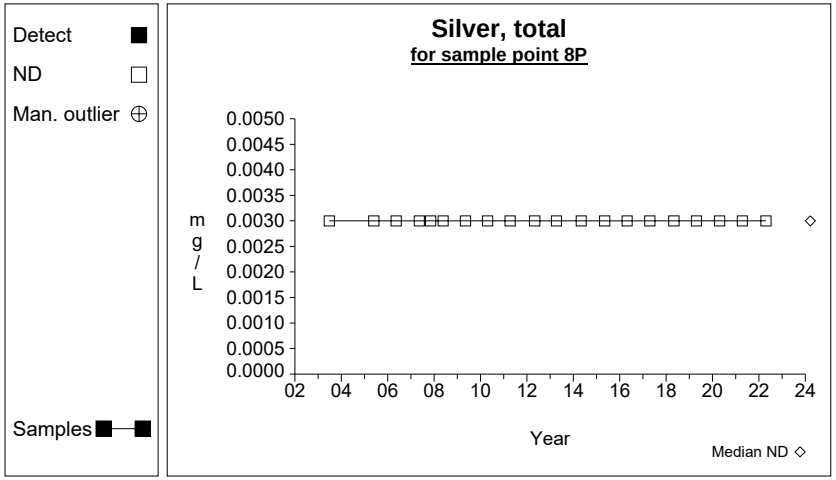


Graph 211

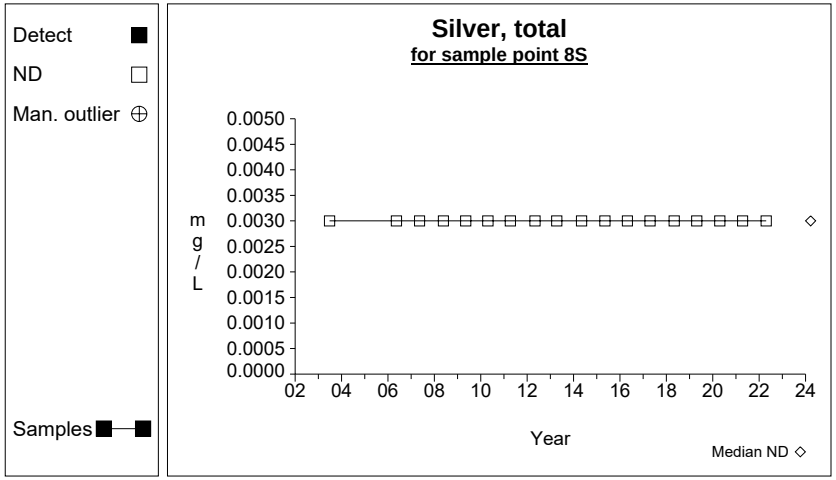


Graph 212

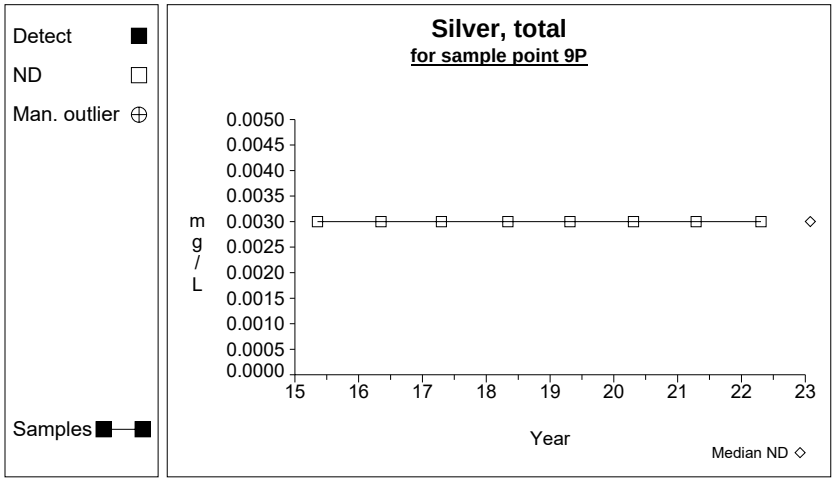
Time Series



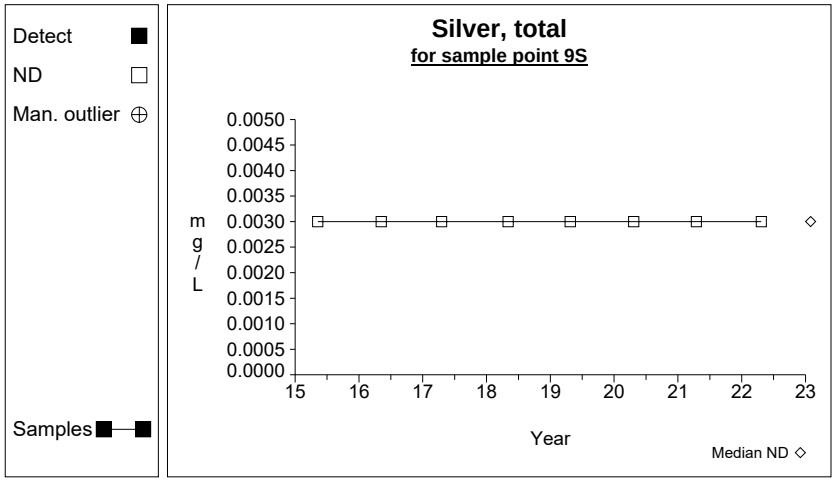
Graph 213



Graph 214

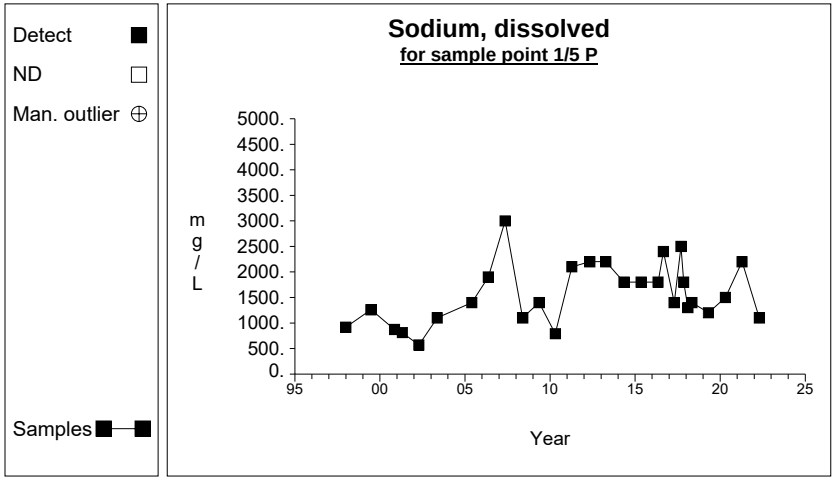


Graph 215

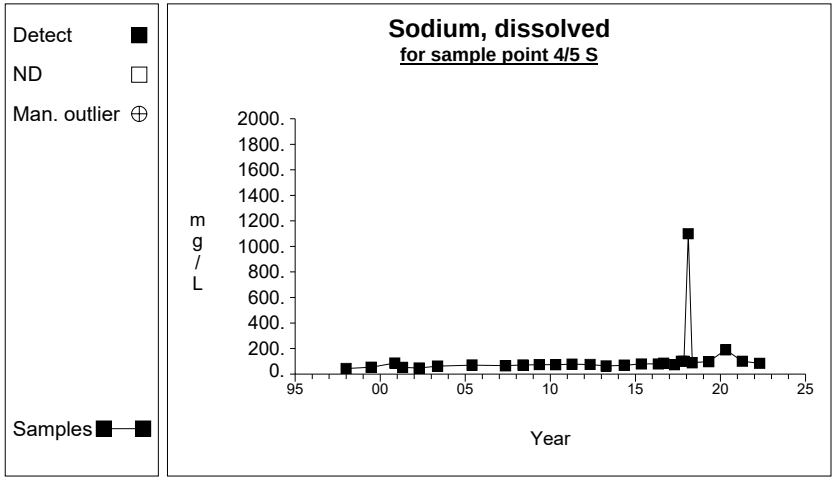


Graph 216

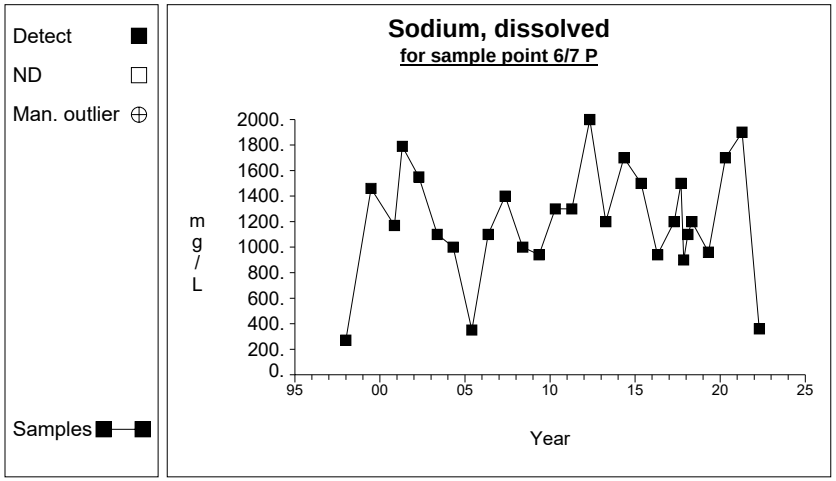
Time Series



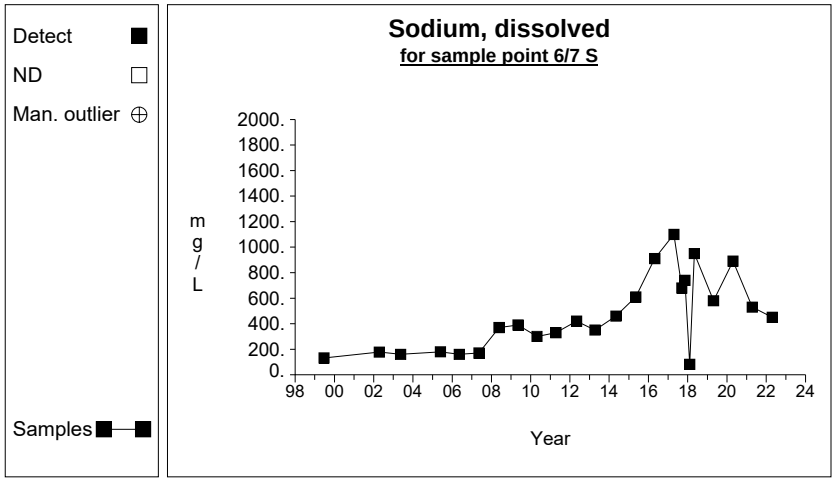
Graph 217



Graph 218

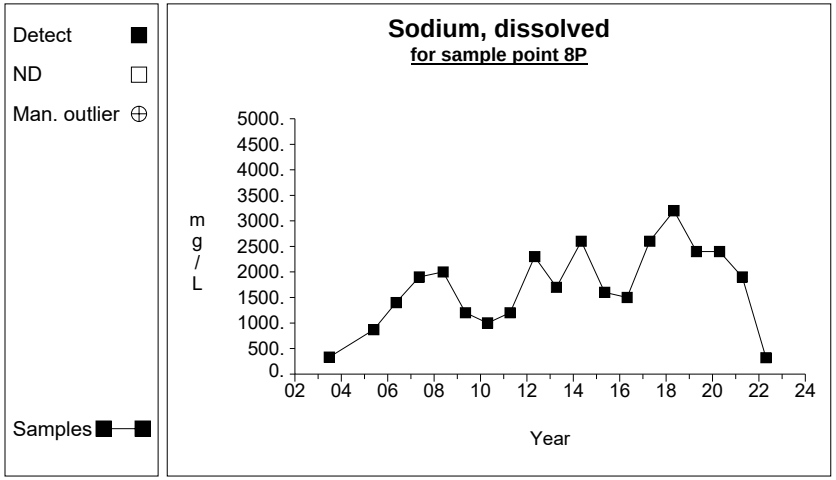


Graph 219

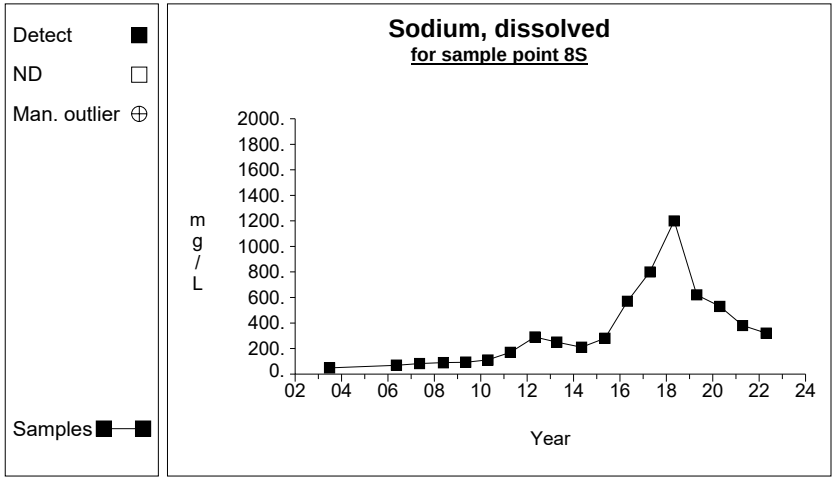


Graph 220

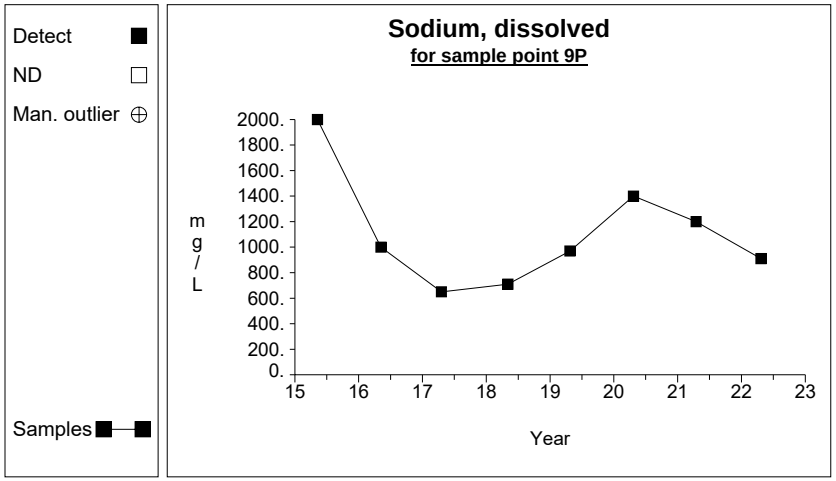
Time Series



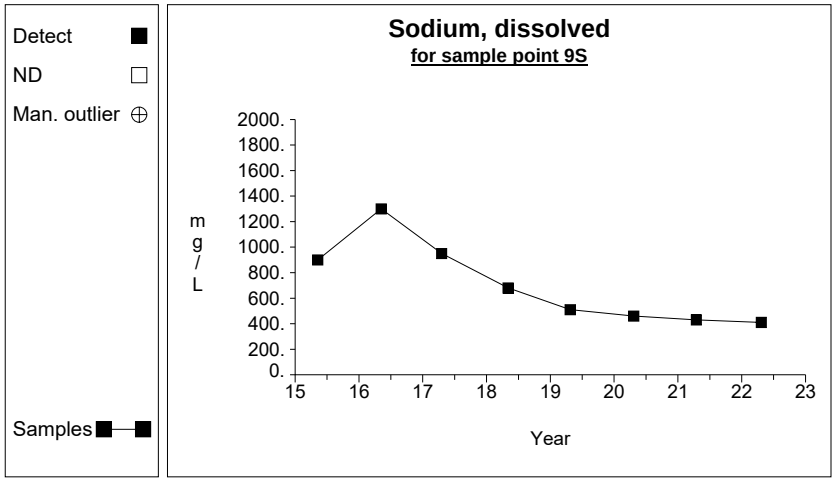
Graph 221



Graph 222

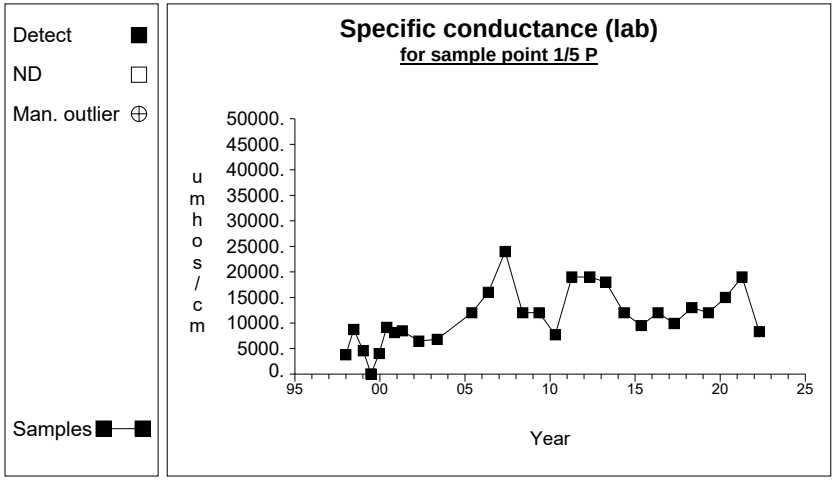


Graph 223

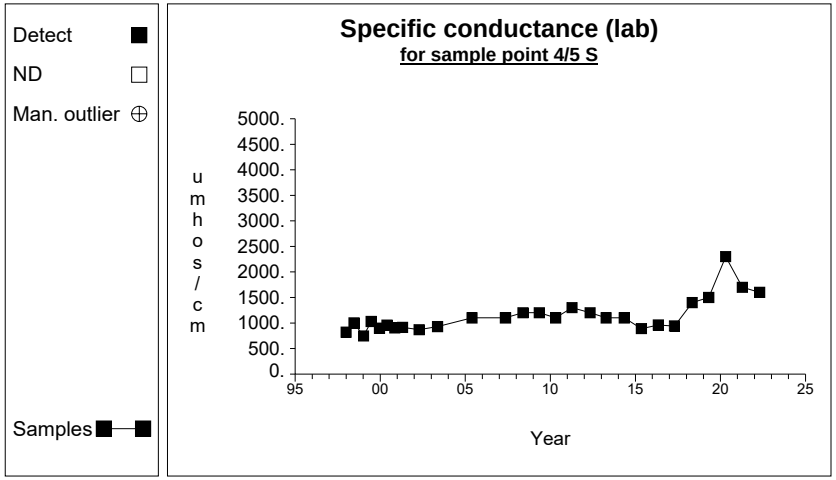


Graph 224

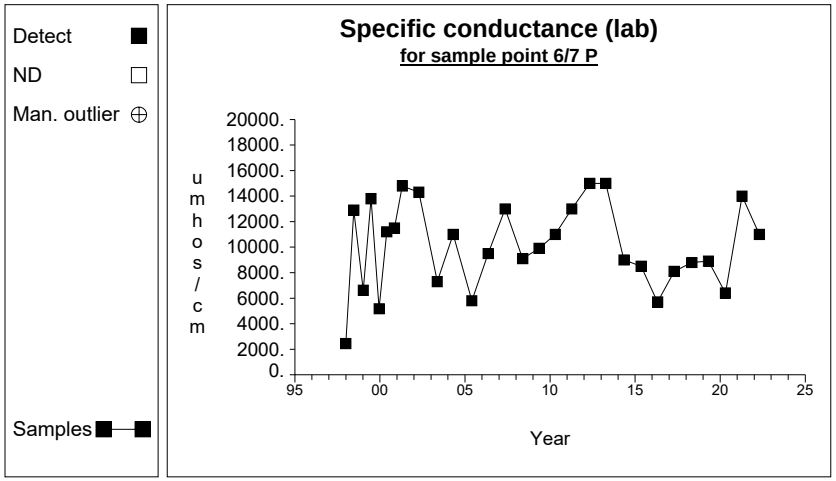
Time Series



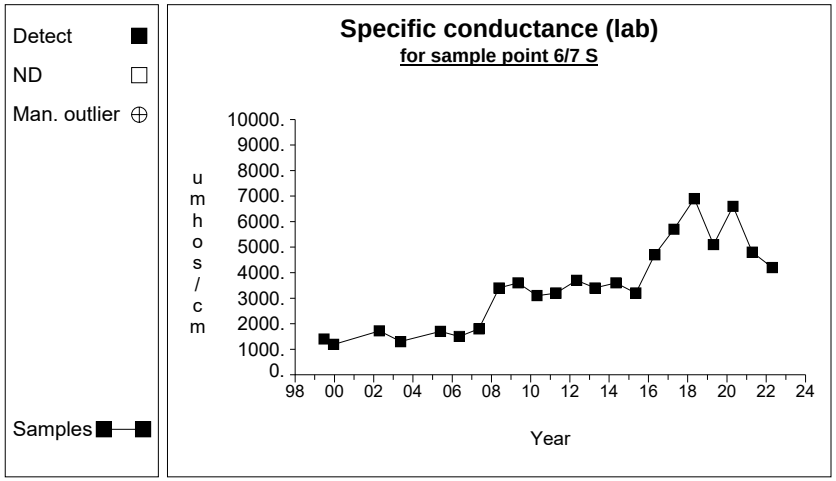
Graph 225



Graph 226

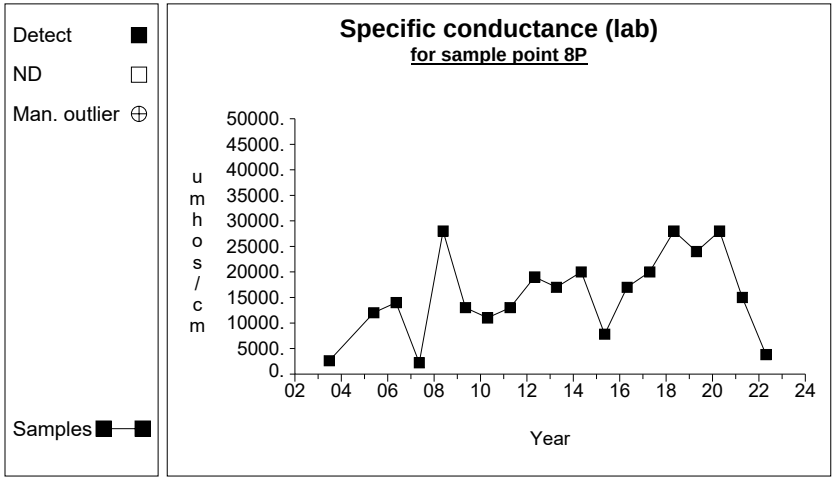


Graph 227

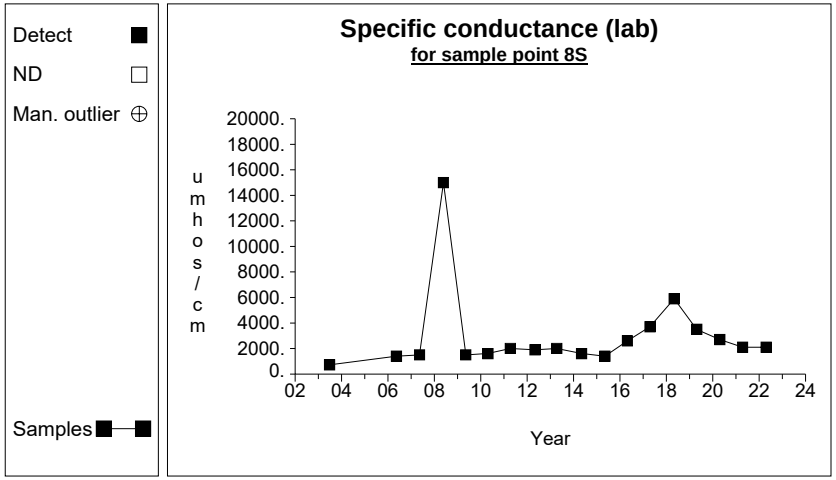


Graph 228

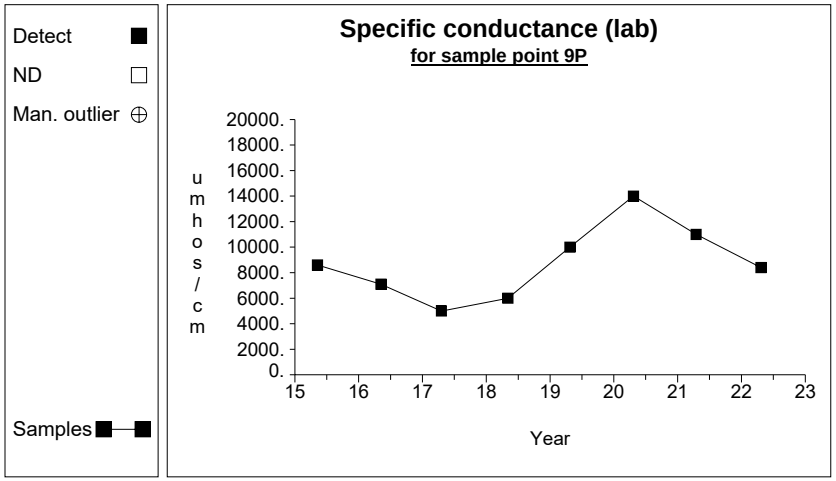
Time Series



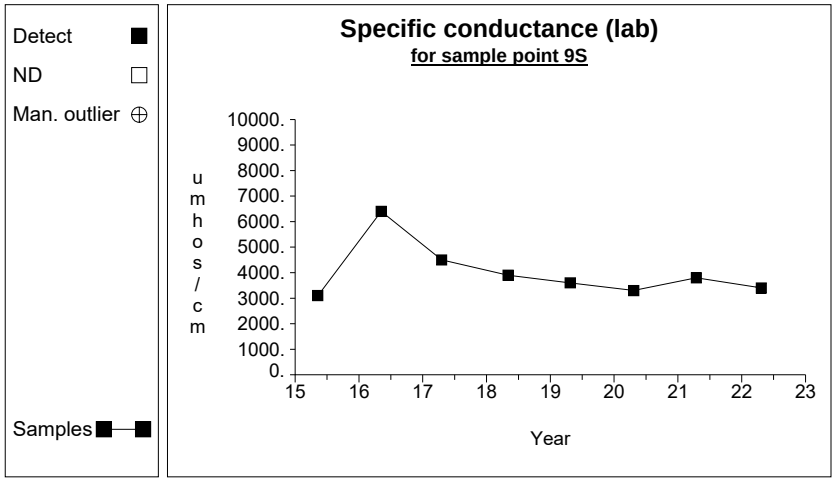
Graph 229



Graph 230

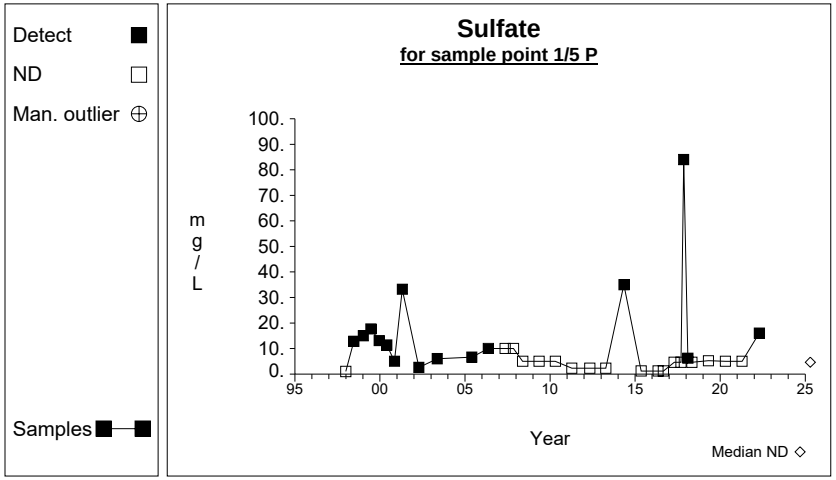


Graph 231



Graph 232

Time Series



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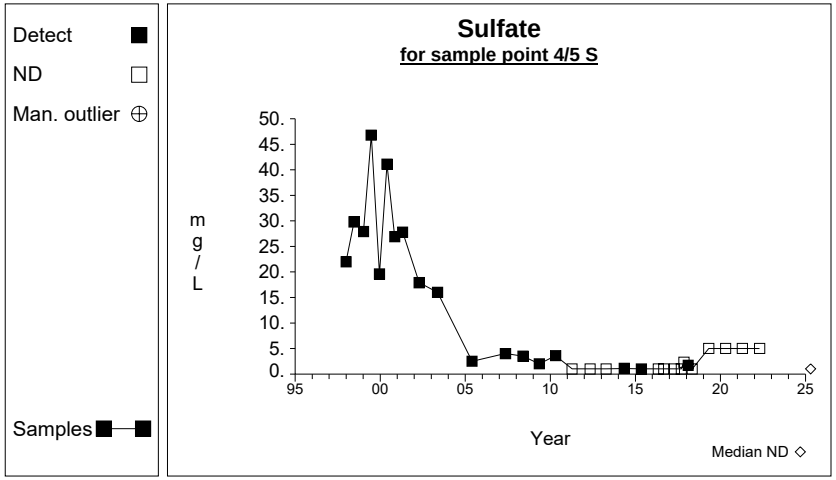
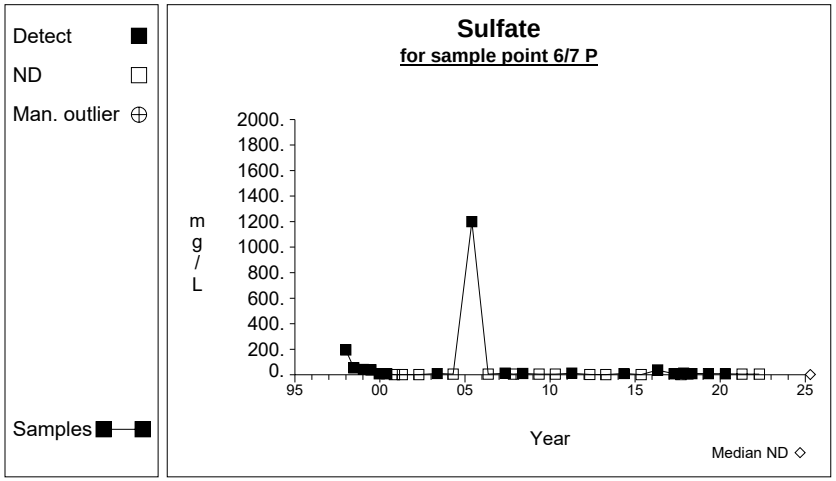


Graph 234



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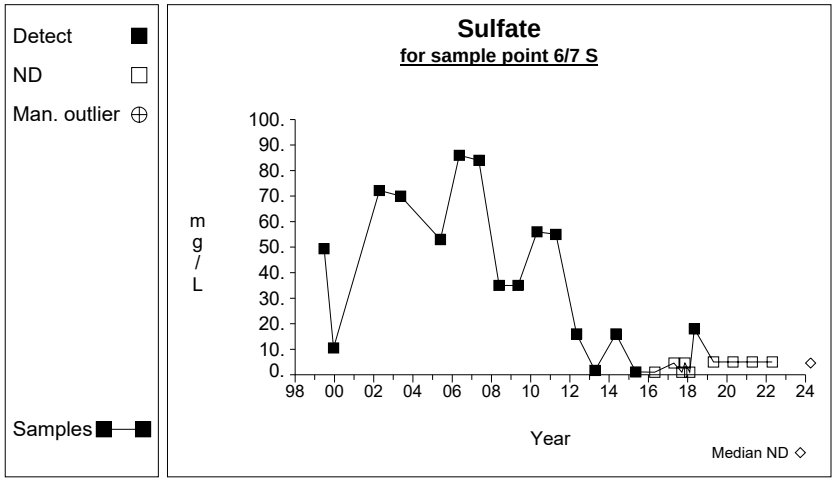
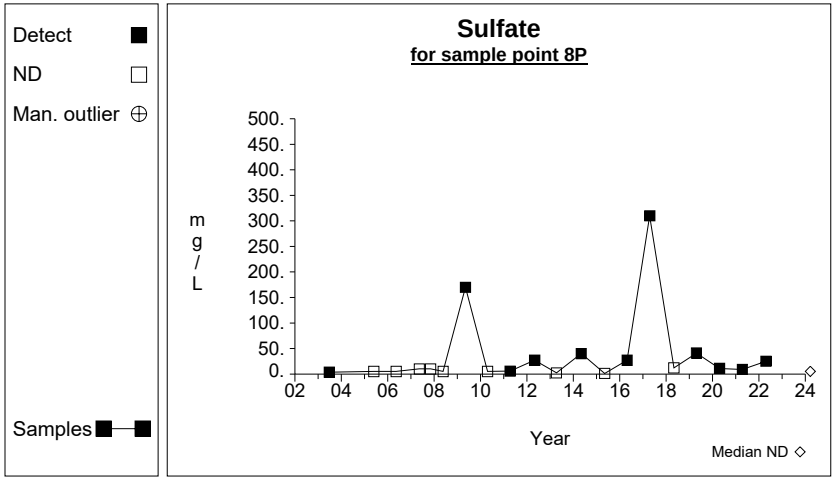
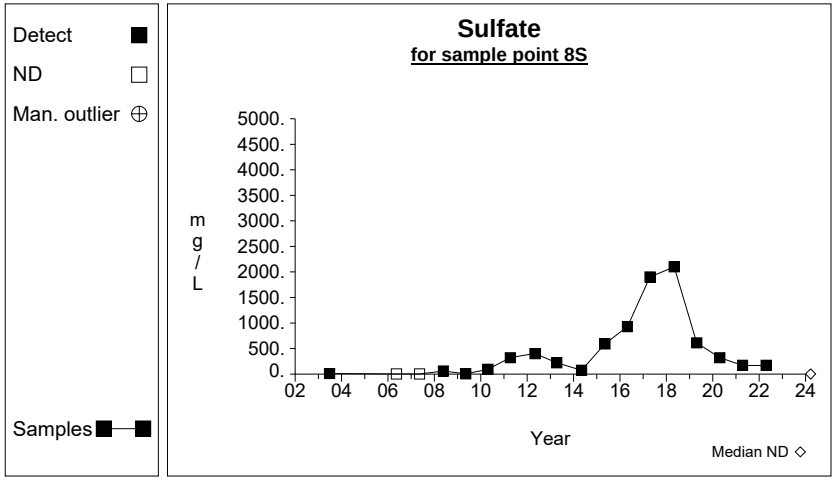


Graph 236

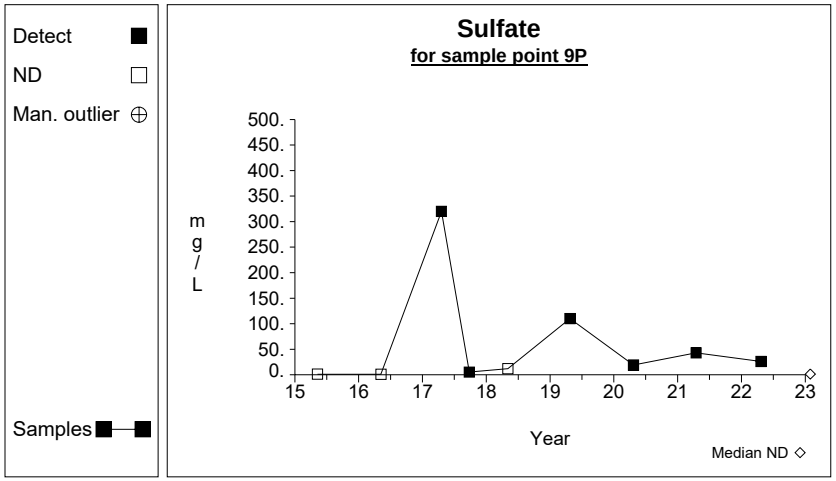
Time Series



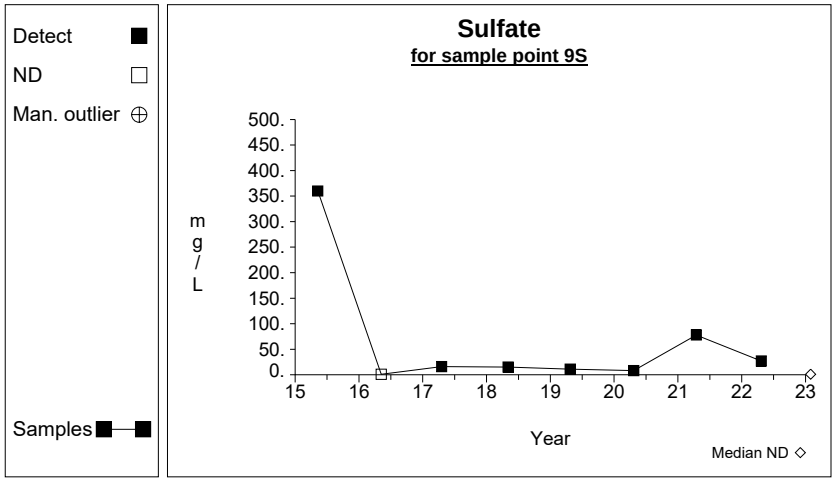
Graph 237



Graph 238

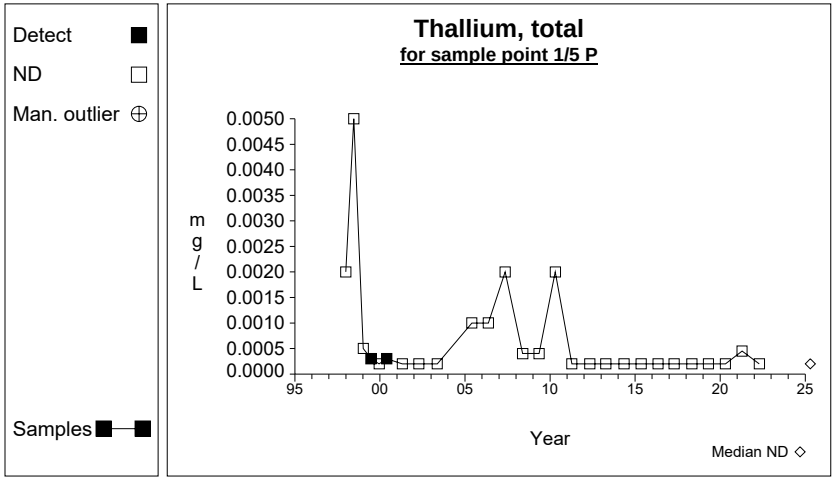


Graph 239

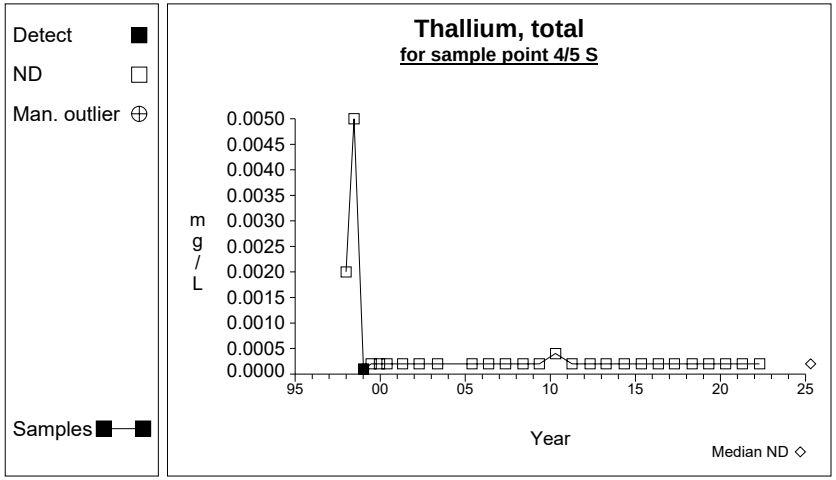


Graph 240

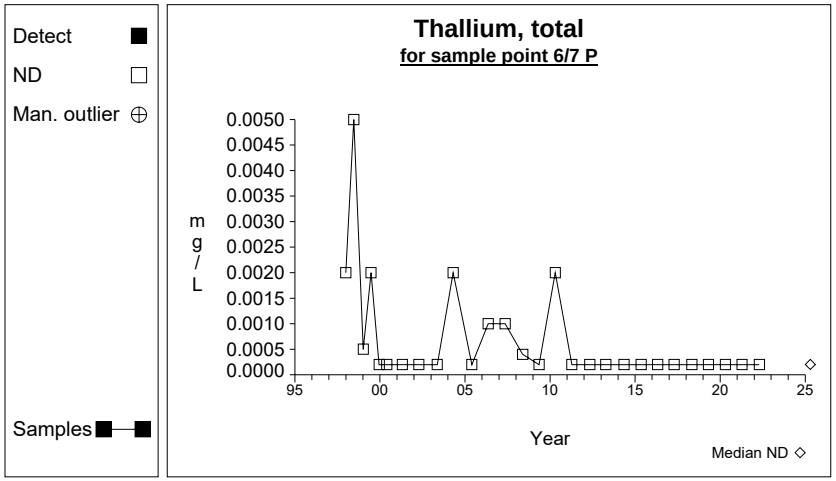
Time Series



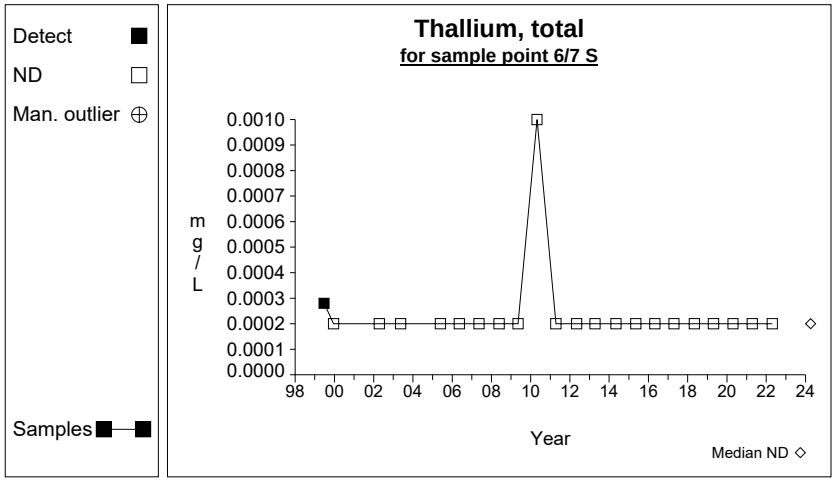
Graph 241



Graph 242

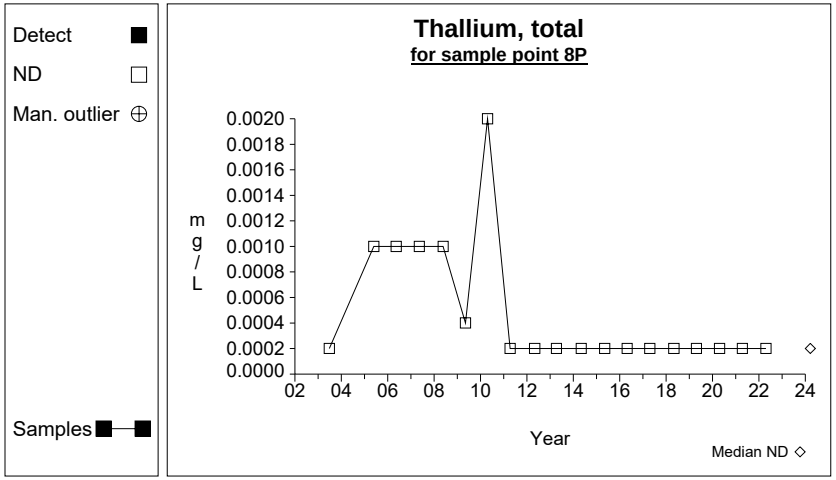


Graph 243

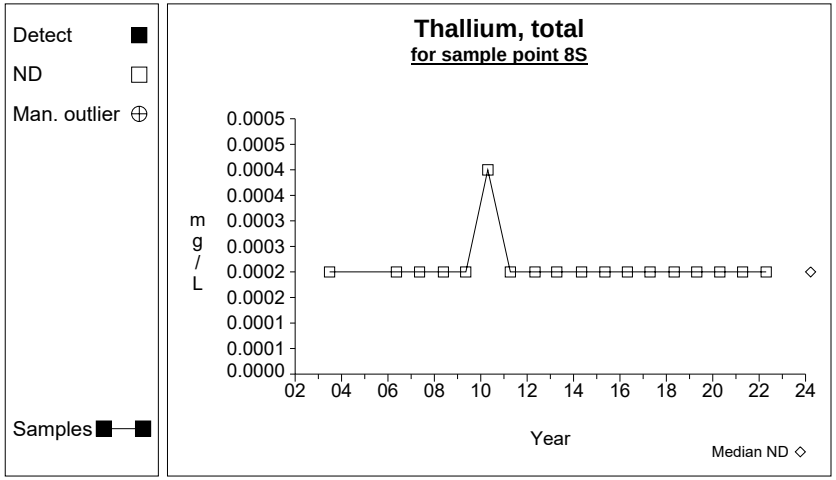


Graph 244

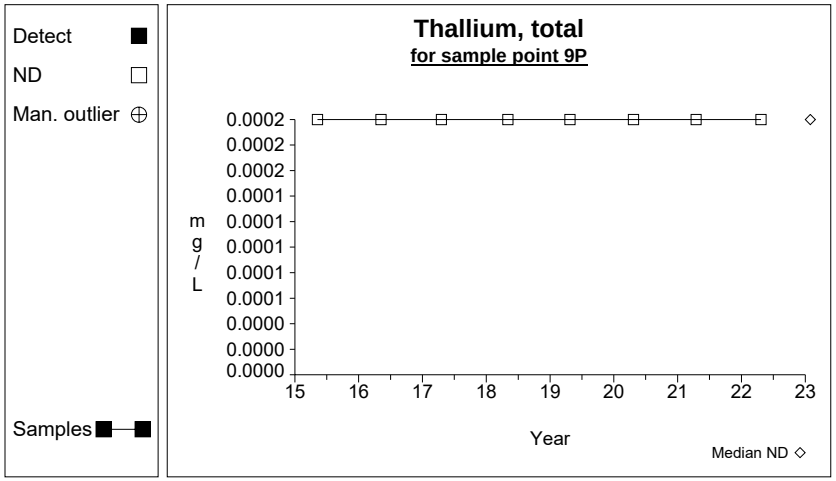
Time Series



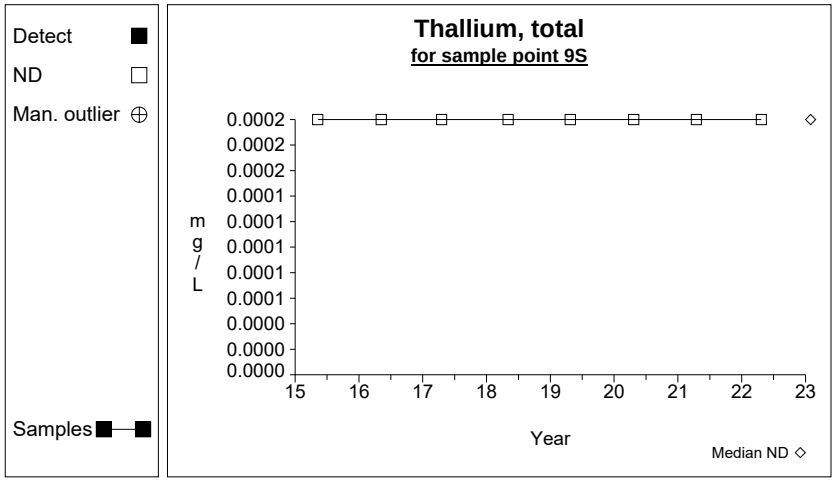
Graph 245



Graph 246

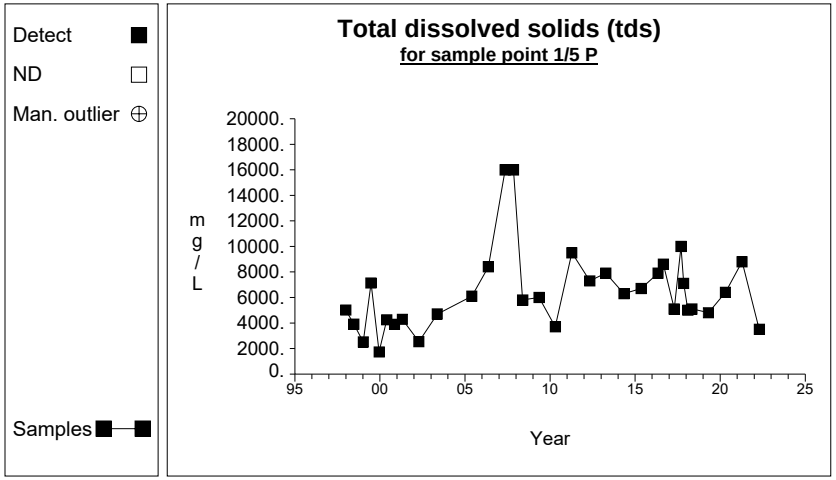


Graph 247

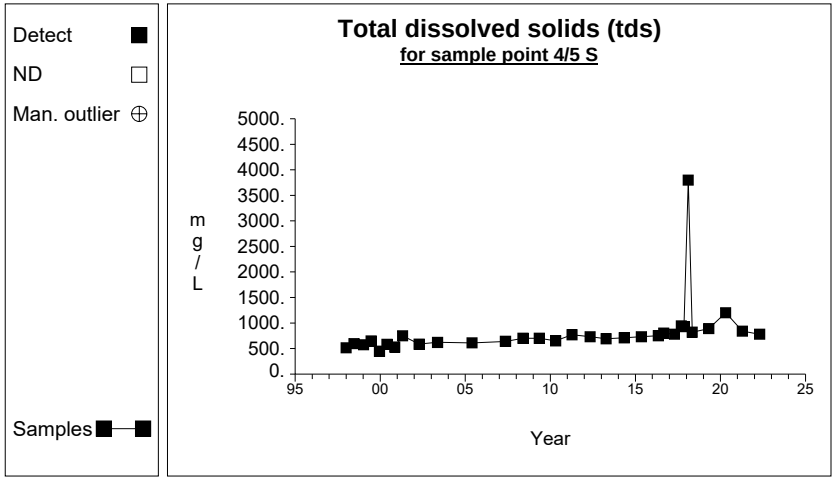


Graph 248

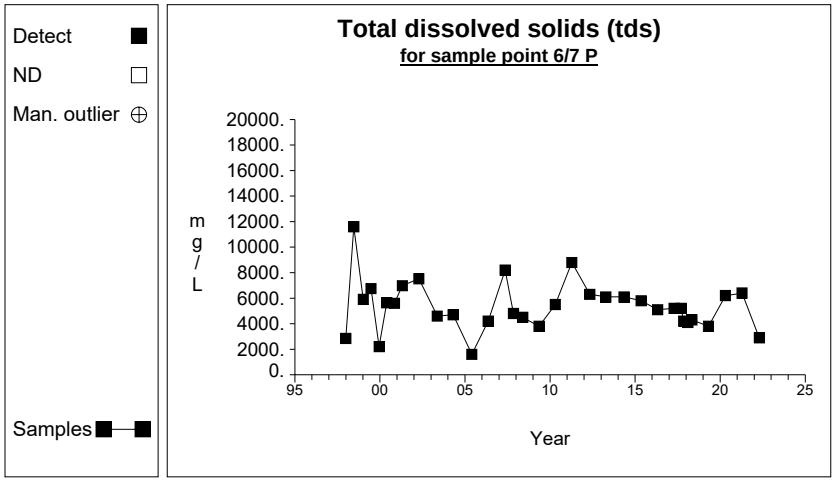
Time Series



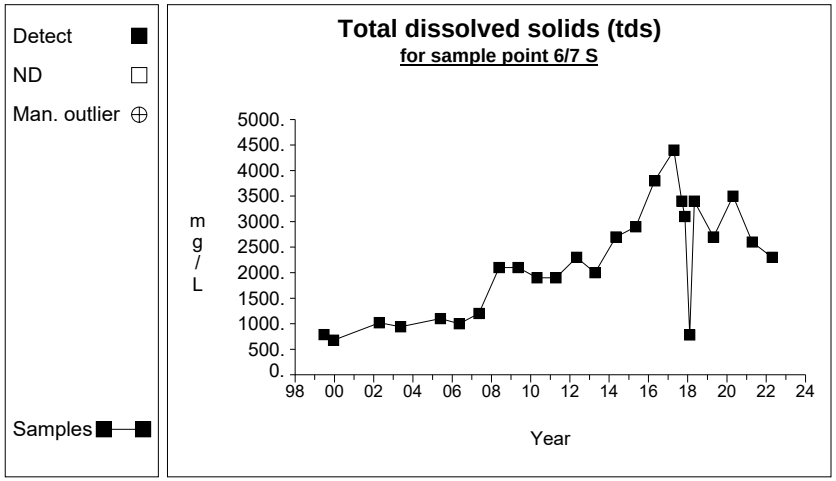
Graph 249



Graph 250

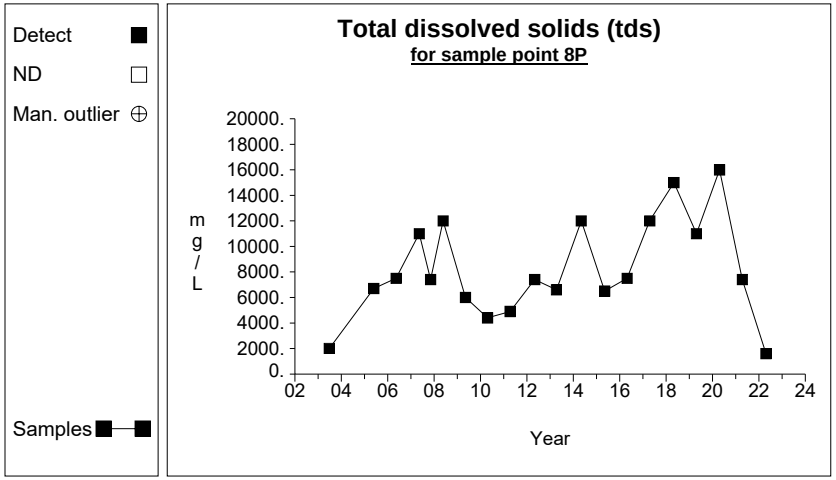


Graph 251

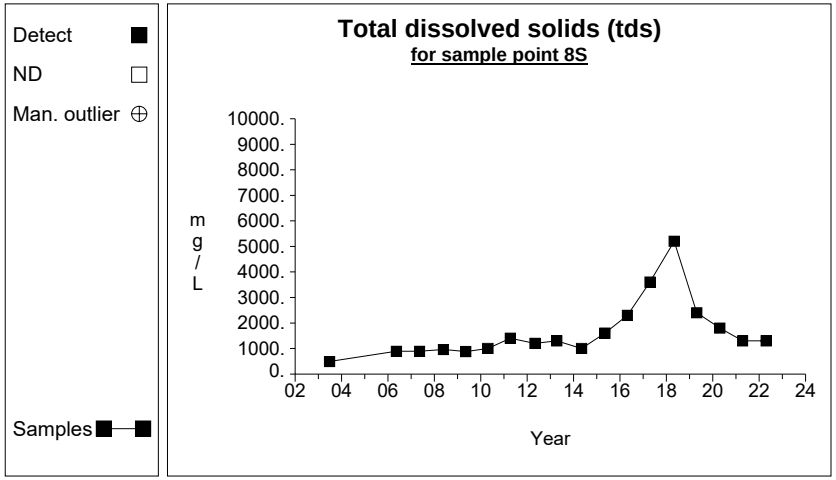


Graph 252

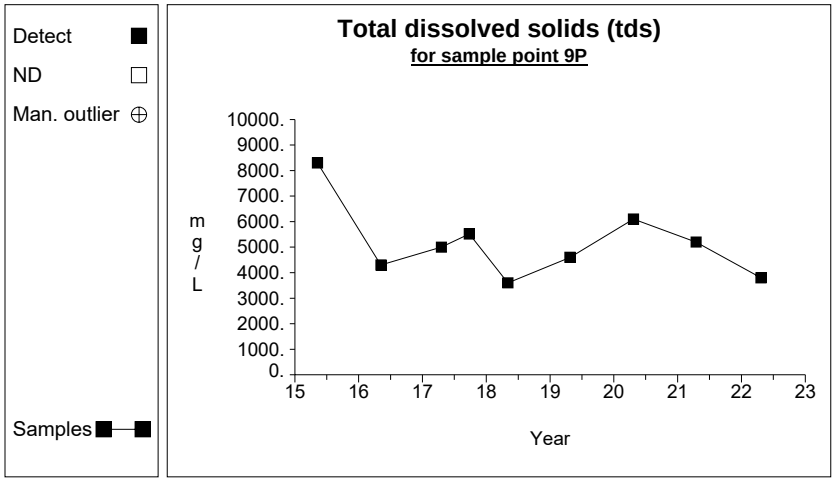
Time Series



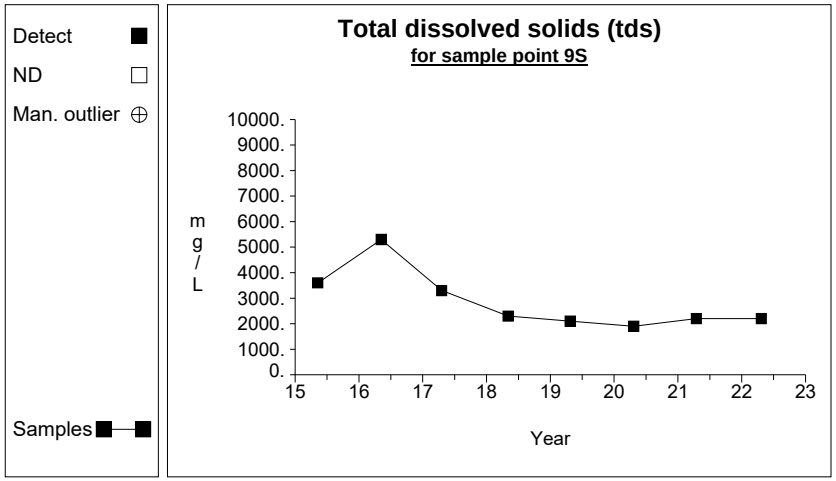
Graph 253



Graph 254

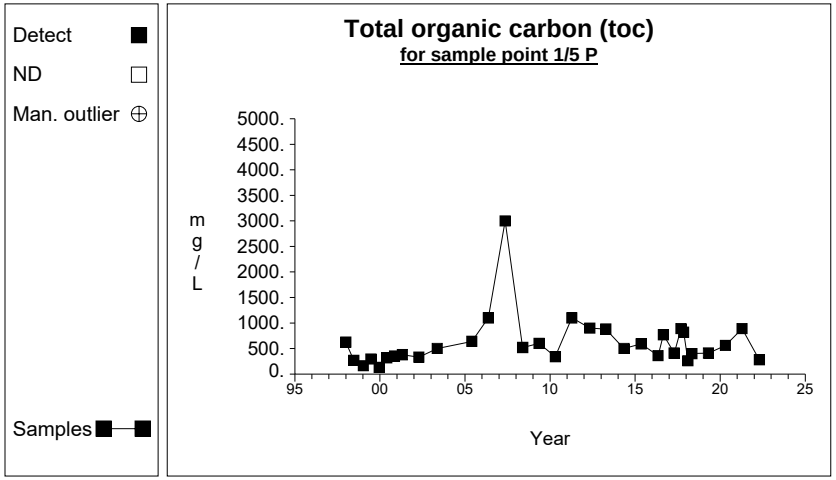


Graph 255

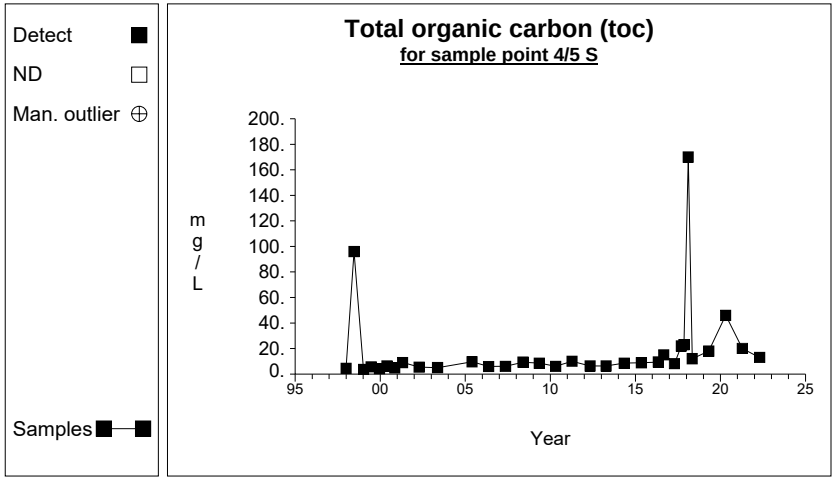


Graph 256

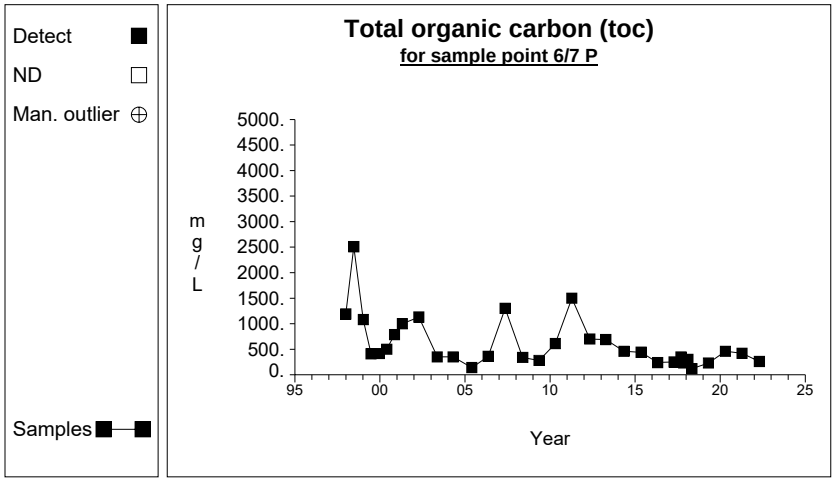
Time Series



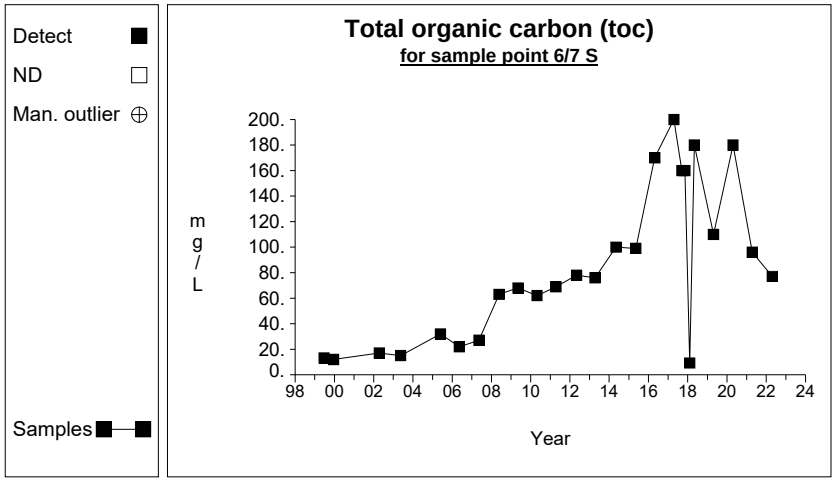
Graph 257



Graph 258

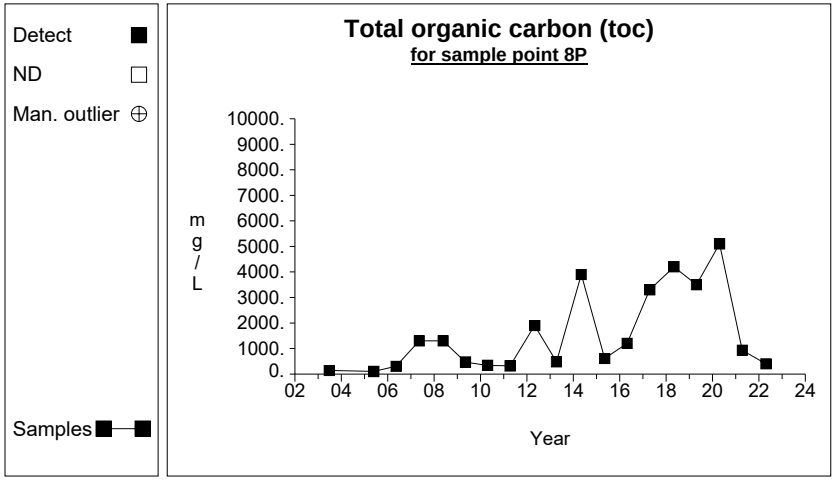


Graph 259

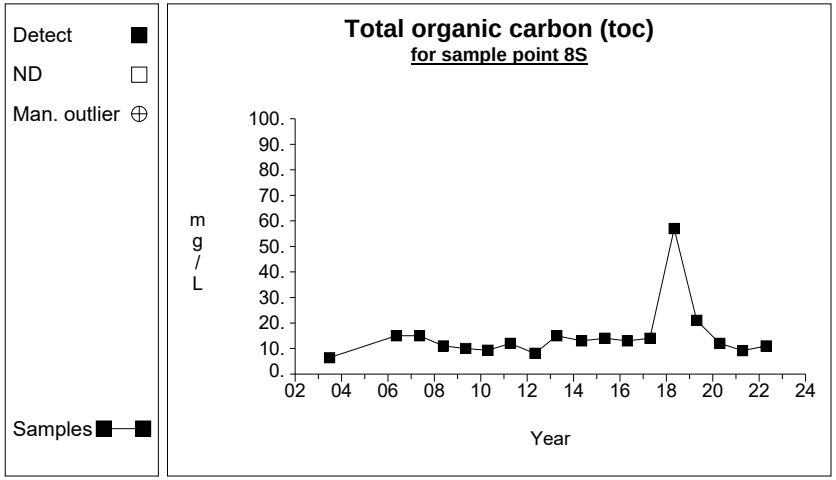


Graph 260

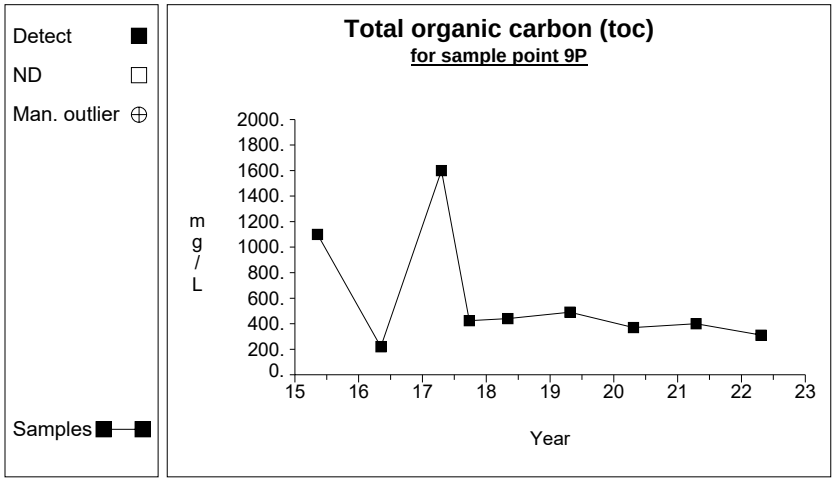
Time Series



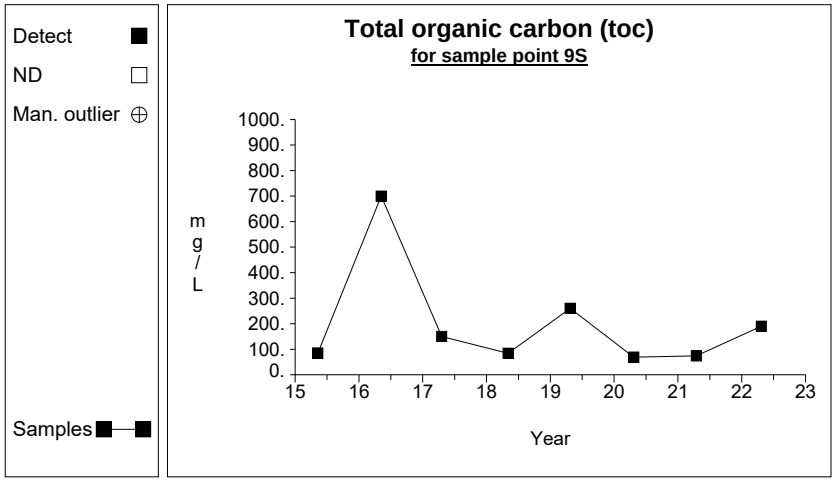
Graph 261



Graph 262

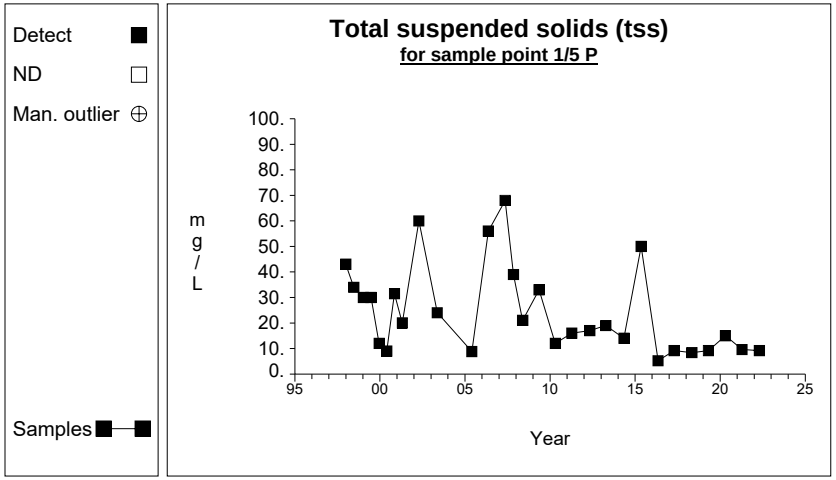


Graph 263

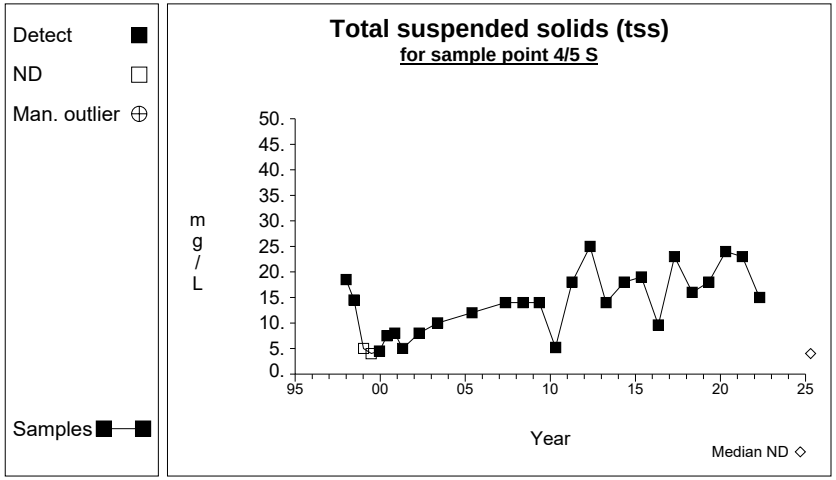


Graph 264

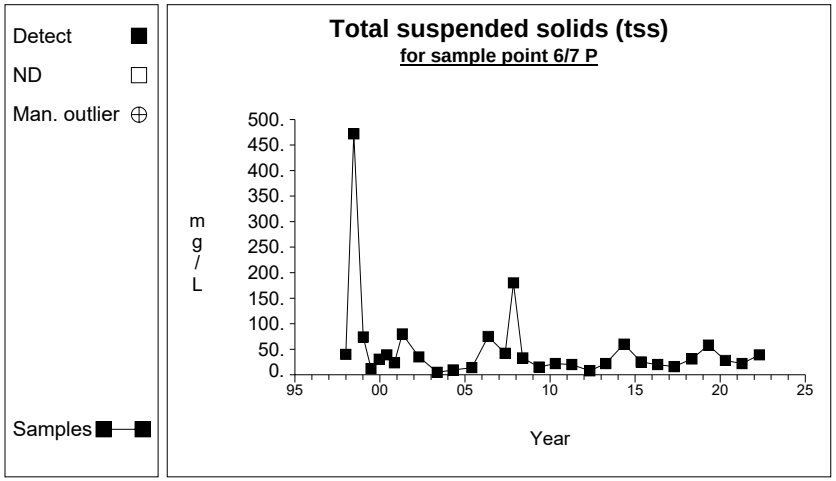
Time Series



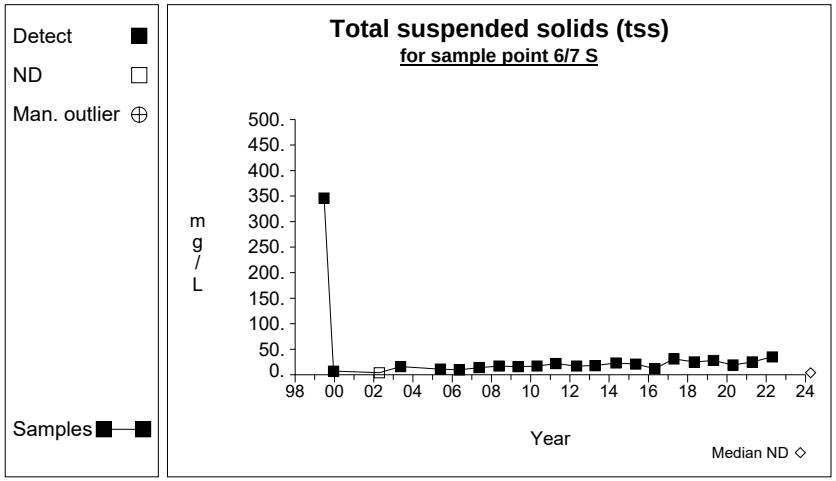
Graph 265



Graph 266

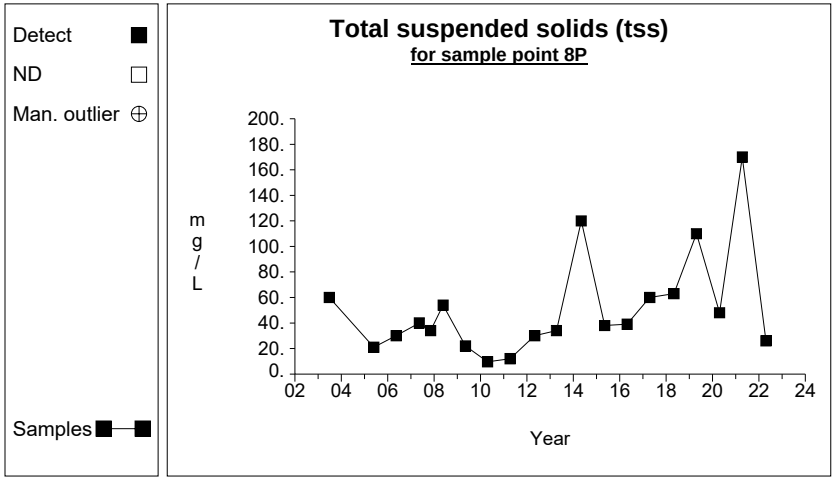


Graph 267

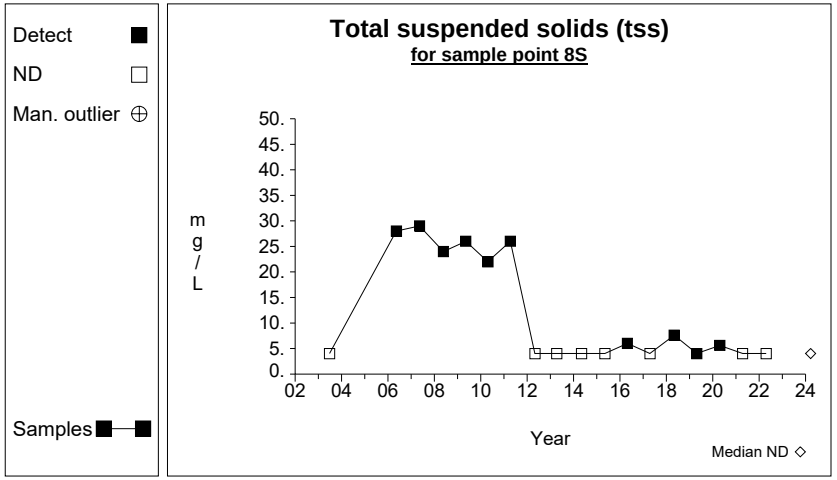


Graph 268

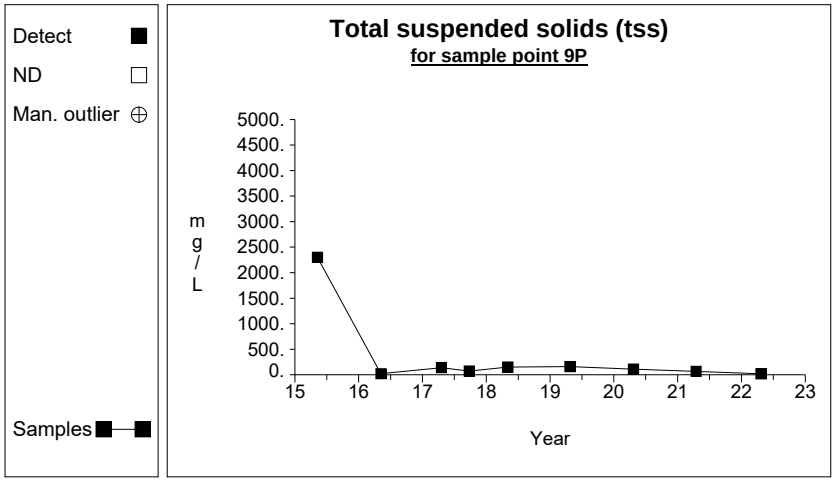
Time Series



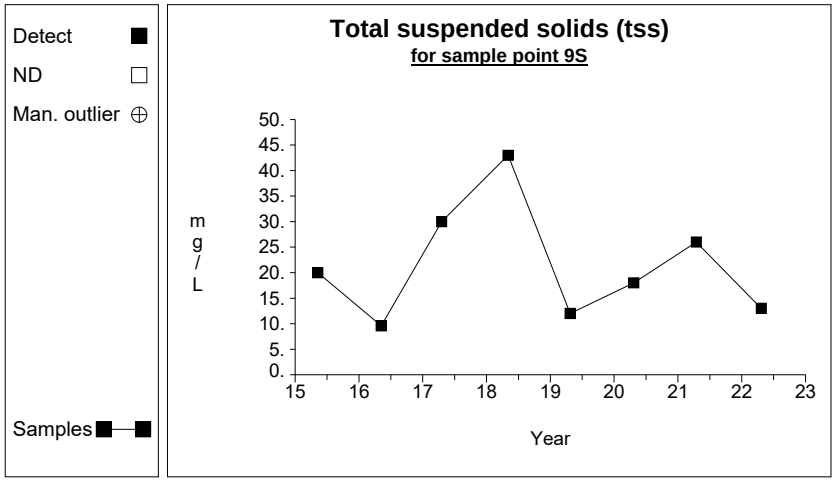
Graph 269



Graph 270

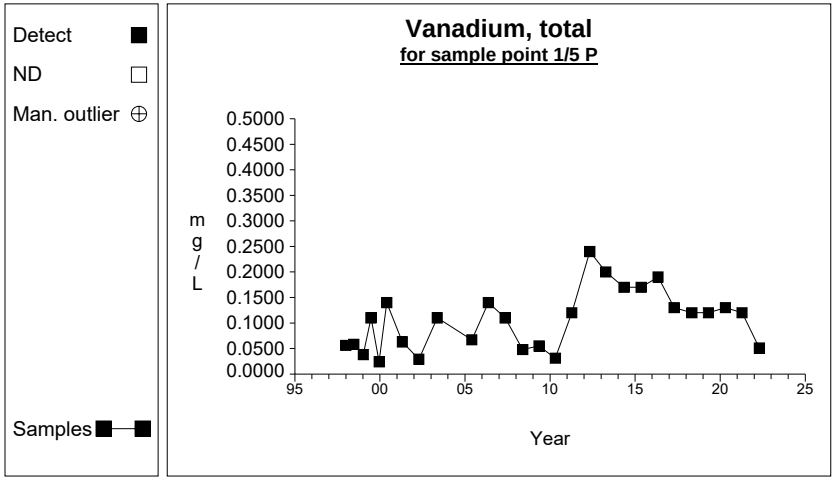


Graph 271

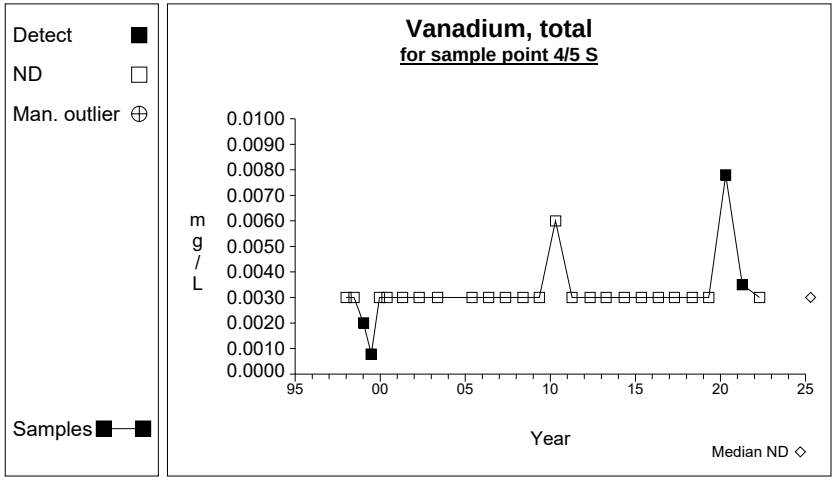


Graph 272

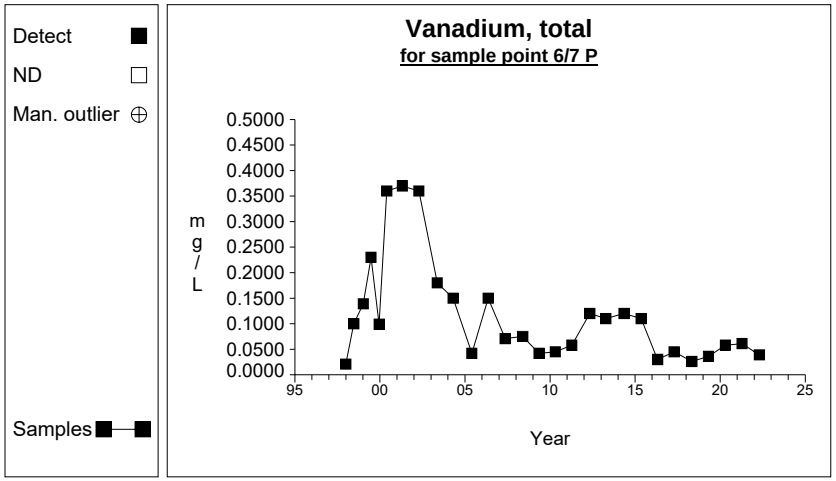
Time Series



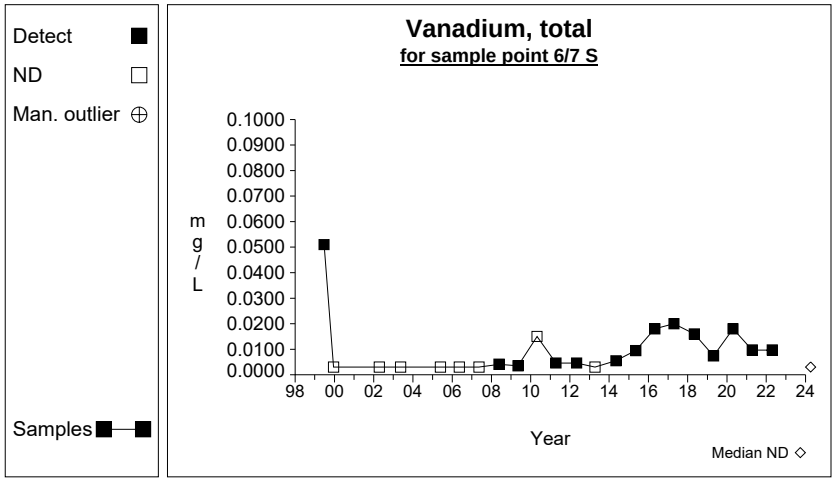
Graph 273



Graph 274

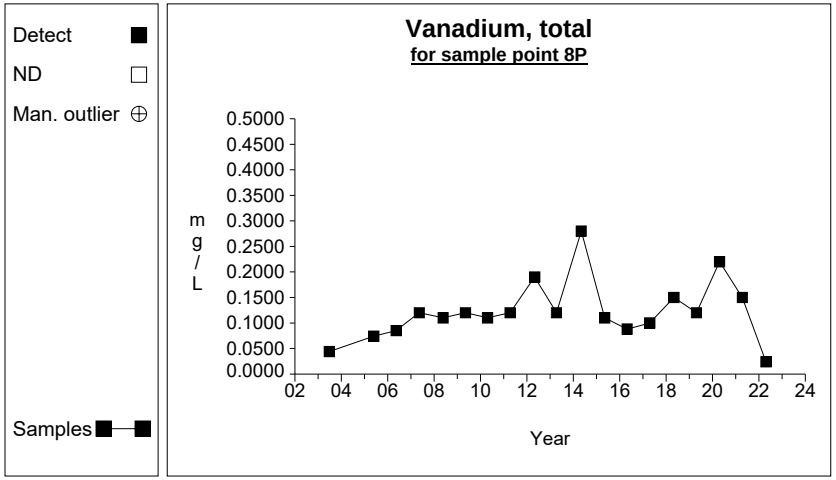


Graph 275

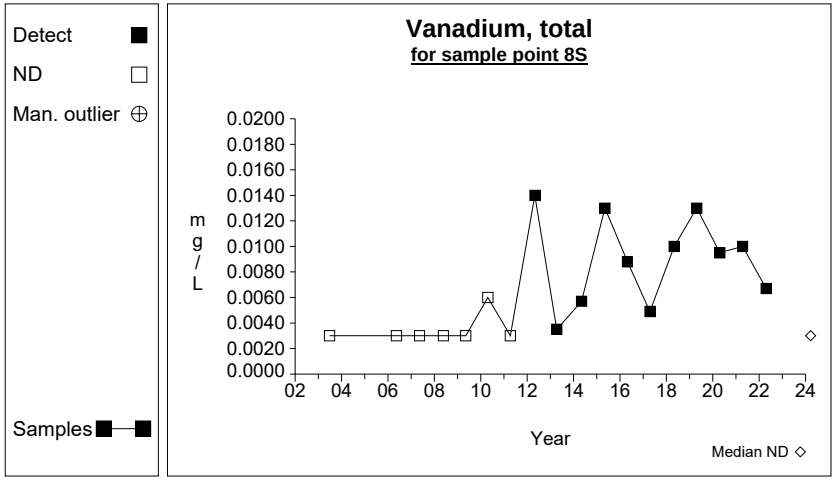


Graph 276

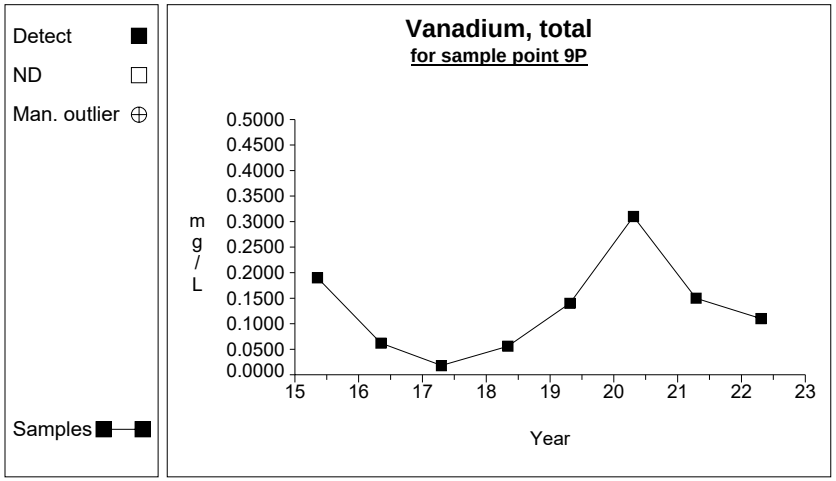
Time Series



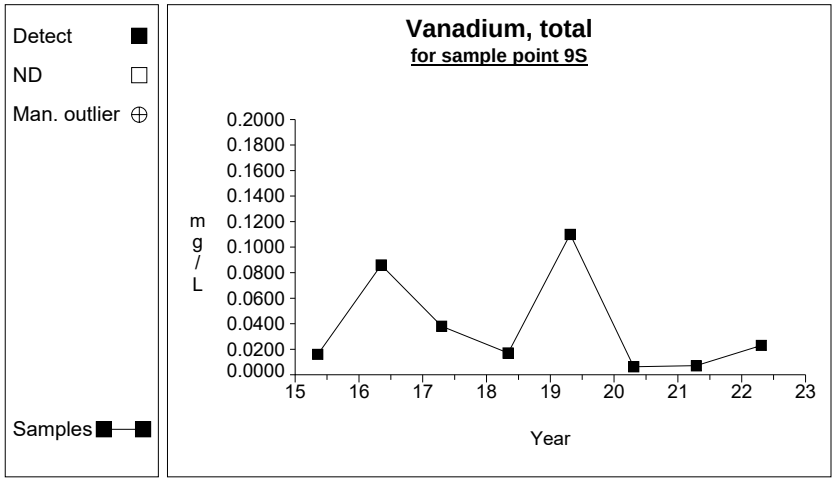
Graph 277



Graph 278

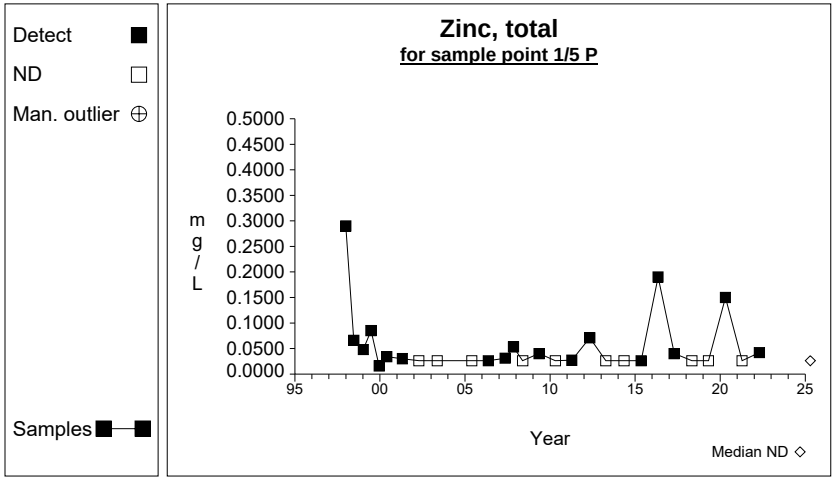


Graph 279

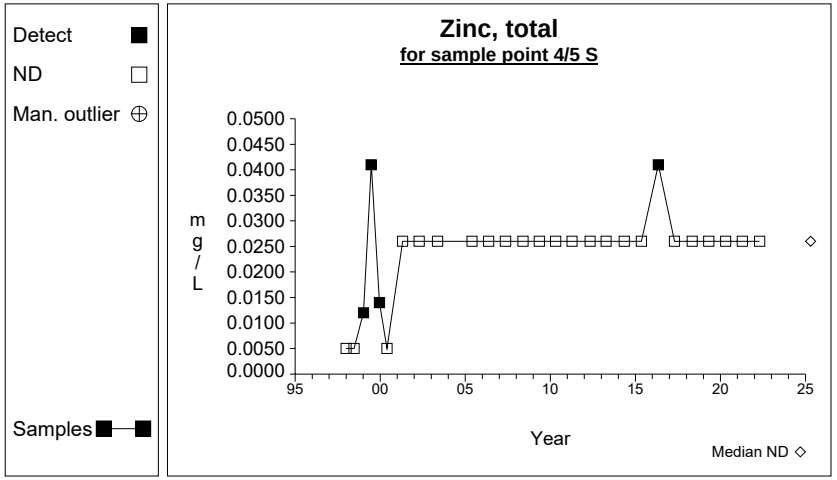


Graph 280

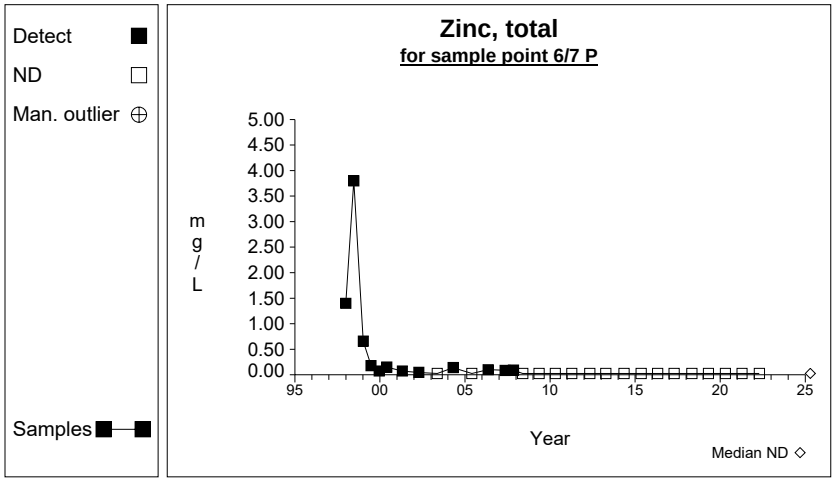
Time Series



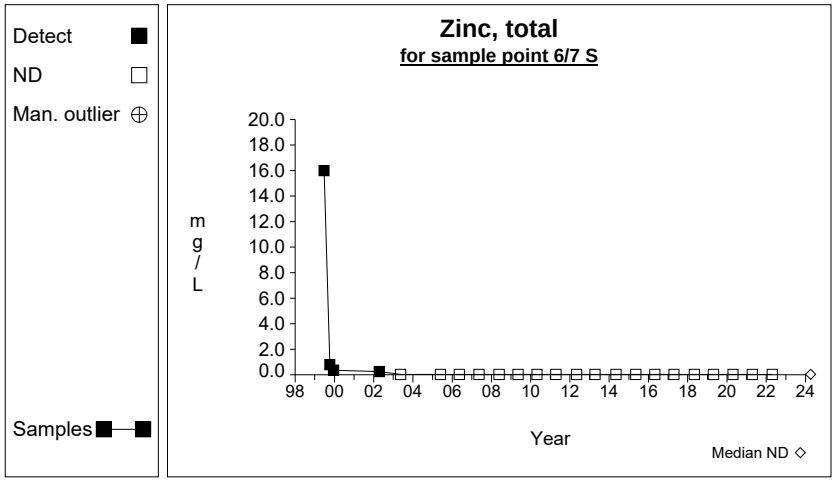
Graph 281



Graph 282

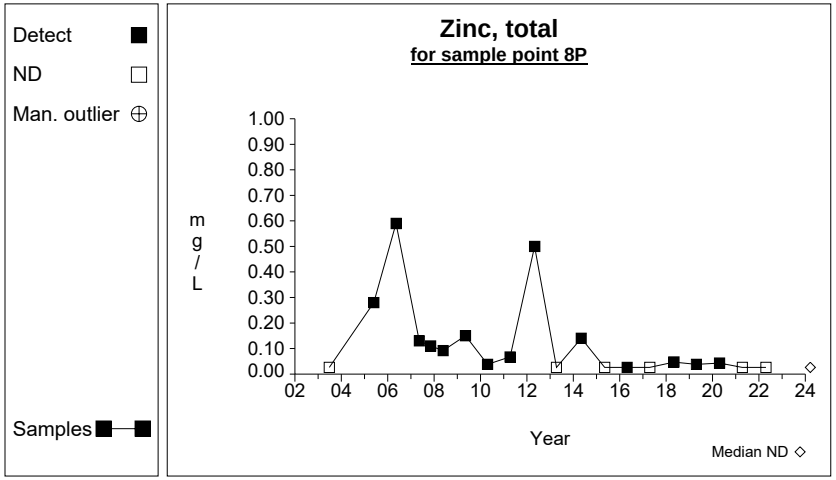


Graph 283

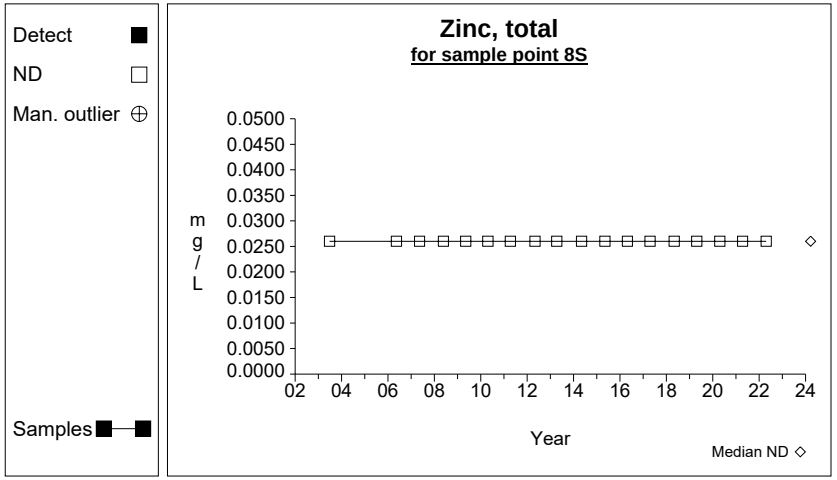


Graph 284

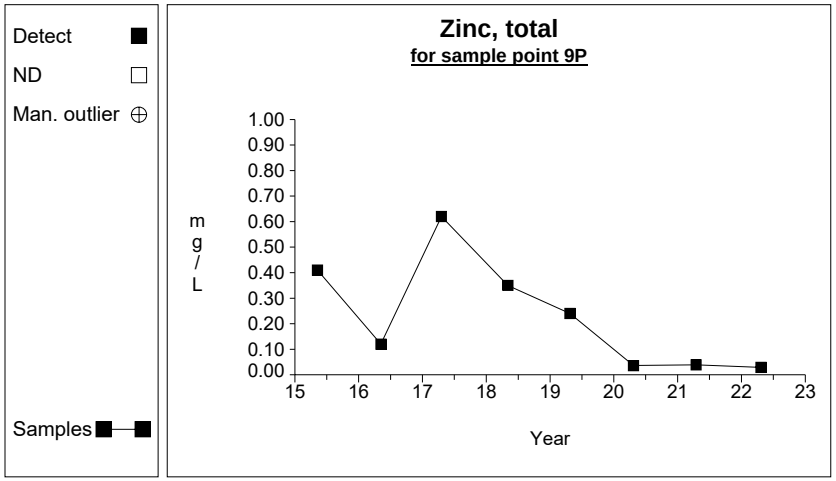
Time Series



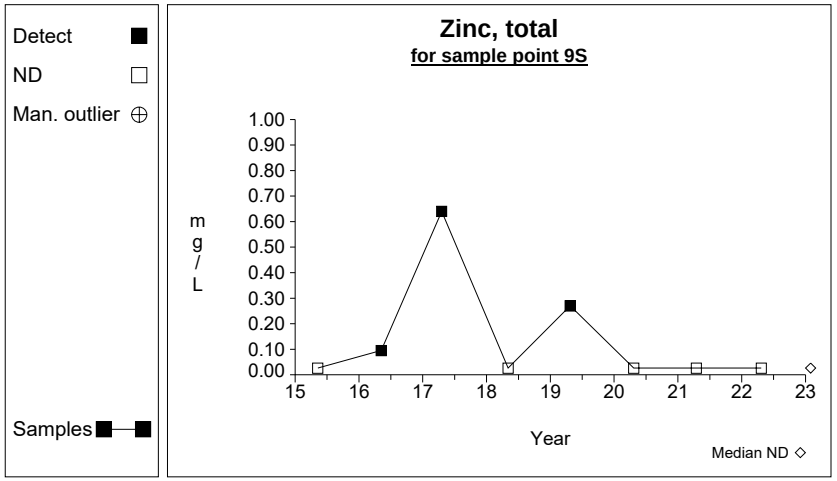
Graph 285



Graph 286



Graph 287

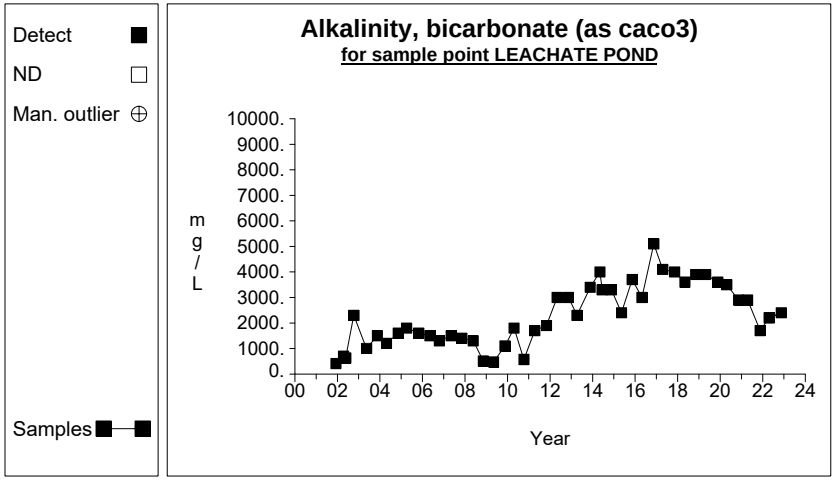


Graph 288

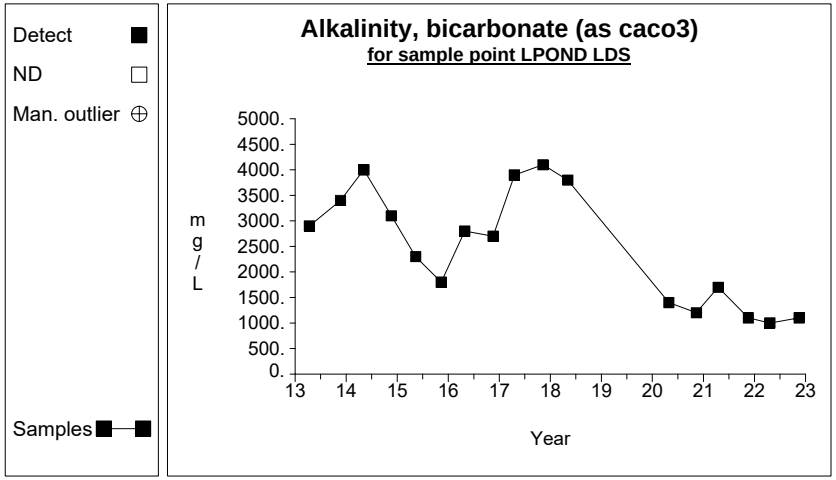
Leachate Pond and Leachate Pond LDS

Time-Concentration Graphs

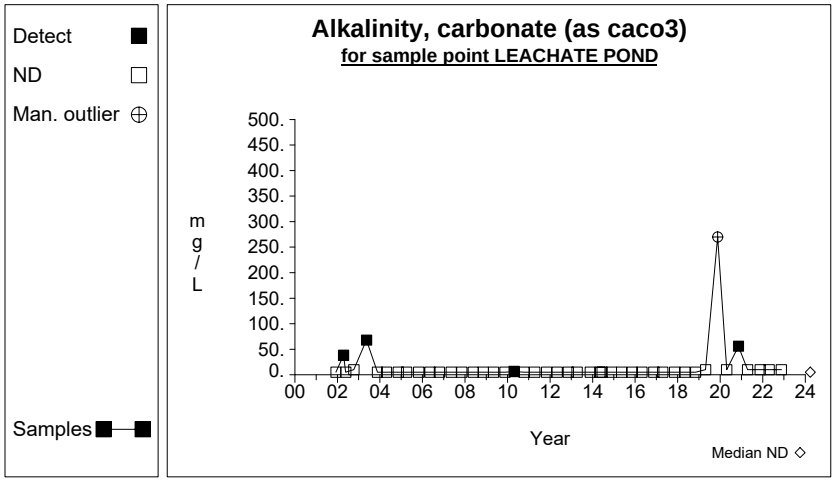
Time Series



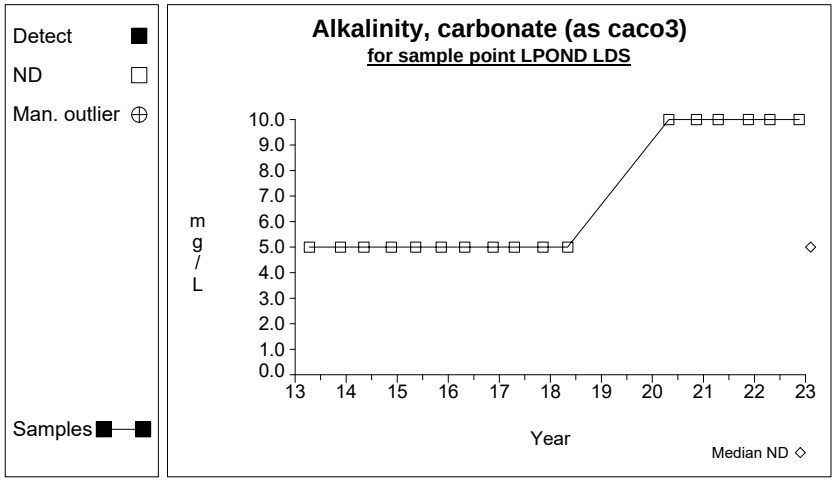
Graph 1



Graph 2

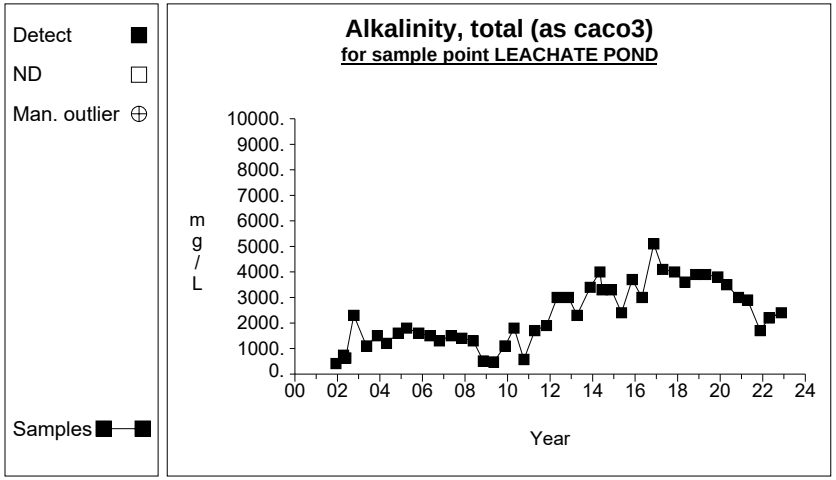


Graph 3

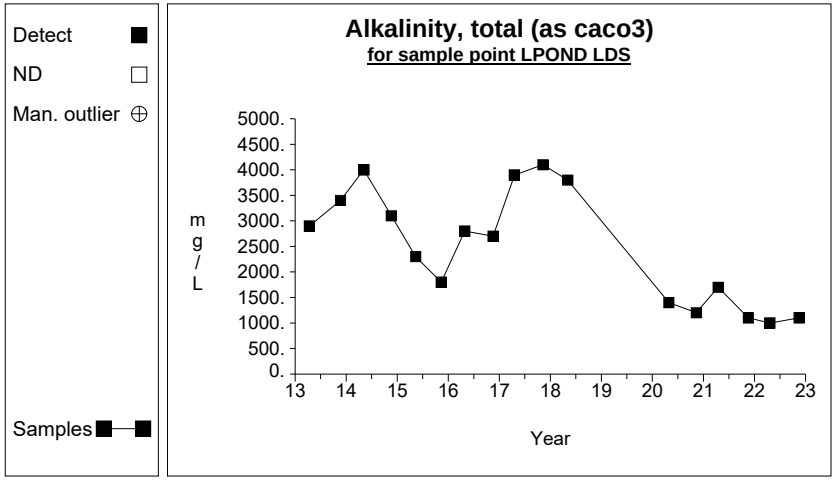


Graph 4

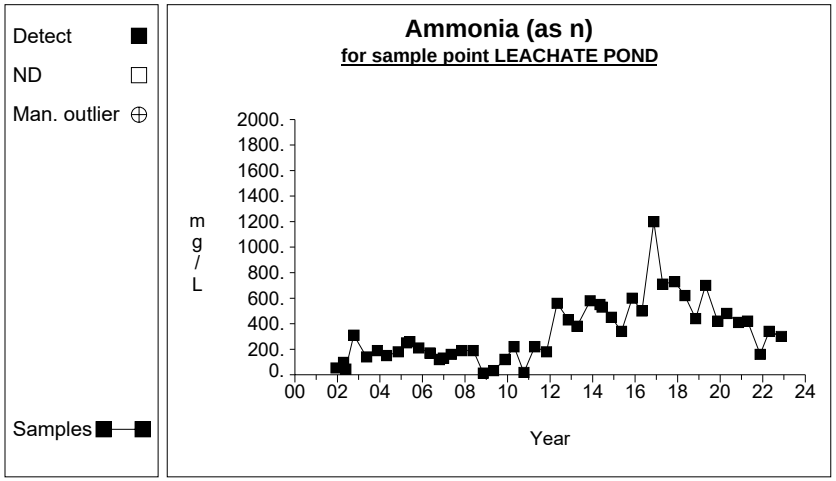
Time Series



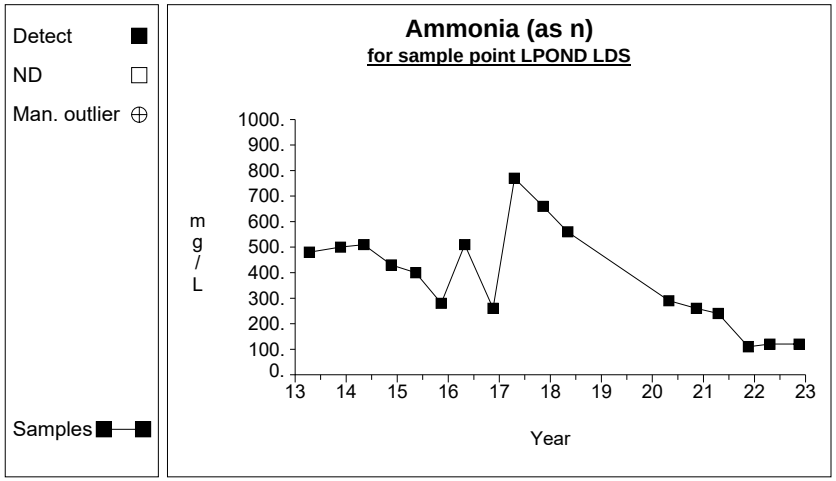
Graph 5



Graph 6

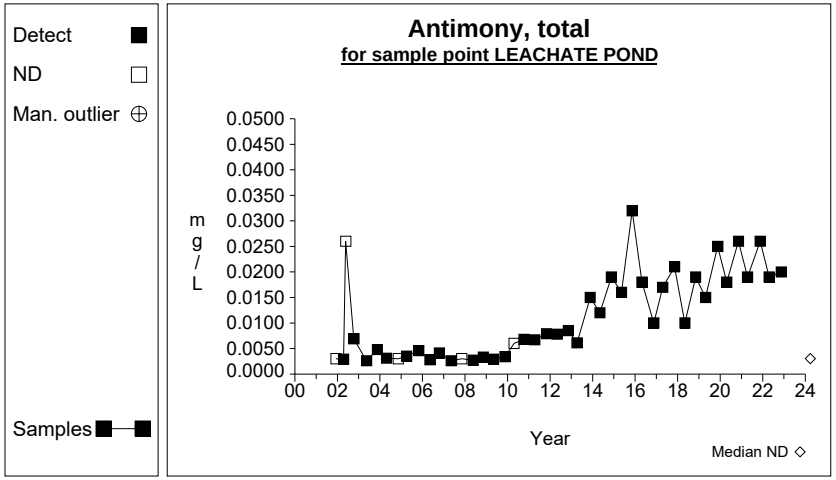


Graph 7

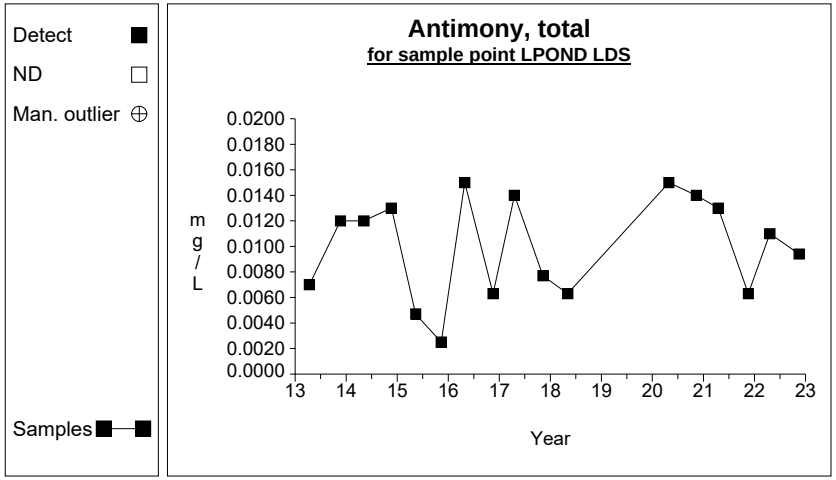


Graph 8

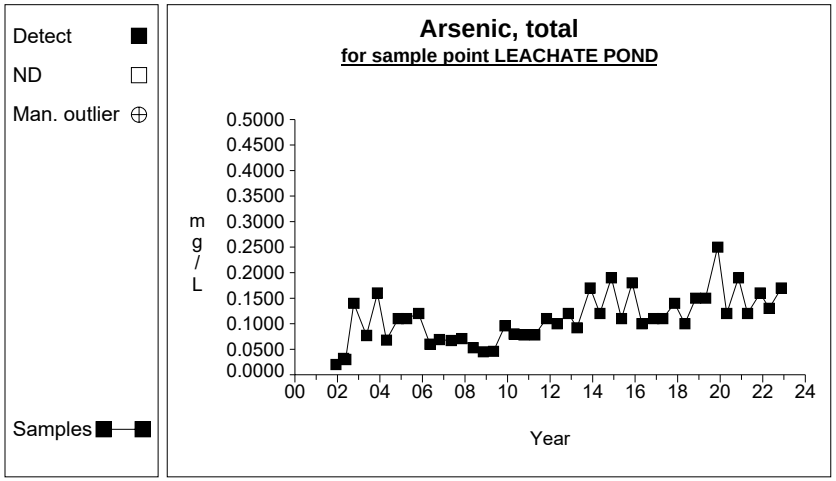
Time Series



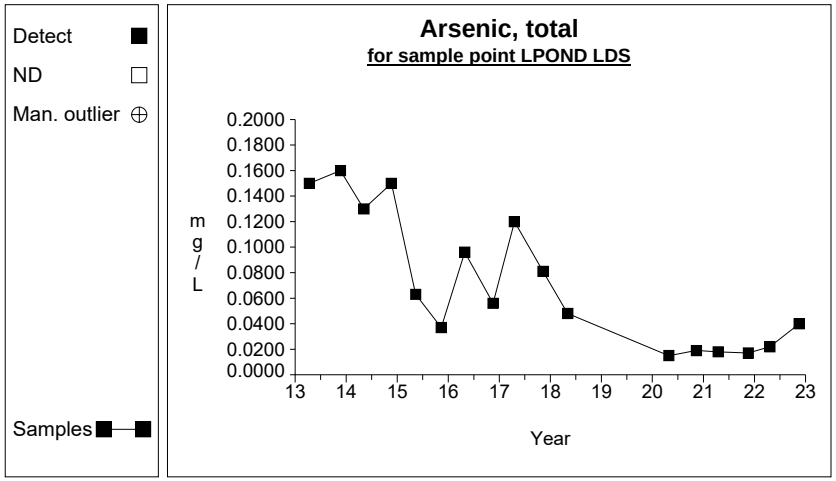
Graph 9



Graph 10

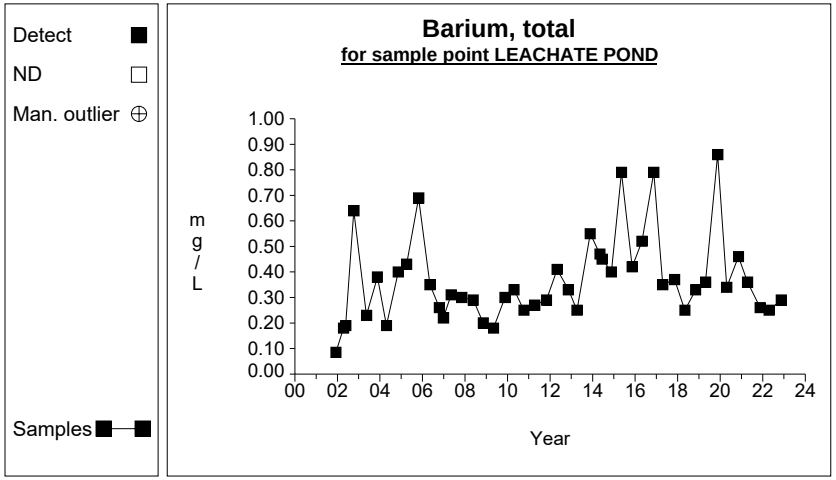


Graph 11

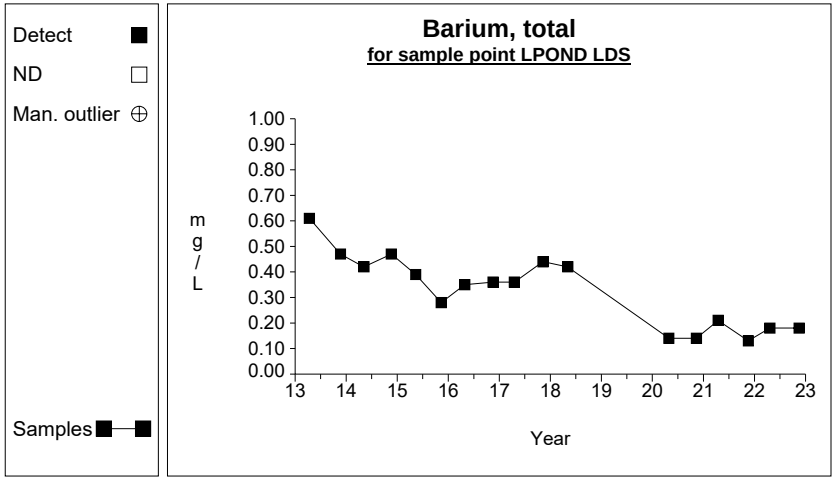


Graph 12

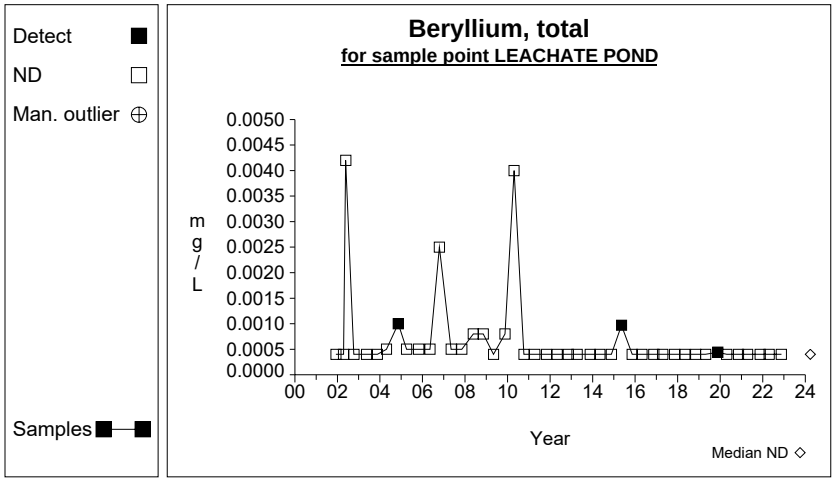
Time Series



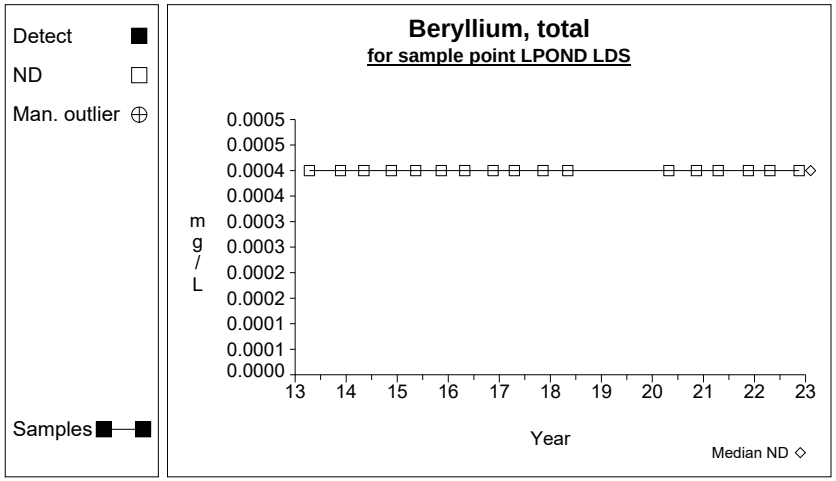
Graph 13



Graph 14

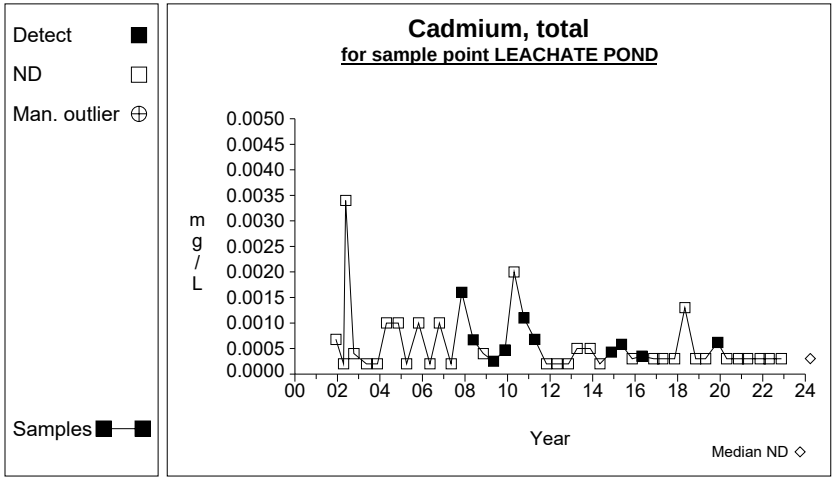


Graph 15

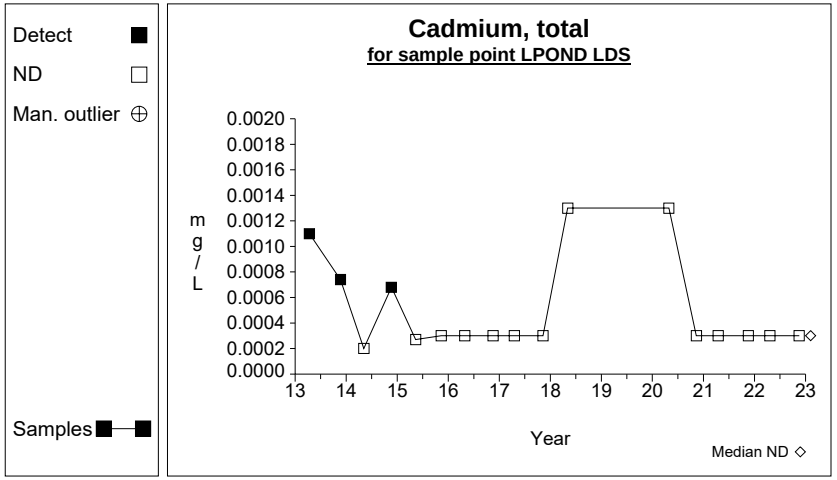


Graph 16

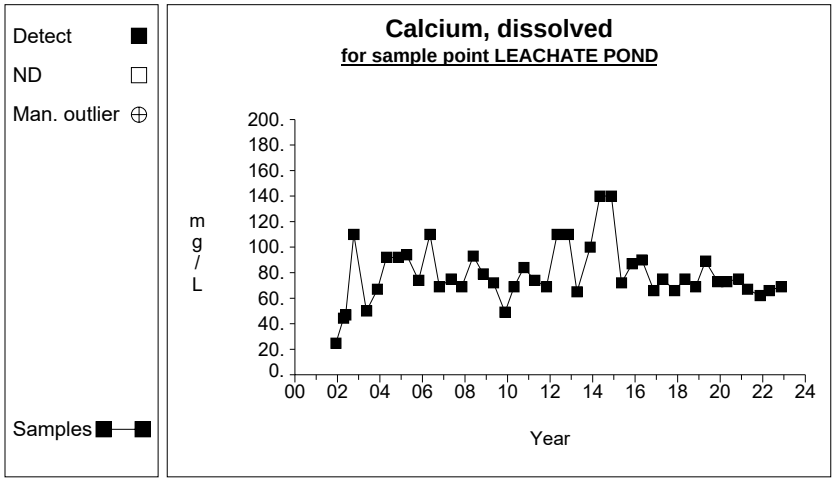
Time Series



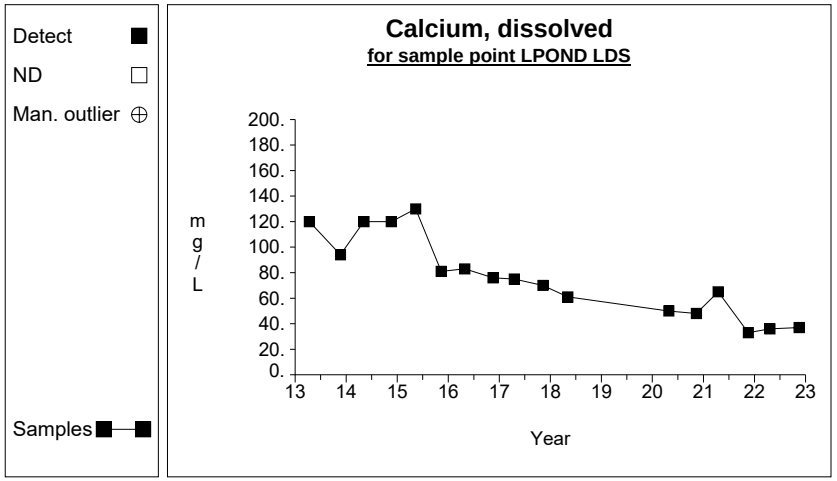
Graph 17



Graph 18

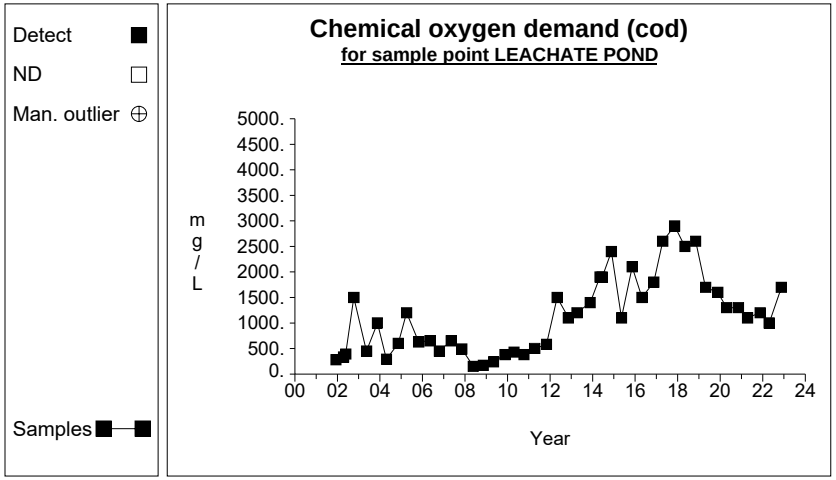


Graph 19

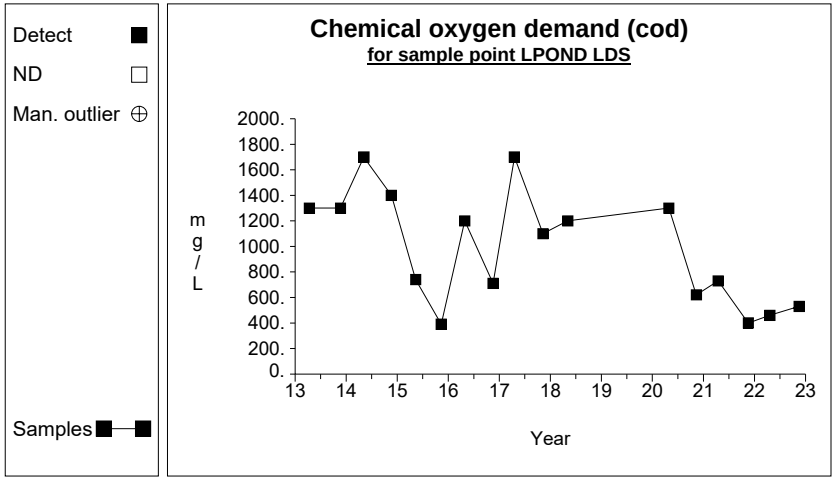


Graph 20

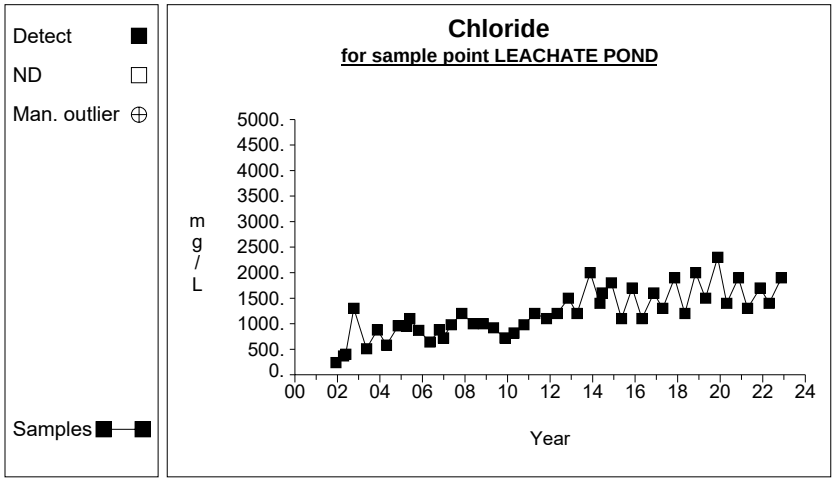
Time Series



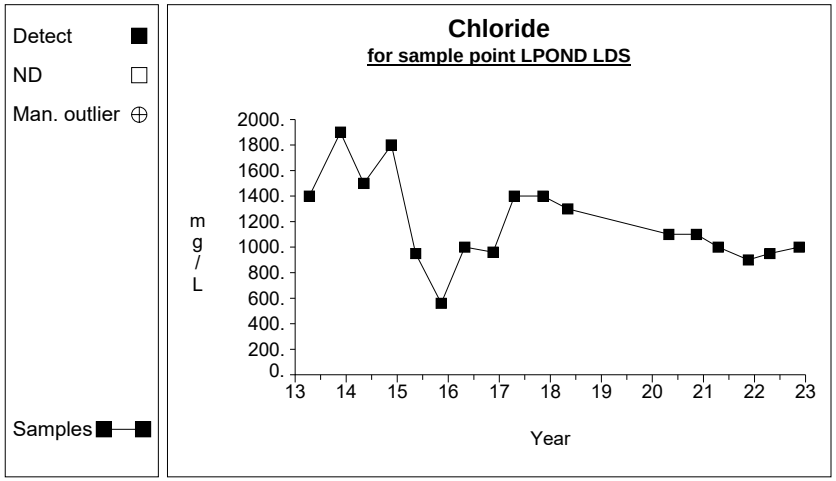
Graph 21



Graph 22

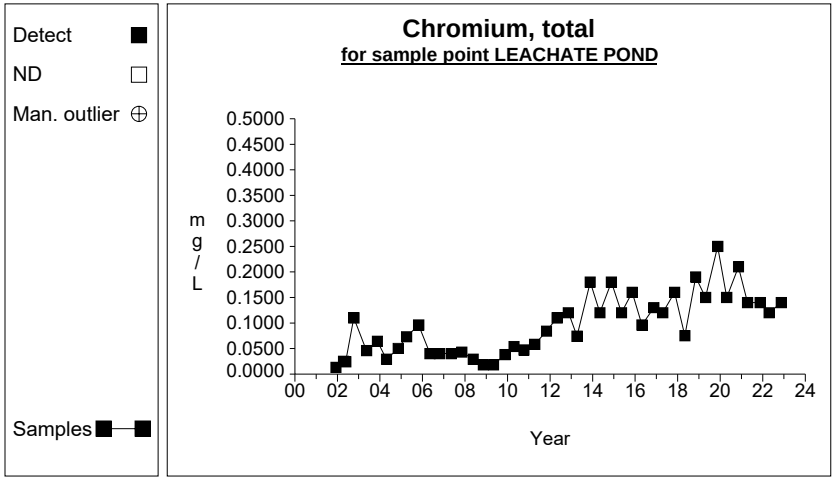


Graph 23

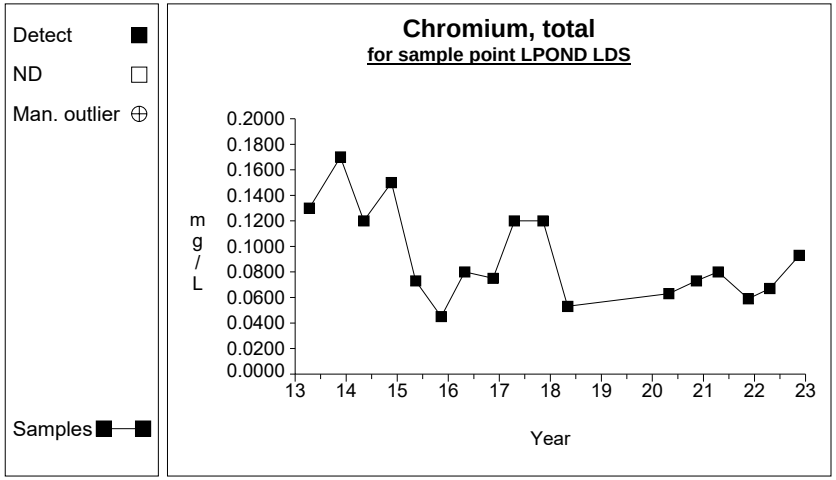


Graph 24

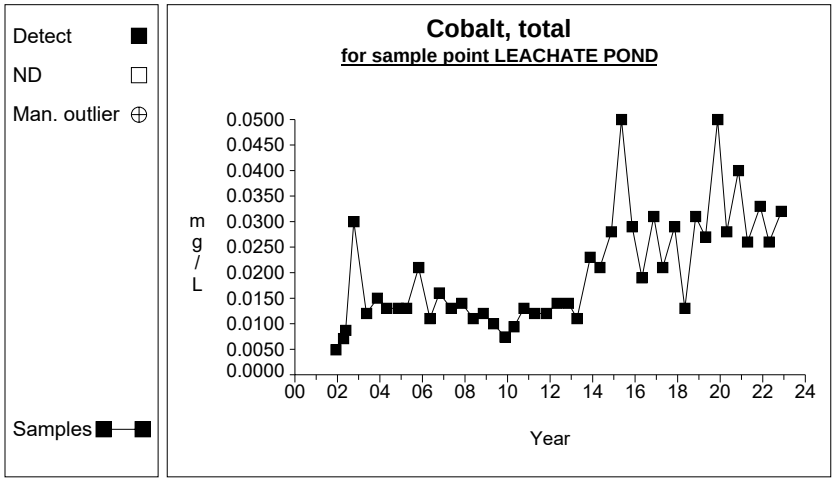
Time Series



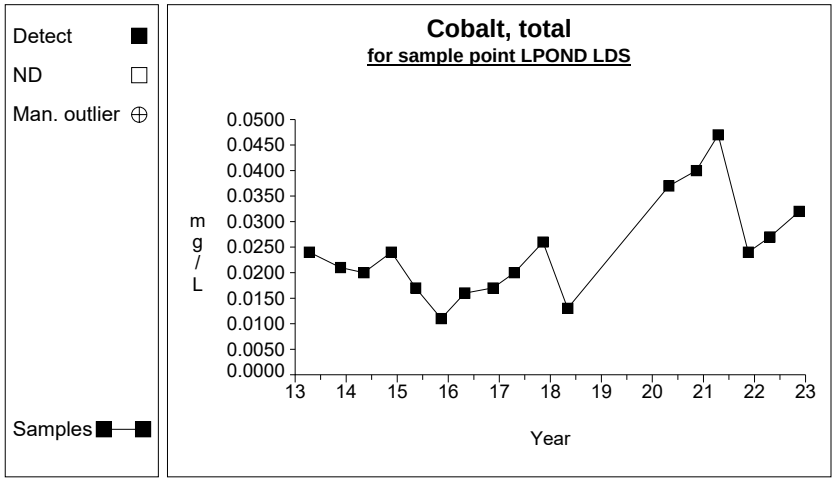
Graph 25



Graph 26

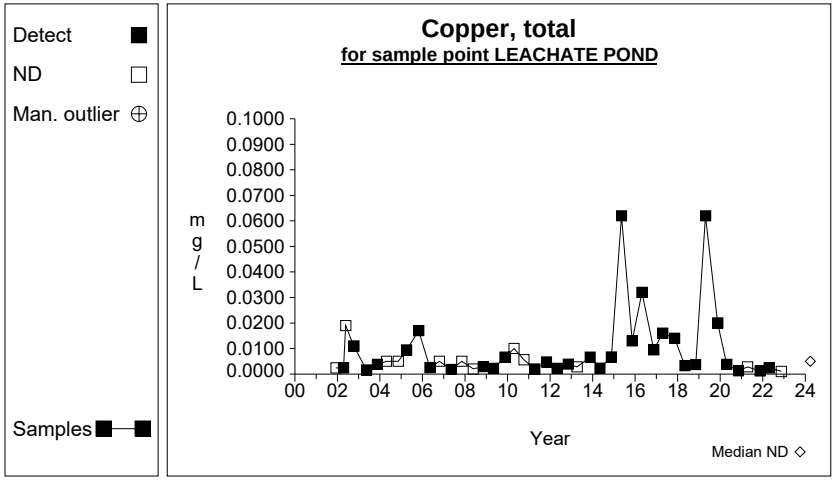


Graph 27

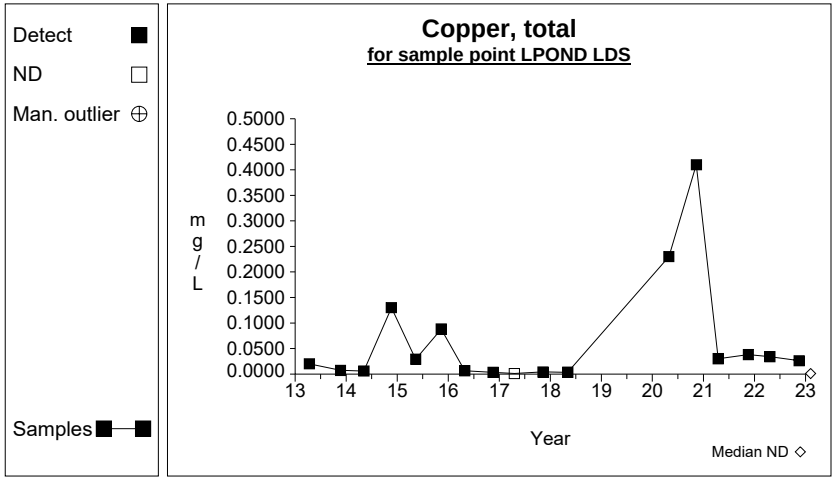


Graph 28

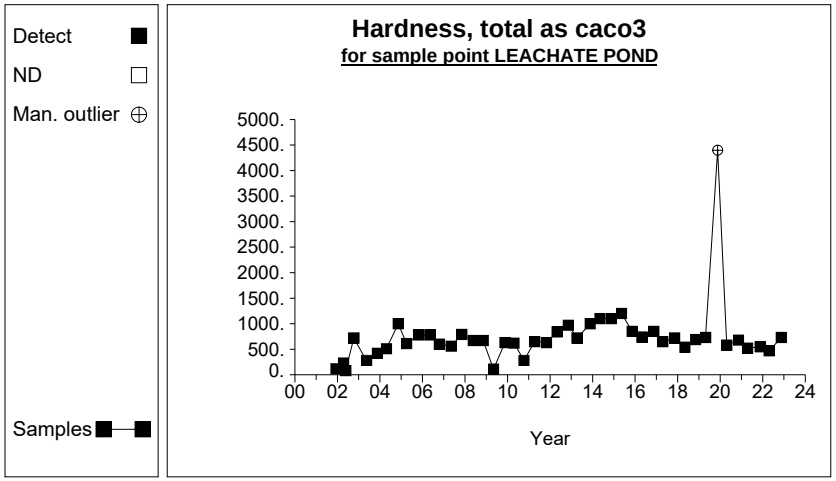
Time Series



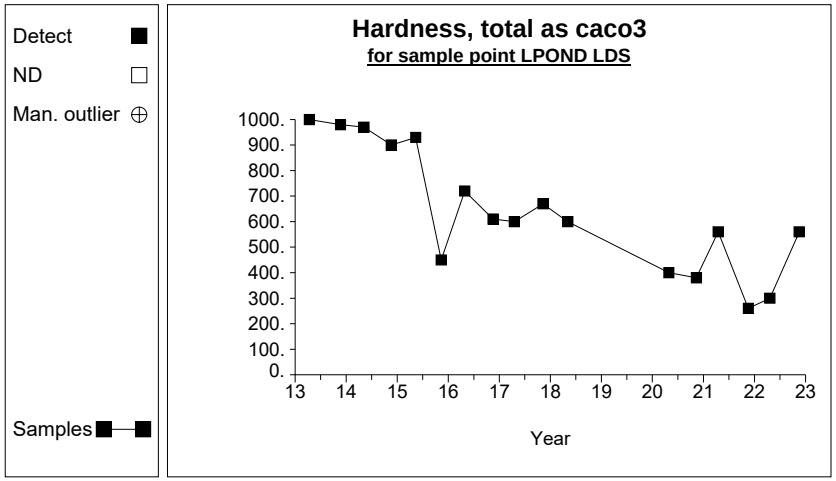
Graph 29



Graph 30

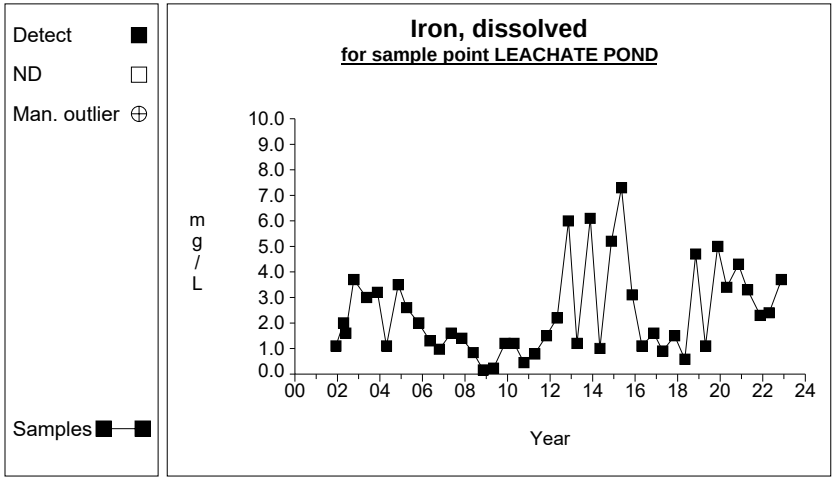


Graph 31

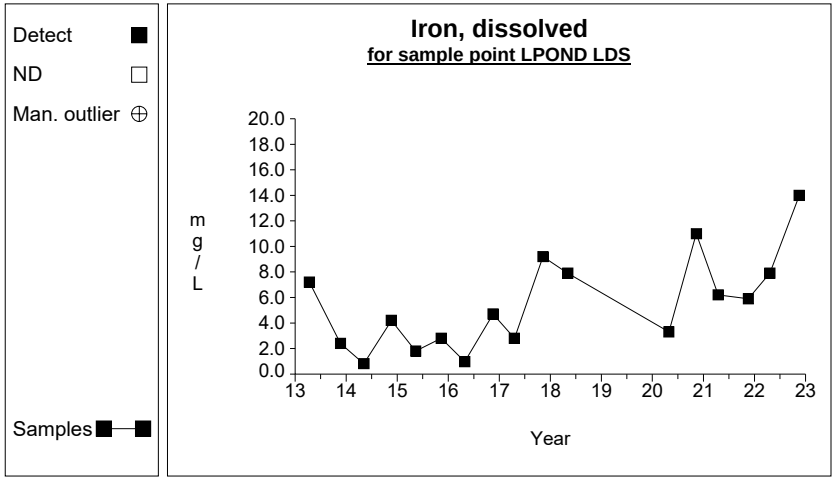


Graph 32

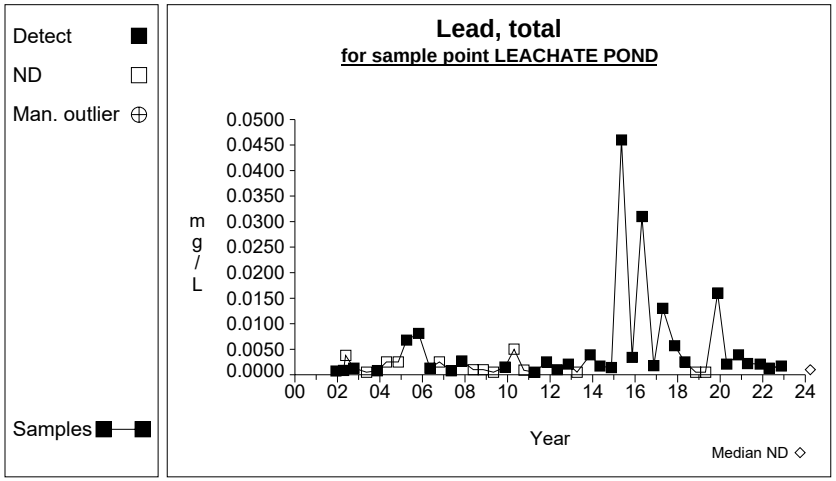
Time Series



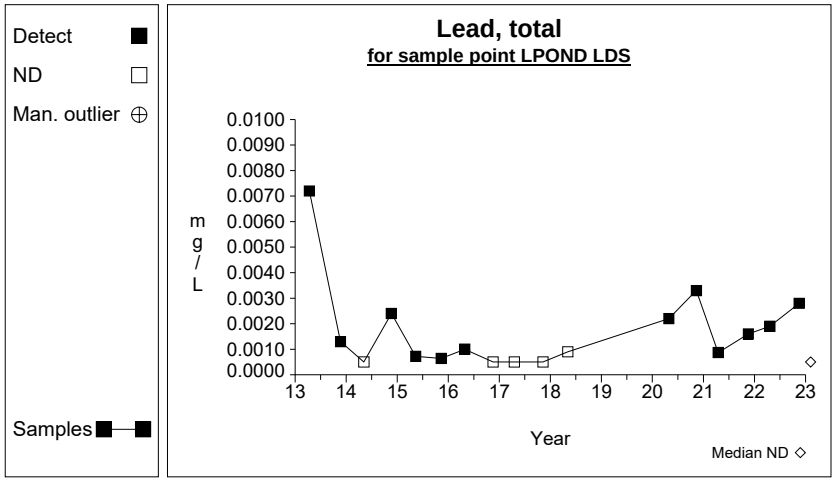
Graph 33



Graph 34

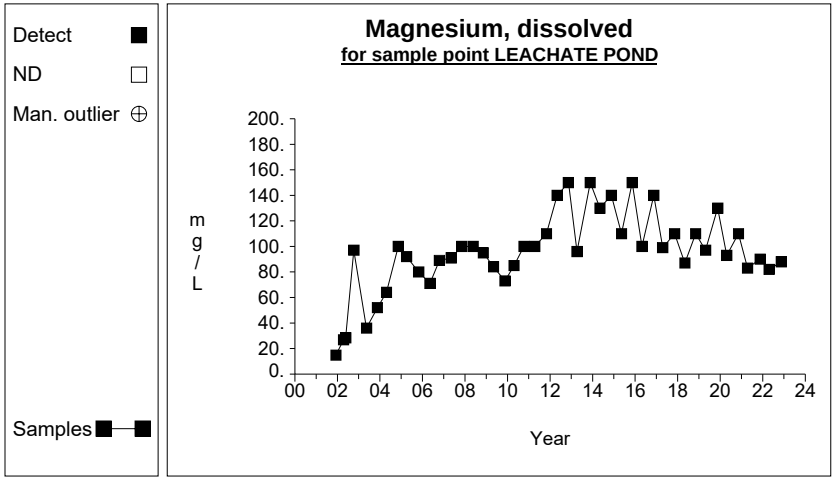


Graph 35

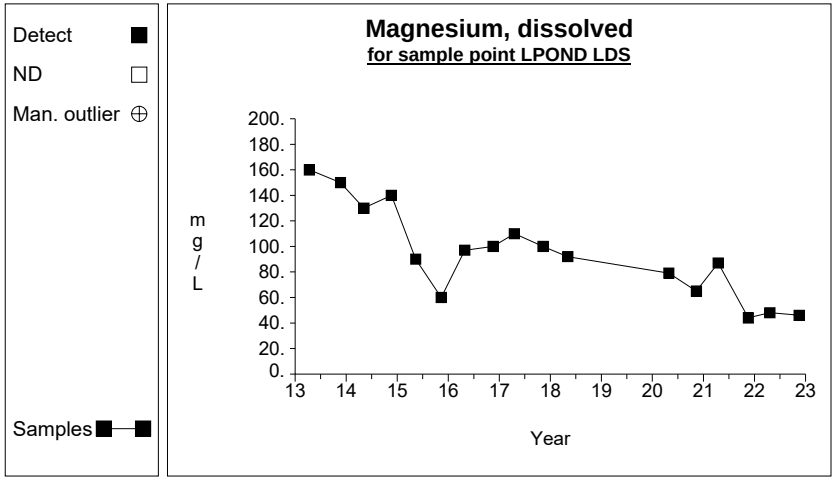


Graph 36

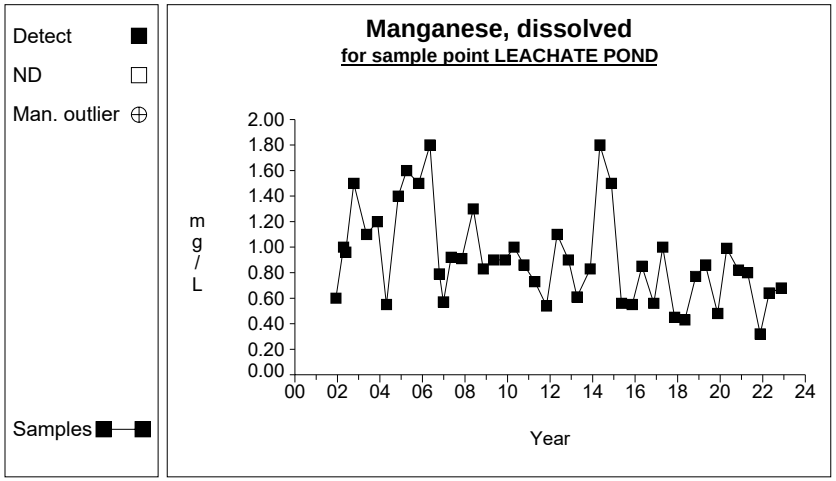
Time Series



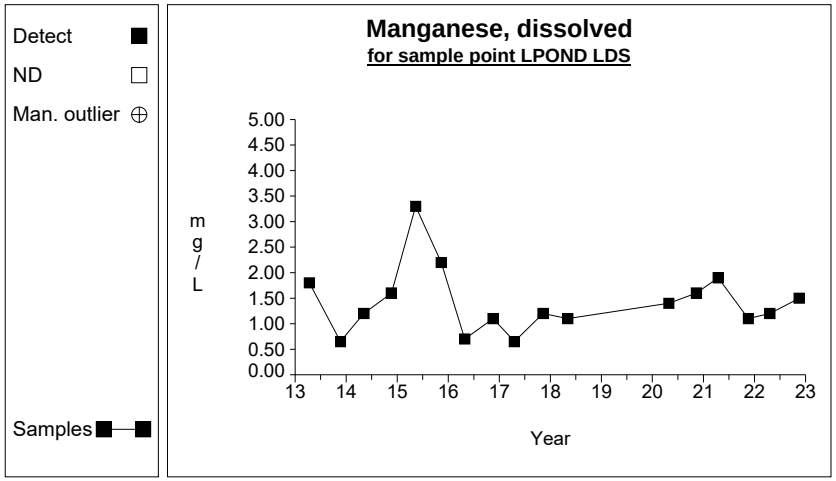
Graph 37



Graph 38

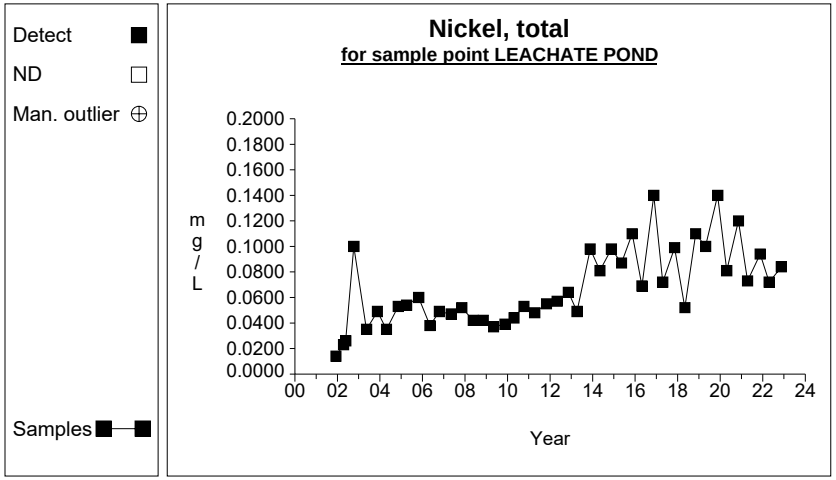


Graph 39

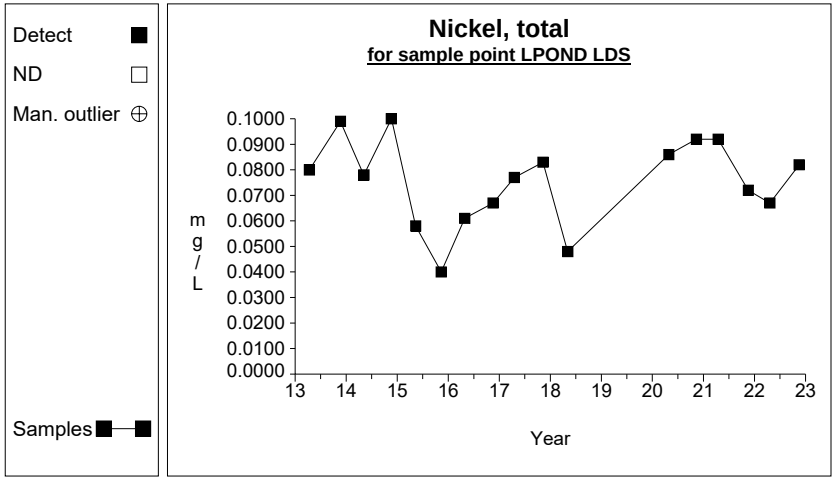


Graph 40

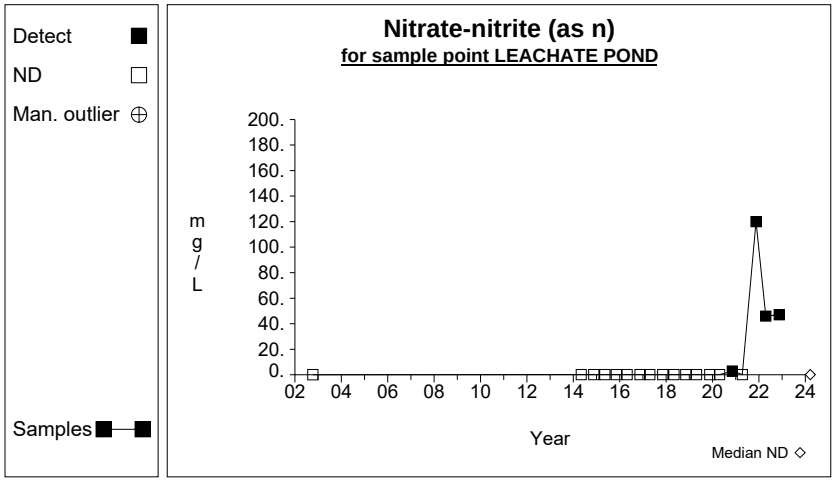
Time Series



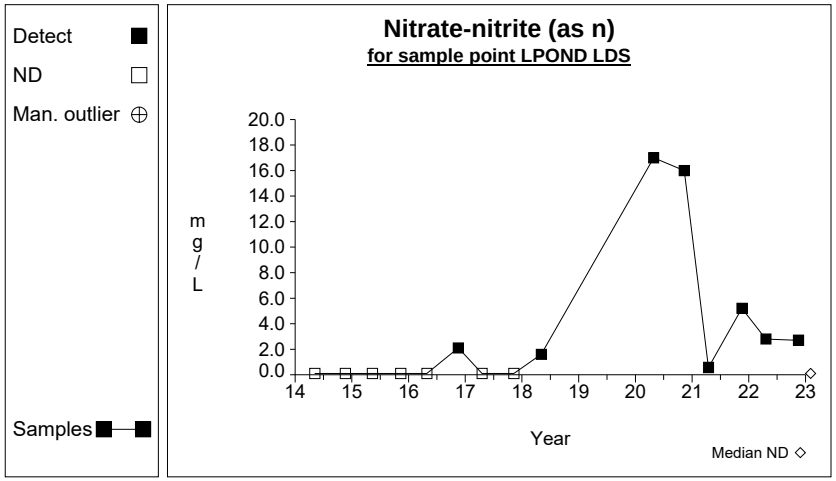
Graph 41



Graph 42

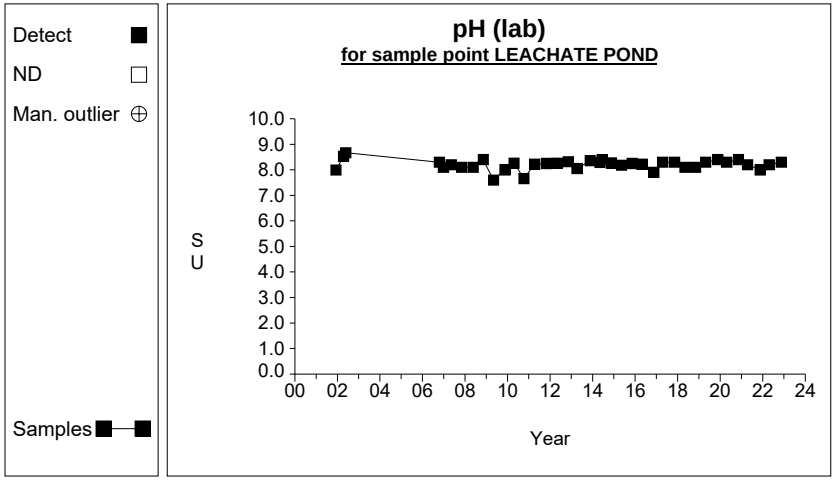


Graph 43

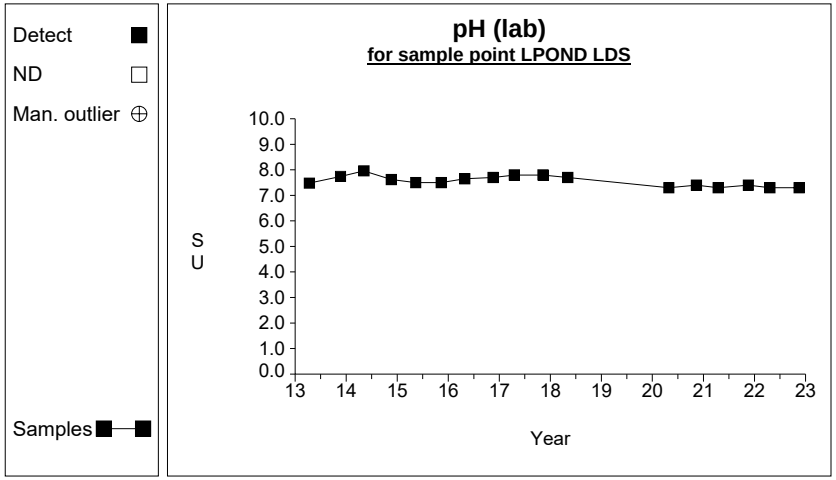


Graph 44

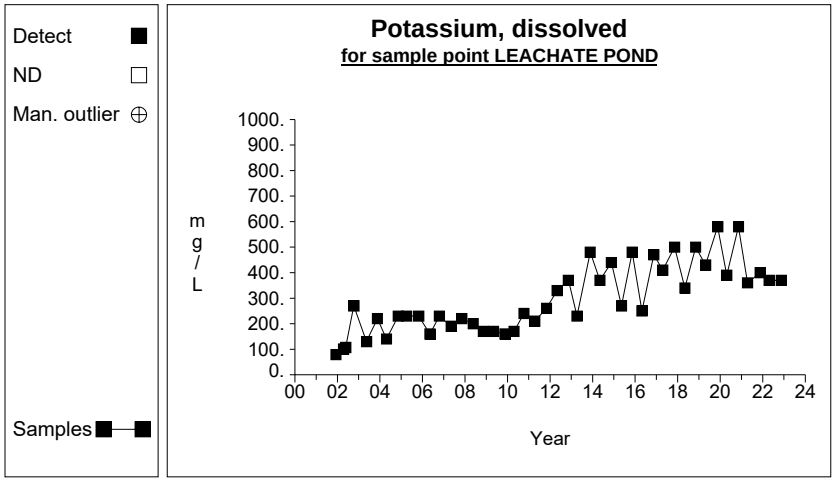
Time Series



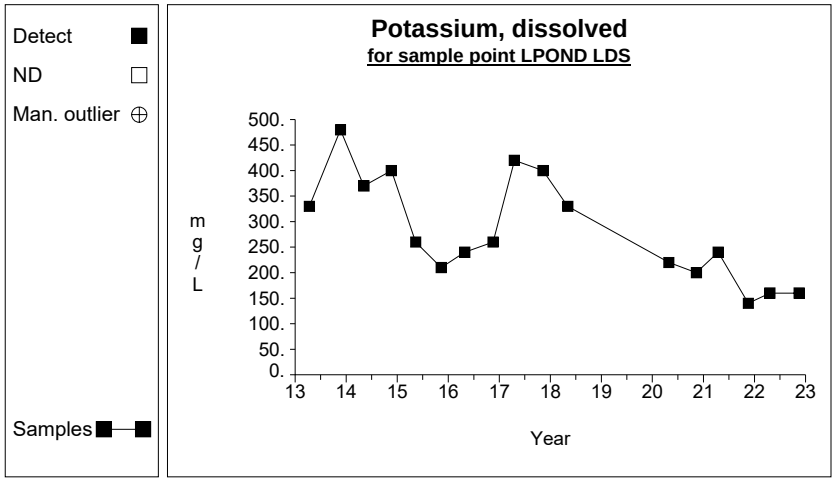
Graph 45



Graph 46

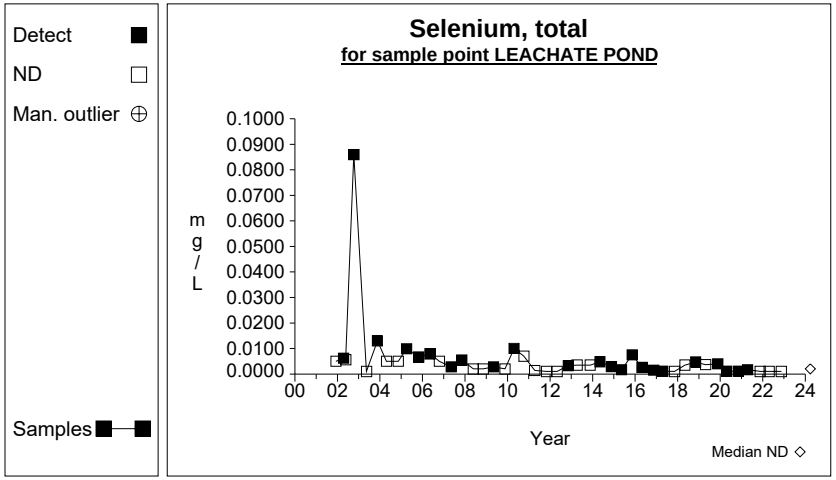


Graph 47

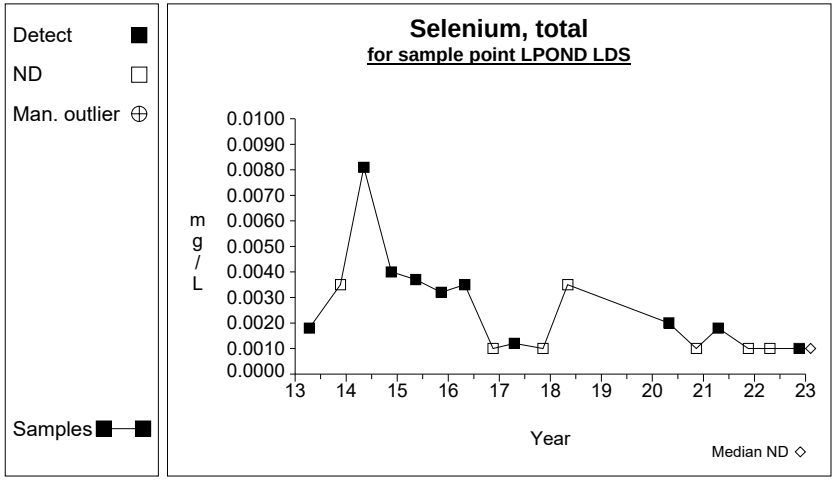


Graph 48

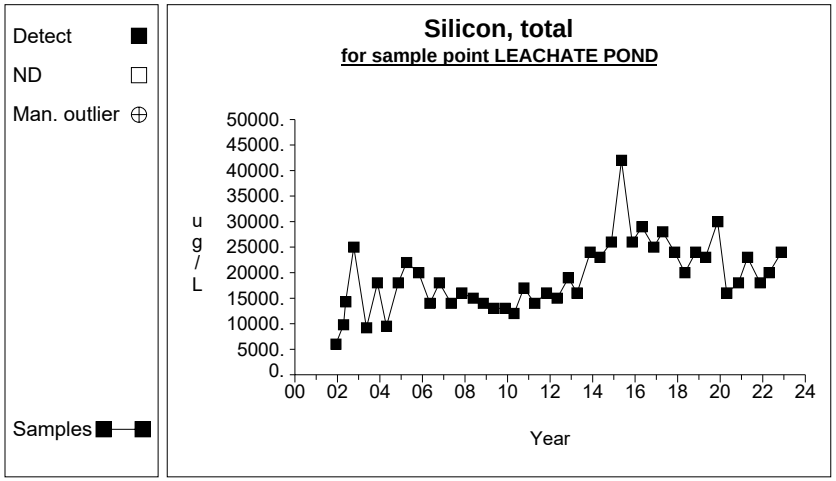
Time Series



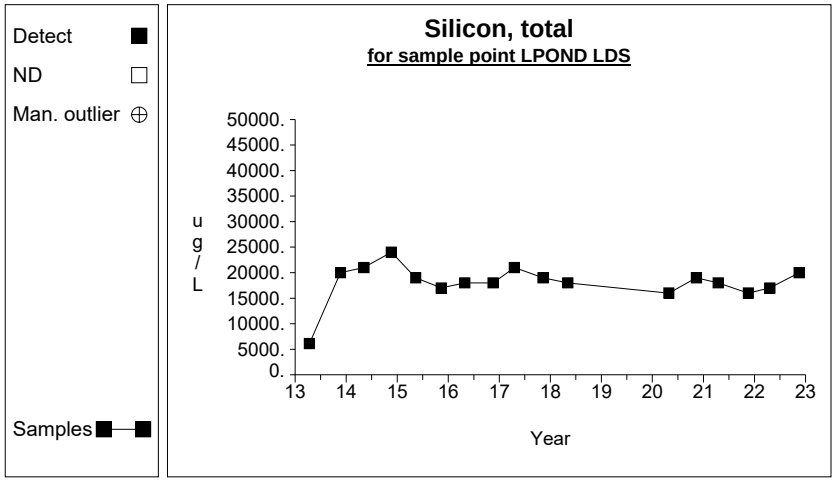
Graph 49



Graph 50

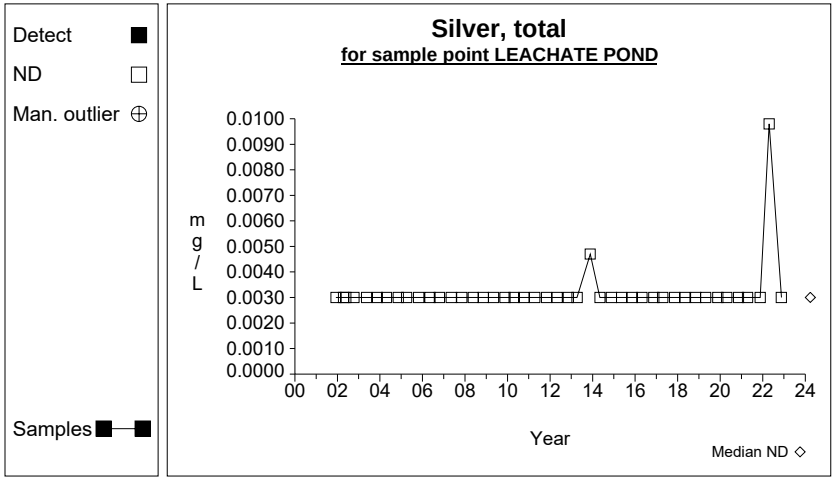


Graph 51

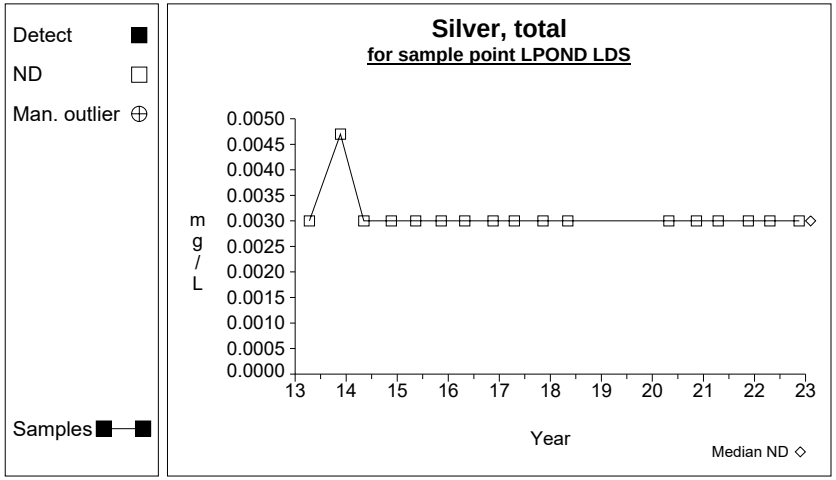


Graph 52

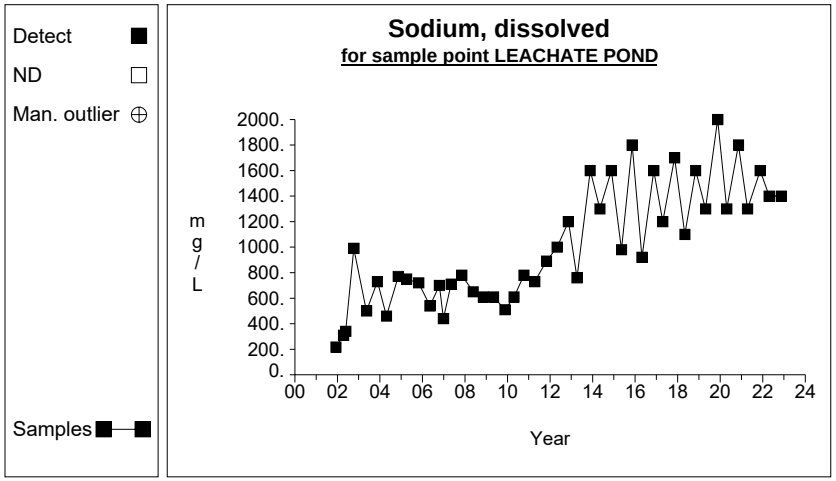
Time Series



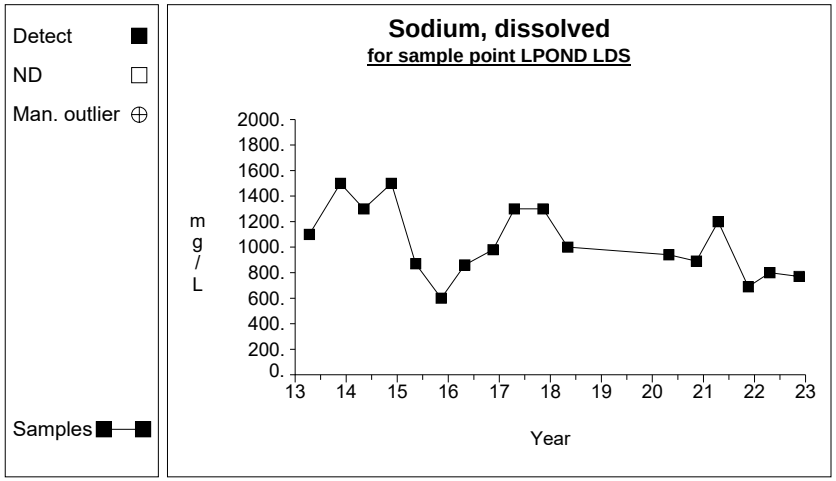
Graph 53



Graph 54

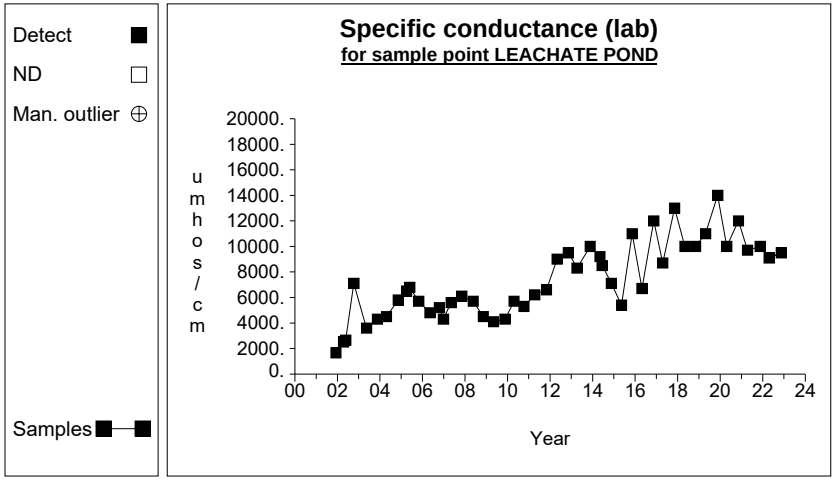


Graph 55

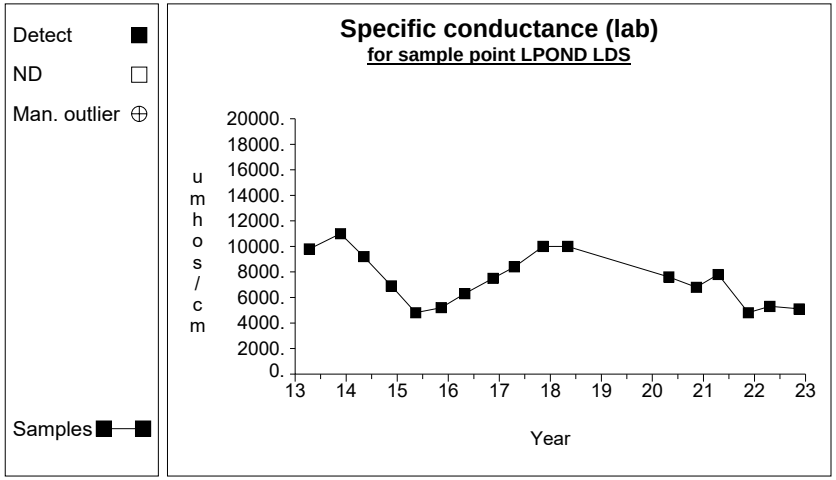


Graph 56

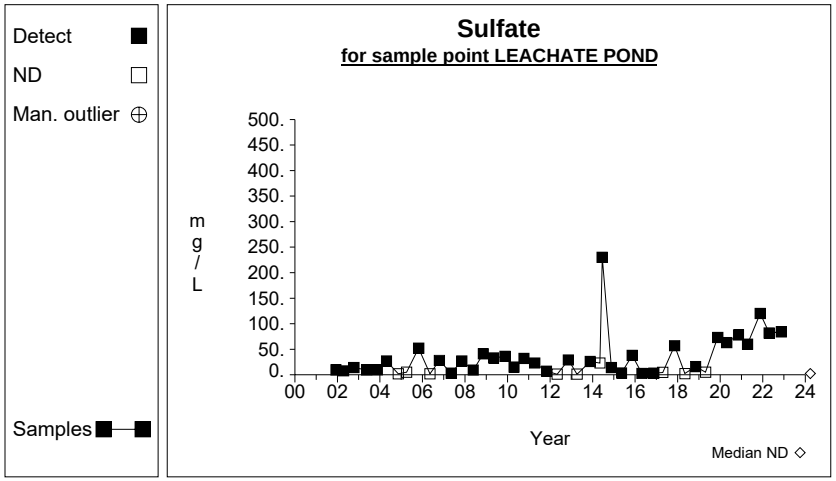
Time Series



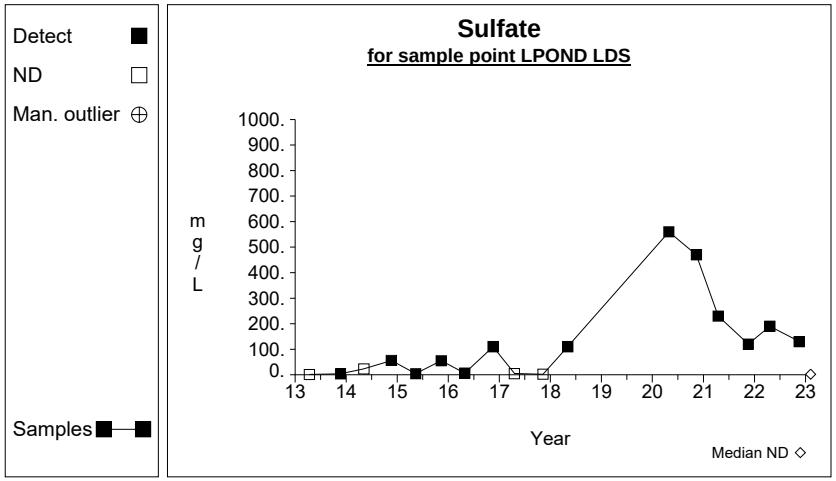
Graph 57



Graph 58

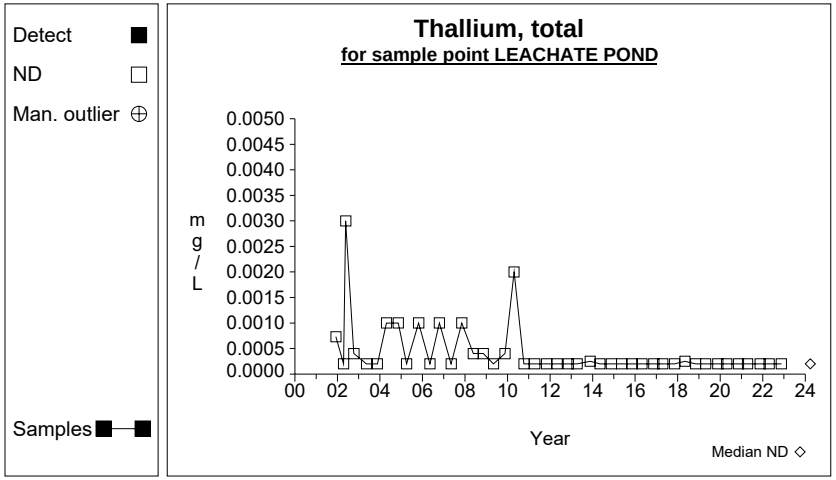


Graph 59

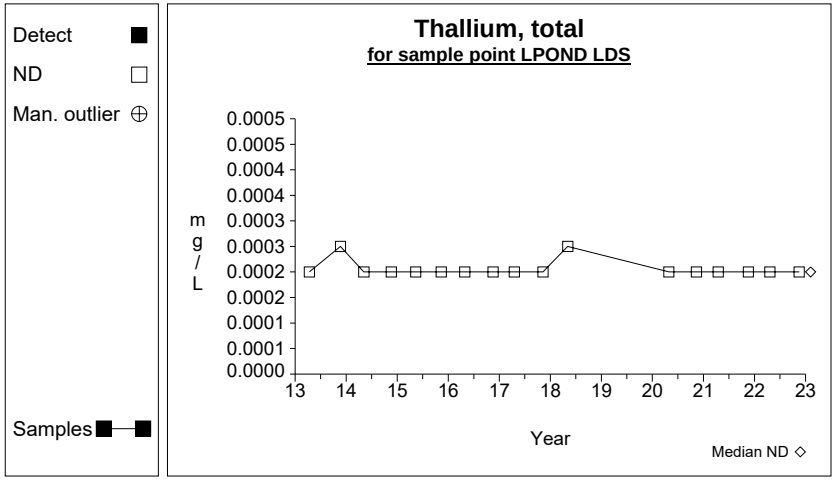


Graph 60

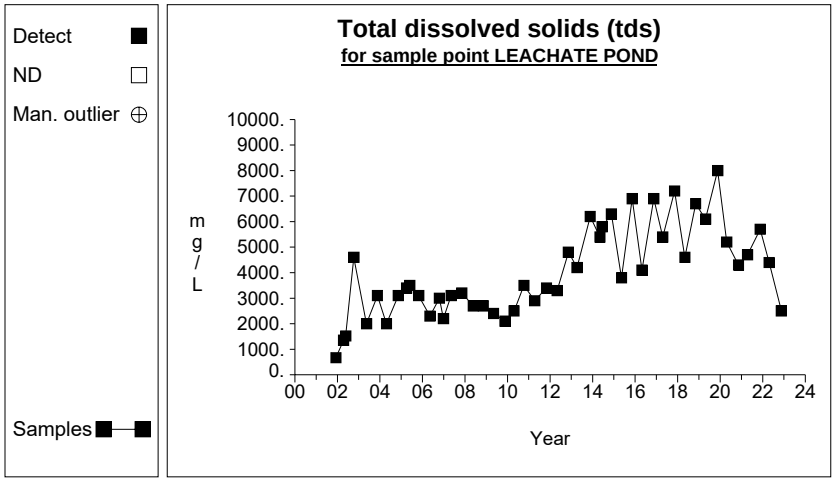
Time Series



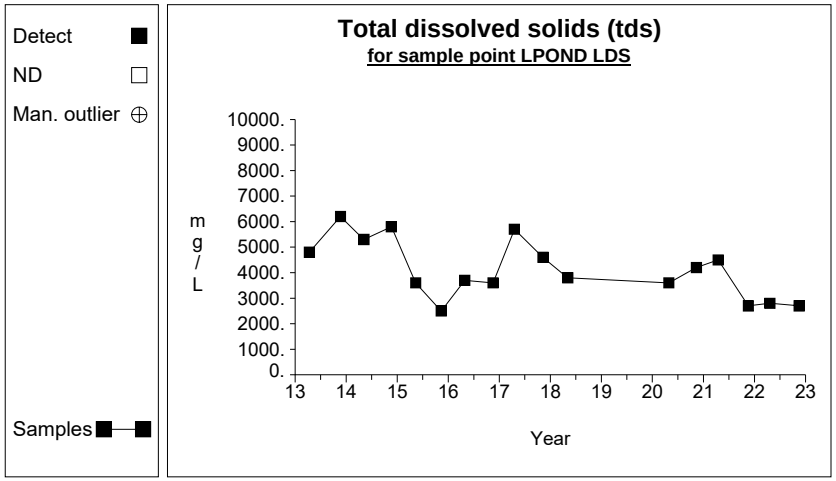
Graph 61



Graph 62

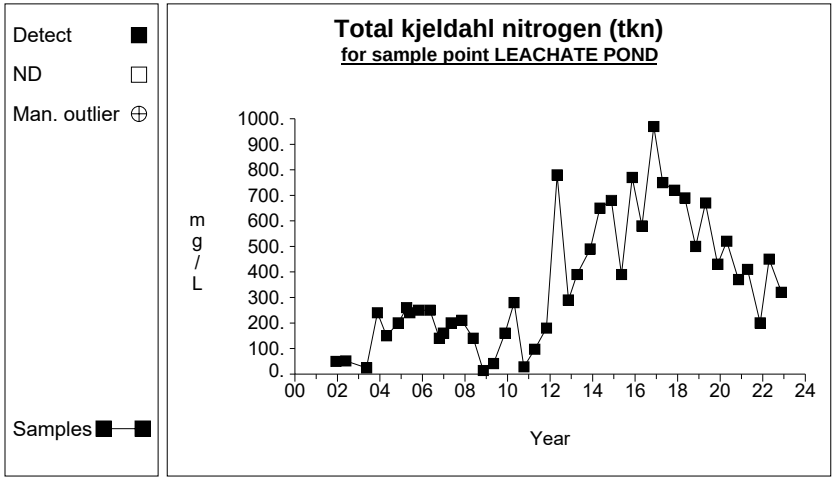


Graph 63

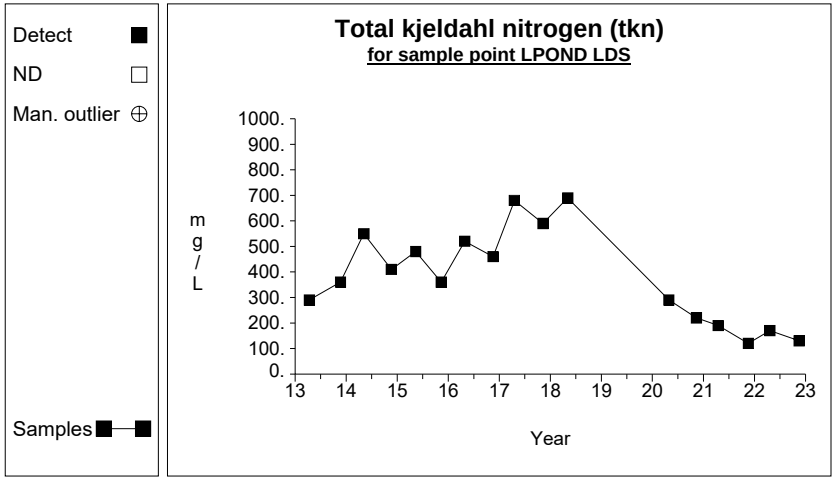


Graph 64

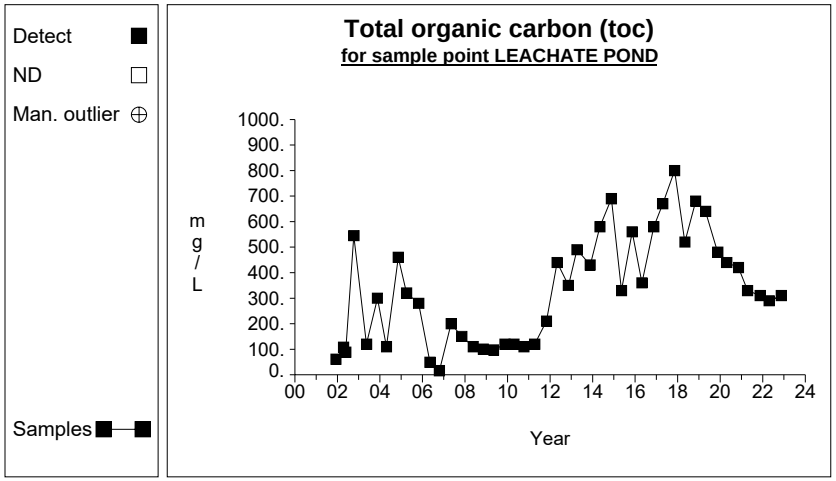
Time Series



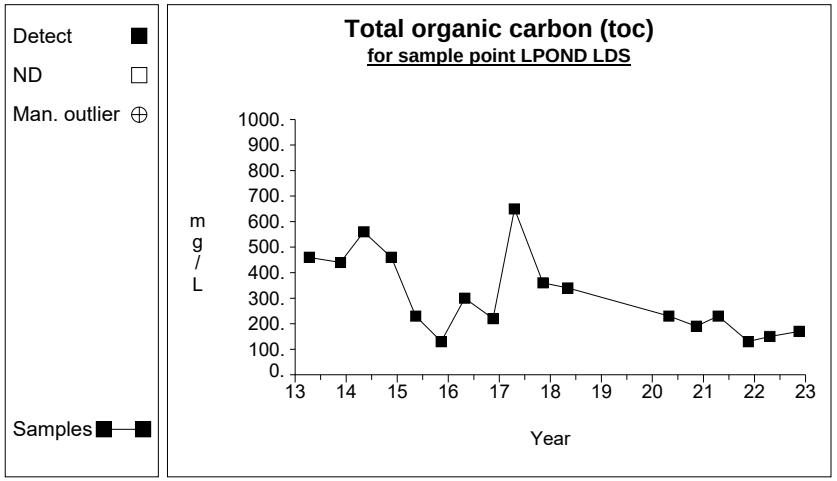
Graph 65



Graph 66

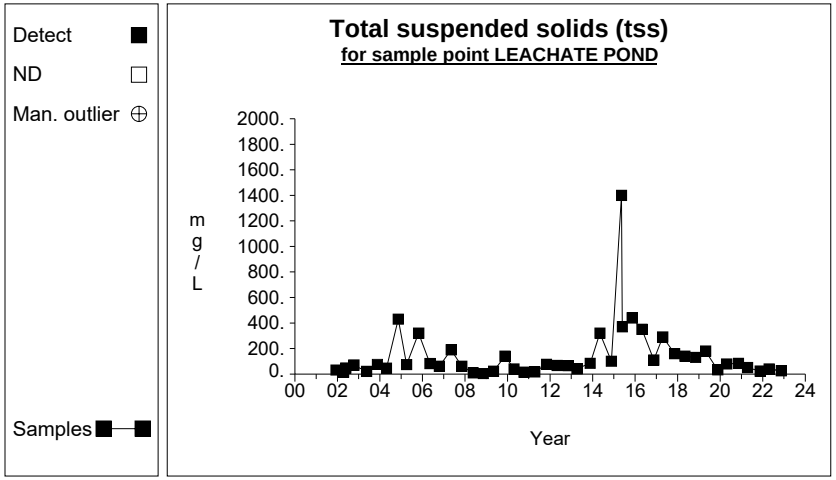


Graph 67

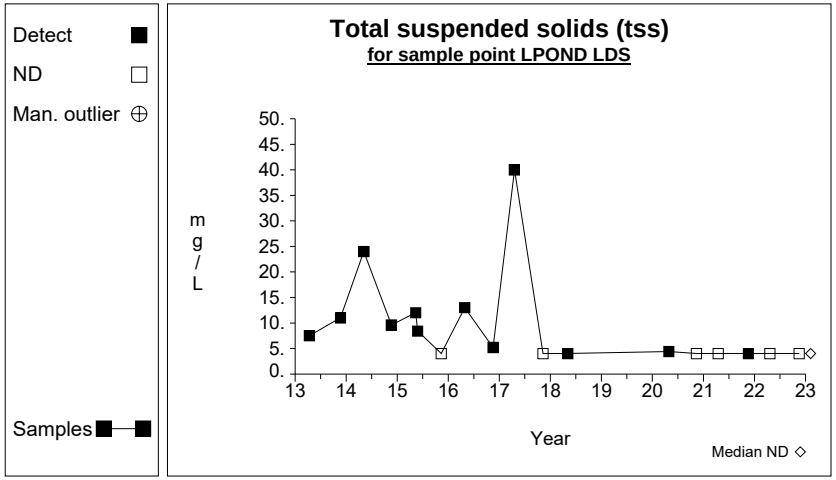


Graph 68

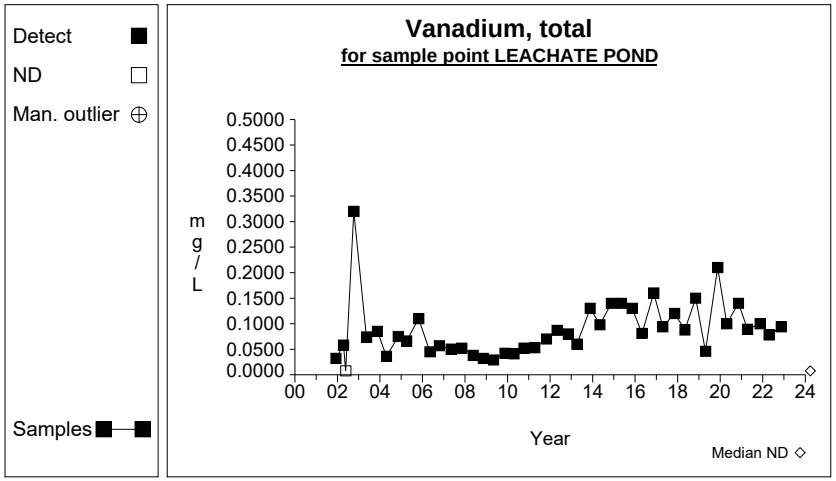
Time Series



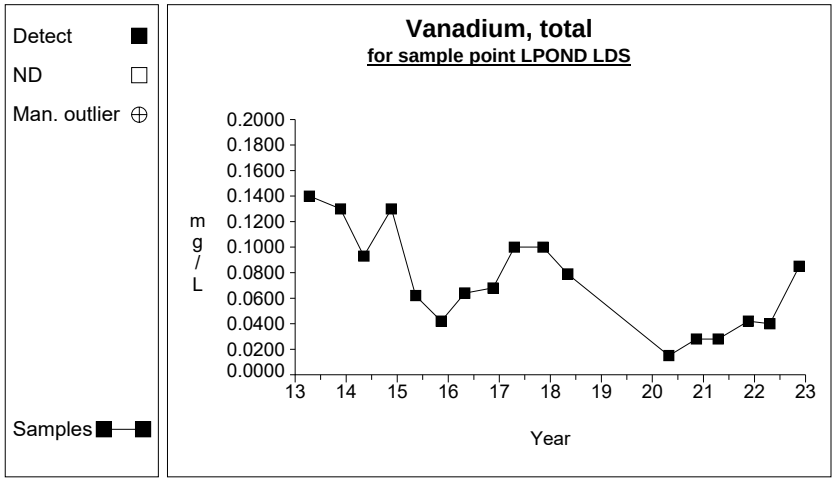
Graph 69



Graph 70

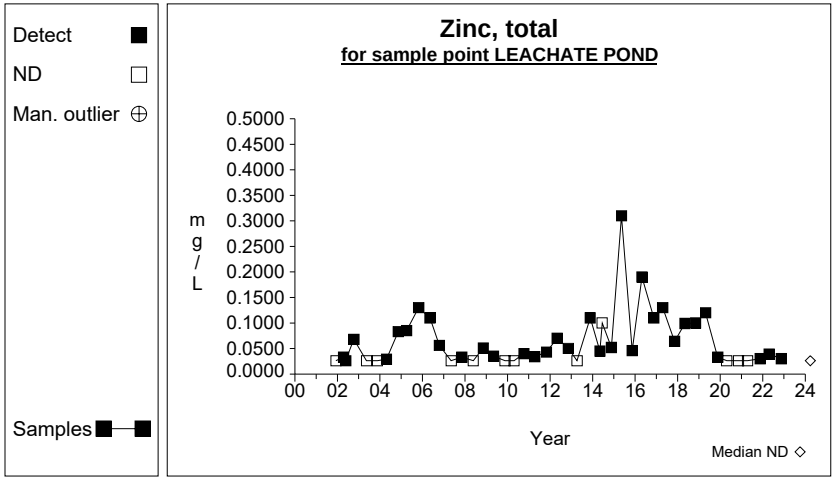


Graph 71

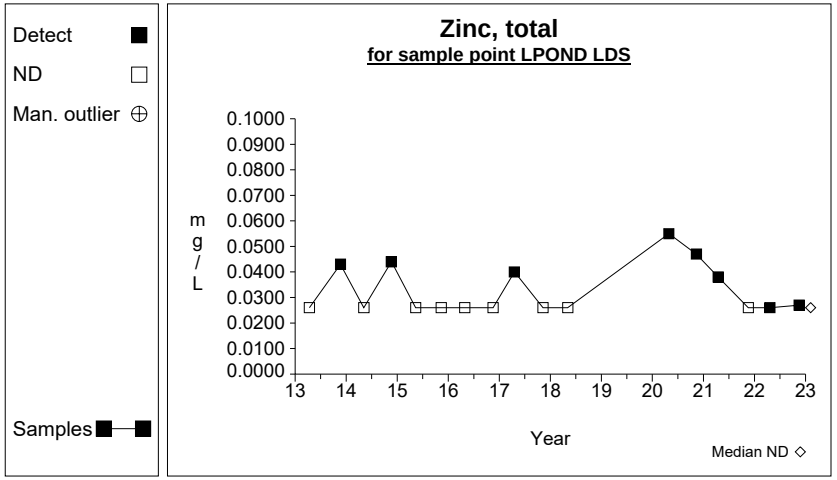


Graph 72

Time Series



Graph 73



Graph 74

APPENDIX F

Geochemical Diagrams for Groundwater and Leachate Management System Samples

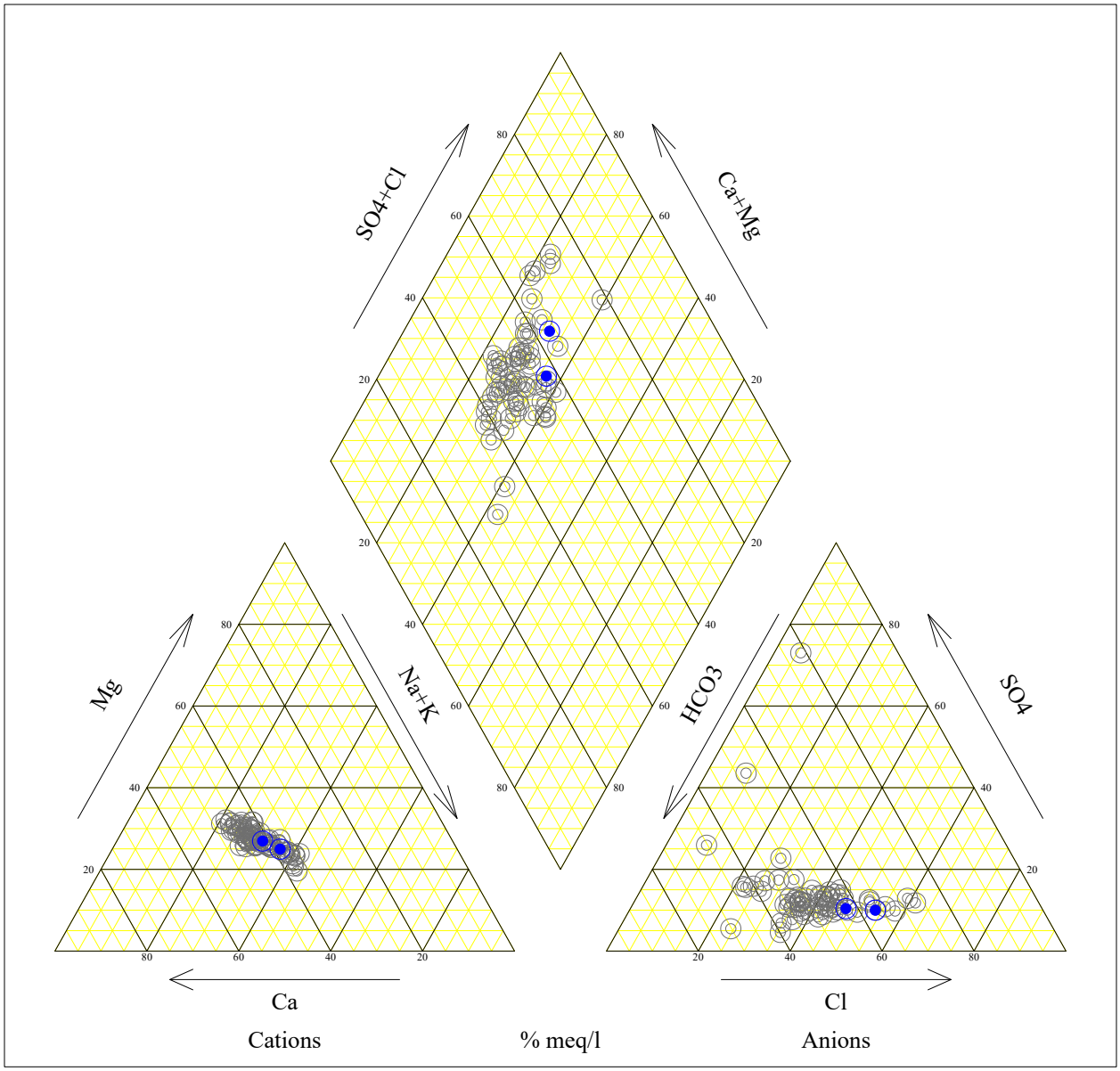
APPENDIX F

Geochemical Diagrams (Piper [Trilinear] Diagrams and Stiff Plots)

Trilinear Diagrams

Groundwater

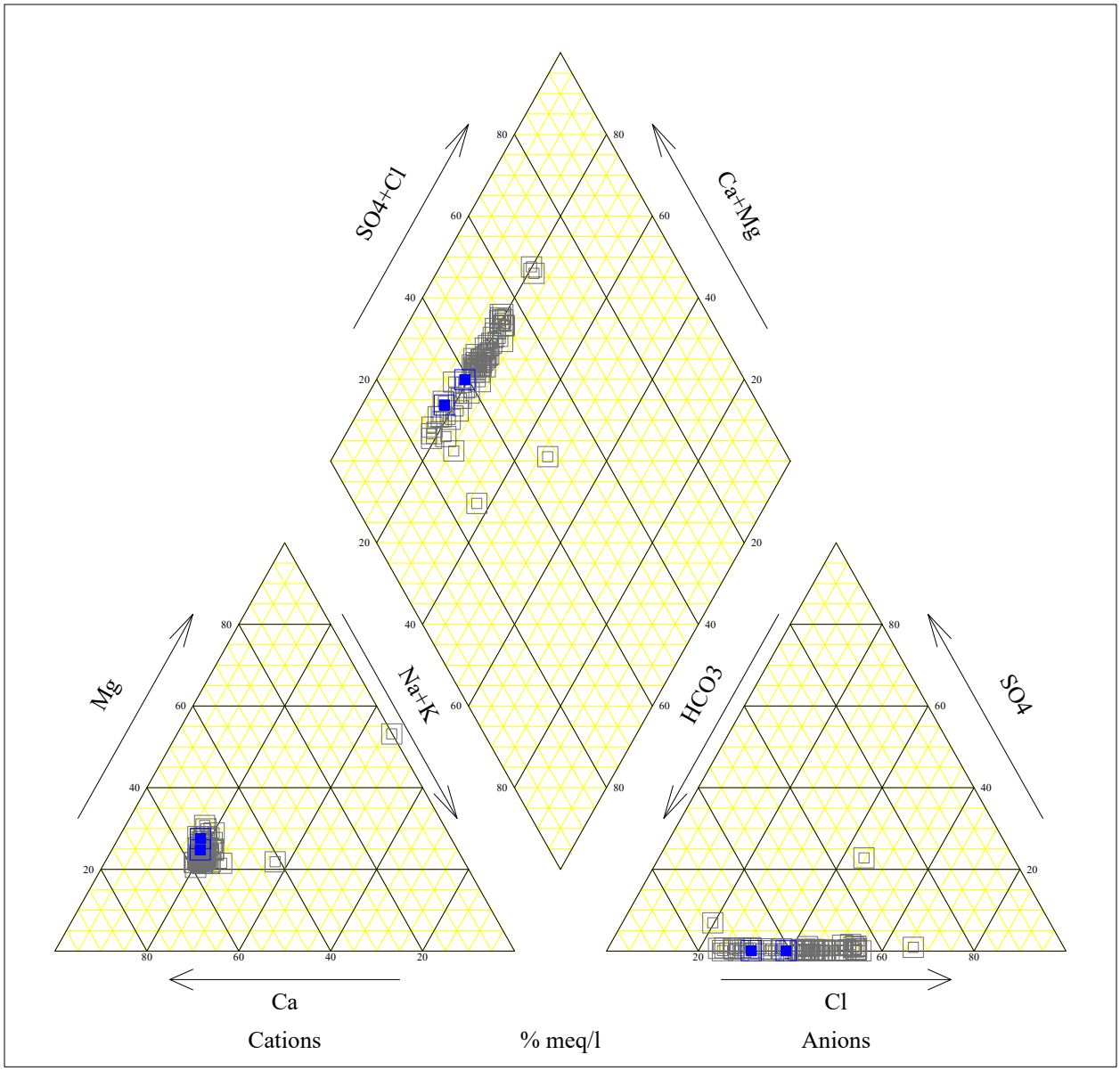
Figure F-1 MW-12A Groundwater



MW-12A	12/28/1995	MW-12A	9/16/1999	MW-12A	5/05/2009	MW-12A	11/11/2015	MW-12A	2/28/2019
MW-12A	3/29/1996	MW-12A	2/08/2000	MW-12A	11/17/2009	MW-12A	5/03/2016	MW-12A	4/25/2019
MW-12A	5/24/1996	MW-12A	5/30/2000	MW-12A	4/20/2010	MW-12A	8/31/2016	MW-12A	11/19/2019
MW-12A	9/30/1996	MW-12A	4/21/2004	MW-12A	10/05/2010	MW-12A	11/16/2016	MW-12A	4/22/2020
MW-12A	1/14/1997	MW-12A	11/09/2004	MW-12A	4/14/2011	MW-12A	12/22/2016	MW-12A	11/11/2020
MW-12A	4/02/1997	MW-12A	5/24/2005	MW-12A	11/02/2011	MW-12A	4/19/2017	MW-12A	4/16/2021
MW-12A	5/20/1997	MW-12A	10/26/2005	MW-12A	5/02/2012	MW-12A	7/14/2017	MW-12A	11/19/2021
MW-12A	9/10/1997	MW-12A	5/09/2006	MW-12A	11/13/2012	MW-12A	9/12/2017	MW-12A	4/21/2022
MW-12A	12/22/1997	MW-12A	10/17/2006	MW-12A	4/15/2013	MW-12A	11/09/2017	MW-12A	11/15/2022
MW-12A	3/18/1998	MW-12A	5/08/2007	MW-12A	11/19/2013	MW-12A	2/07/2018		
MW-12A	4/30/1998	MW-12A	11/07/2007	MW-12A	4/29/2014	MW-12A	5/02/2018		
MW-12A	8/21/1998	MW-12A	5/20/2008	MW-12A	11/18/2014	MW-12A	11/06/2018		
MW-12A	12/17/1998	MW-12A	11/11/2008	MW-12A	5/07/2015	MW-12A	12/17/2018		

Prepared by: SCS Engineers

Figure F-2 MW-12B Groundwater



MW-12B	12/28/1995	MW-12B	12/17/1998	MW-12B	5/20/2008	MW-12B	4/29/2014	MW-12B	11/19/2019
MW-12B	3/29/1996	MW-12B	9/16/1999	MW-12B	11/11/2008	MW-12B	11/18/2014	MW-12B	4/22/2020
MW-12B	5/24/1996	MW-12B	2/08/2000	MW-12B	5/05/2009	MW-12B	5/07/2015	MW-12B	11/11/2020
MW-12B	9/30/1996	MW-12B	5/30/2000	MW-12B	11/17/2009	MW-12B	11/11/2015	MW-12B	4/16/2021
MW-12B	1/14/1997	MW-12B	4/21/2004	MW-12B	4/20/2010	MW-12B	5/03/2016	MW-12B	11/19/2021
MW-12B	4/02/1997	MW-12B	11/09/2004	MW-12B	10/05/2010	MW-12B	8/31/2016	MW-12B	4/21/2022
MW-12B	5/20/1997	MW-12B	5/25/2005	MW-12B	4/14/2011	MW-12B	11/16/2016	MW-12B	11/15/2022
MW-12B	9/10/1997	MW-12B	10/25/2005	MW-12B	11/02/2011	MW-12B	4/19/2017		
MW-12B	12/22/1997	MW-12B	5/09/2006	MW-12B	5/02/2012	MW-12B	11/09/2017		
MW-12B	3/18/1998	MW-12B	10/17/2006	MW-12B	11/13/2012	MW-12B	4/30/2018		
MW-12B	4/30/1998	MW-12B	5/08/2007	MW-12B	4/15/2013	MW-12B	11/06/2018		
MW-12B	8/21/1998	MW-12B	11/08/2007	MW-12B	11/20/2013	MW-12B	4/25/2019		

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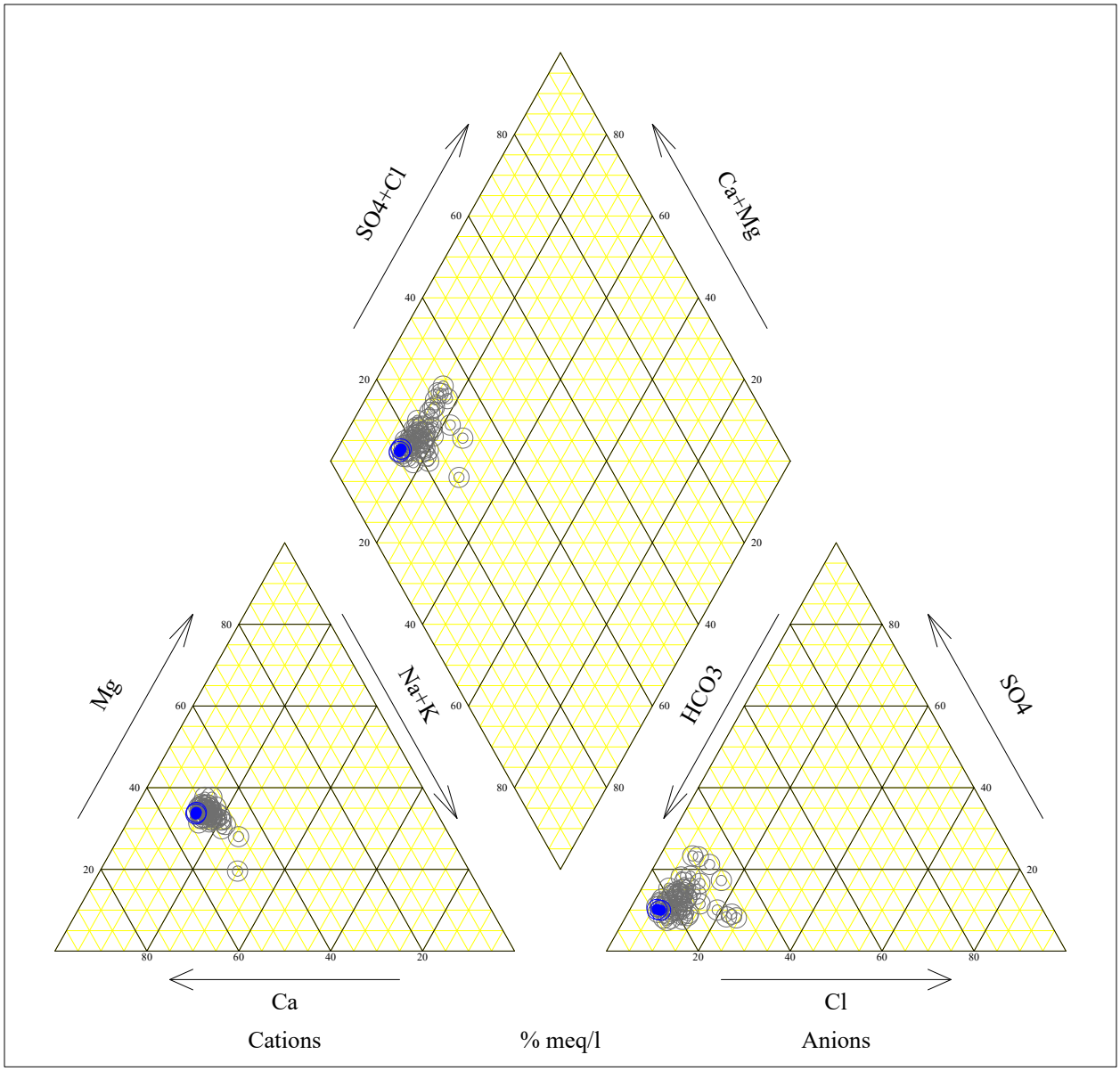
Figure F-3 MW-14A Groundwater



MW-14A	4/03/1997	MW-14A	5/24/2000	MW-14A	5/09/2007	MW-14A	4/09/2013	MW-14A	12/26/2019
MW-14A	5/20/1997	MW-14A	1/30/2001	MW-14A	12/27/2007	MW-14A	11/20/2013	MW-14A	1/22/2019
MW-14A	9/11/1997	MW-14A	4/25/2001	MW-14A	5/21/2008	MW-14A	4/30/2014	MW-14A	4/25/2019
MW-14A	12/30/1997	MW-14A	8/29/2001	MW-14A	11/13/2008	MW-14A	11/20/2014	MW-14A	4/21/2020
MW-14A	3/19/1998	MW-14A	1/30/2002	MW-14A	5/06/2009	MW-14A	5/12/2015	MW-14A	1/28/2021
MW-14A	6/11/1998	MW-14A	4/09/2002	MW-14A	11/18/2009	MW-14A	12/28/2015	MW-14A	4/13/2021
MW-14A	8/20/1998	MW-14A	2/25/2003	MW-14A	4/22/2010	MW-14A	5/04/2016	MW-14A	11/17/2021
MW-14A	12/16/1998	MW-14A	5/13/2003	MW-14A	11/24/2010	MW-14A	11/17/2016	MW-14A	4/22/2022
MW-14A	3/25/1999	MW-14A	4/20/2004	MW-14A	4/13/2011	MW-14A	4/19/2017	MW-14A	1/05/2023
MW-14A	6/16/1999	MW-14A	5/25/2005	MW-14A	1/12/2012	MW-14A	11/08/2017		
MW-14A	12/10/1999	MW-14A	5/10/2006	MW-14A	5/03/2012	MW-14A	2/07/2018		
MW-14A	2/09/2000	MW-14A	11/22/2006	MW-14A	11/13/2012	MW-14A	5/01/2018		

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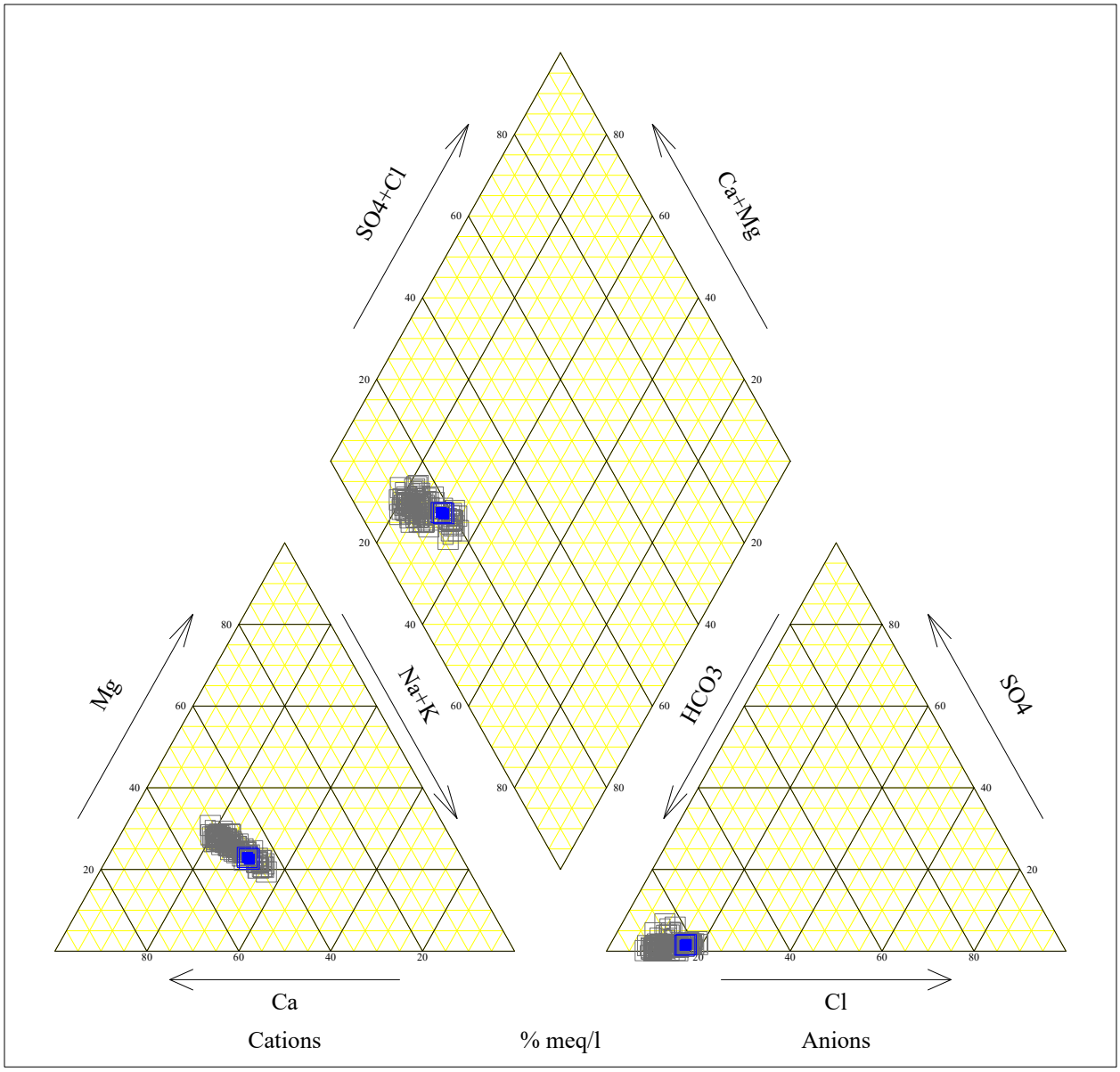
Figure F-4 MW-14B Groundwater



MW-14B	4/03/1997	MW-14B	8/22/2000	MW-14B	4/21/2004	MW-14B	4/13/2011	MW-14B	5/02/2018
MW-14B	5/20/1997	MW-14B	11/07/2000	MW-14B	11/10/2004	MW-14B	11/01/2011	MW-14B	11/07/2018
MW-14B	9/11/1997	MW-14B	1/30/2001	MW-14B	5/25/2005	MW-14B	5/03/2012	MW-14B	4/25/2019
MW-14B	12/30/1997	MW-14B	4/25/2001	MW-14B	10/25/2005	MW-14B	11/13/2012	MW-14B	11/19/2019
MW-14B	3/19/1998	MW-14B	8/29/2001	MW-14B	5/10/2006	MW-14B	4/09/2013	MW-14B	4/21/2020
MW-14B	6/11/1998	MW-14B	11/06/2001	MW-14B	10/18/2006	MW-14B	11/20/2013	MW-14B	11/10/2020
MW-14B	8/20/1998	MW-14B	1/30/2002	MW-14B	5/09/2007	MW-14B	4/30/2014	MW-14B	4/13/2021
MW-14B	12/16/1998	MW-14B	4/09/2002	MW-14B	11/08/2007	MW-14B	11/19/2014	MW-14B	11/18/2021
MW-14B	3/25/1999	MW-14B	7/23/2002	MW-14B	5/21/2008	MW-14B	5/12/2015	MW-14B	4/22/2022
MW-14B	6/16/1999	MW-14B	10/10/2002	MW-14B	11/12/2008	MW-14B	11/11/2015	MW-14B	11/15/2022
MW-14B	9/16/1999	MW-14B	2/25/2003	MW-14B	5/06/2009	MW-14B	5/04/2016		
MW-14B	12/10/1999	MW-14B	5/13/2003	MW-14B	11/17/2009	MW-14B	11/17/2016		
MW-14B	2/09/2000	MW-14B	8/20/2003	MW-14B	4/22/2010	MW-14B	4/19/2017		
MW-14B	5/24/2000	MW-14B	11/18/2003	MW-14B	10/06/2010	MW-14B	11/08/2017		

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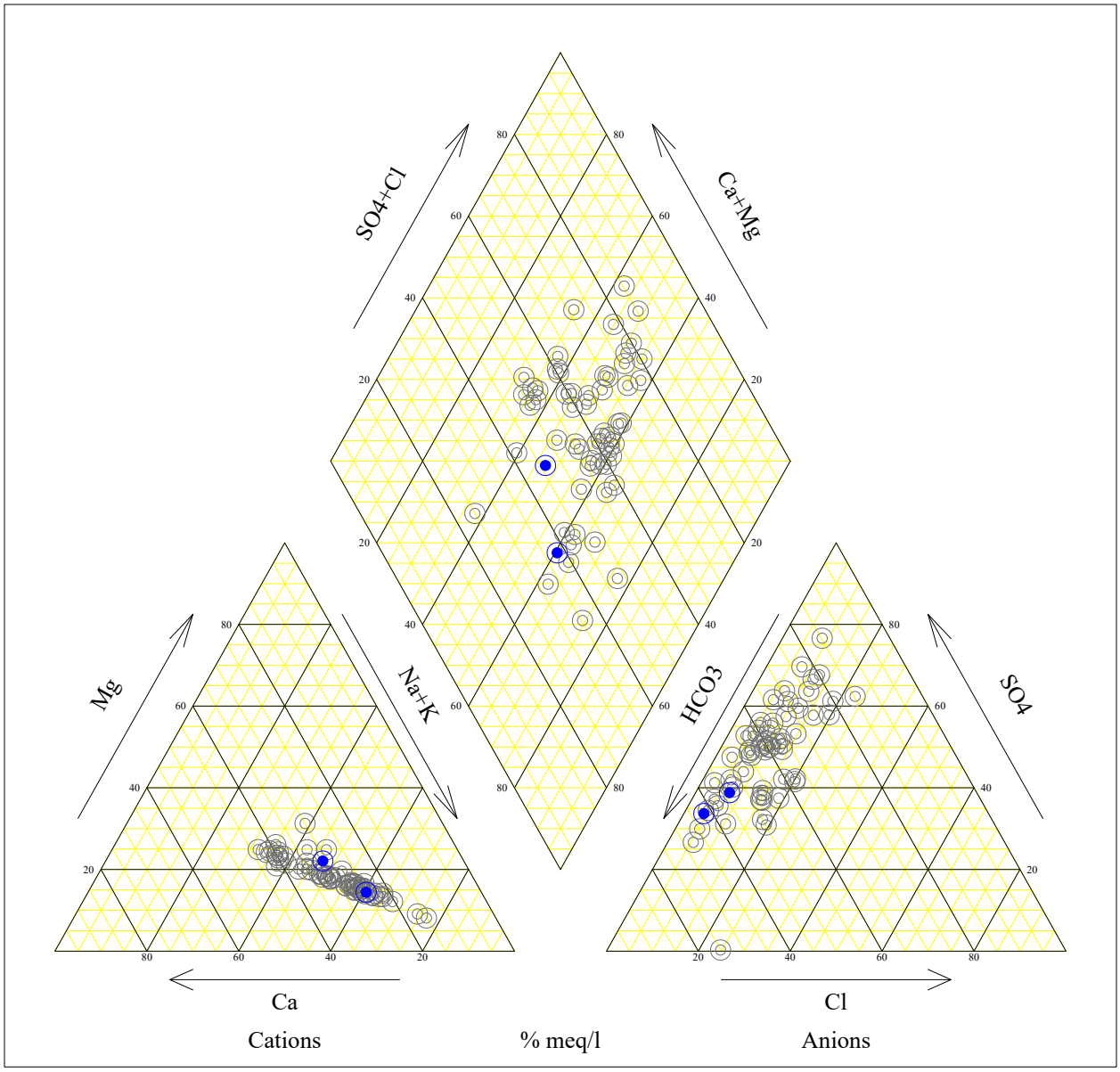
Figure F-5 MW-15A Groundwater



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	4/19/2022
MW-15A	12/13/1999	MW-15A	4/20/2004	MW-15A	10/06/2010	MW-15A	11/16/2016	MW-15A	1/05/2023
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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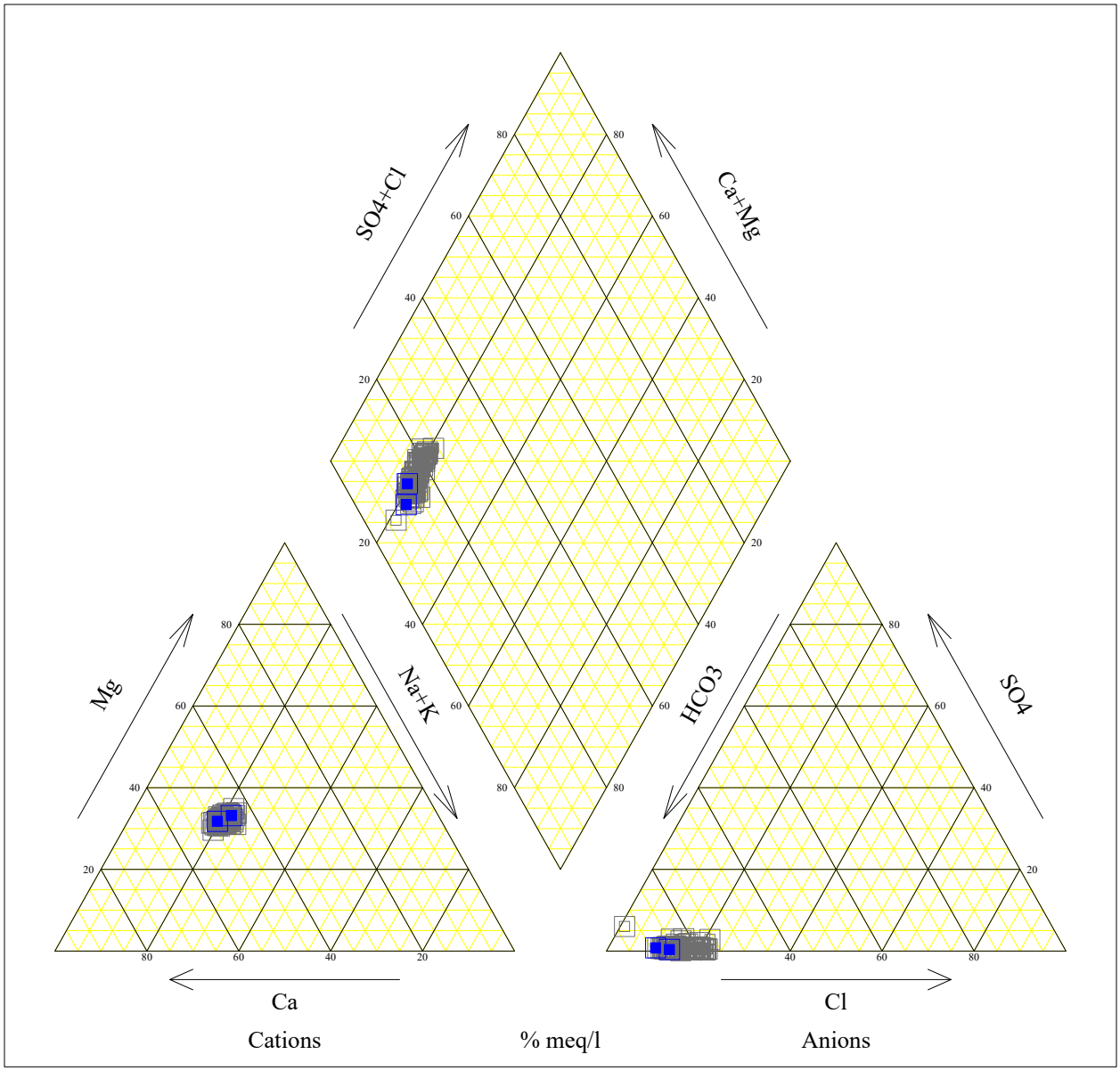
Figure F-6 MW-15B Groundwater



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	4/20/2022
MW-15B	2/08/2000	MW-15B	5/13/2003	MW-15B	11/17/2009	MW-15B	5/03/2016	MW-15B	11/15/2022
MW-15B	5/24/2000	MW-15B	8/20/2003	MW-15B	4/20/2010	MW-15B	11/16/2016		

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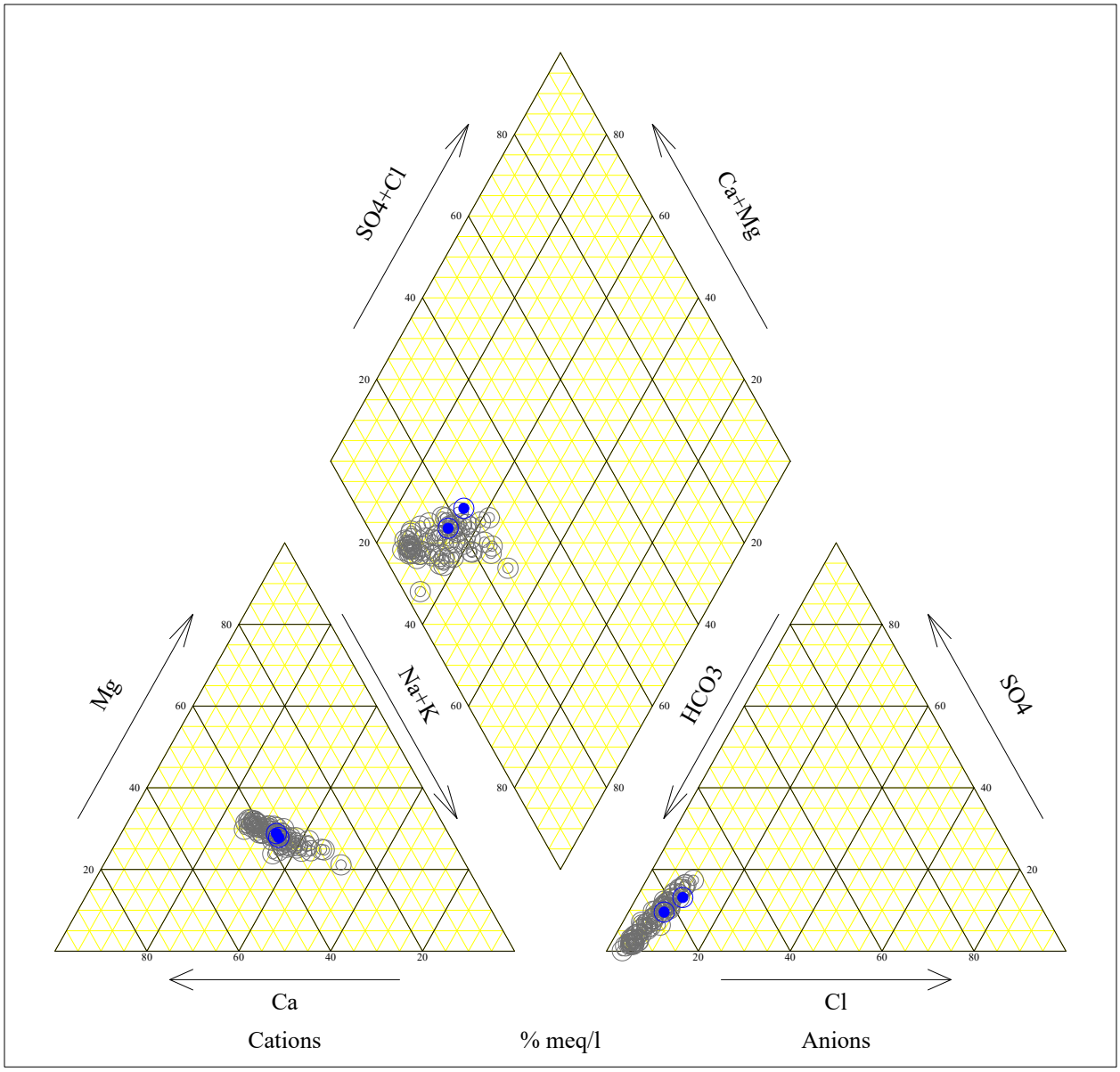
Figure F-7 MW-16A Groundwater



MW-16A 4/01/1997	MW-16A 8/28/2001	MW-16A 11/07/2007	MW-16A 5/03/2016
MW-16A 5/19/1997	MW-16A 11/06/2001	MW-16A 5/20/2008	MW-16A 11/16/2016
MW-16A 9/12/1997	MW-16A 1/31/2002	MW-16A 11/11/2008	MW-16A 4/19/2017
MW-16A 12/22/1997	MW-16A 4/09/2002	MW-16A 5/05/2009	MW-16A 11/07/2017 - 11/21/2017
MW-16A 3/18/1998	MW-16A 7/23/2002	MW-16A 11/18/2009	MW-16A 4/27/2018
MW-16A 6/11/1998	MW-16A 10/09/2002	MW-16A 4/20/2010	MW-16A 12/17/2018
MW-16A 8/21/1998	MW-16A 2/25/2003	MW-16A 10/06/2010	MW-16A 4/24/2019
MW-16A 12/17/1998	MW-16A 5/13/2003	MW-16A 4/14/2011	MW-16A 12/26/2019
MW-16A 3/26/1999	MW-16A 8/19/2003	MW-16A 11/03/2011	MW-16A 4/21/2020
MW-16A 6/17/1999	MW-16A 11/19/2003	MW-16A 5/02/2012	MW-16A 1/28/2021
MW-16A 12/13/1999	MW-16A 4/20/2004	MW-16A 11/13/2012	MW-16A 4/14/2021
MW-16A 2/09/2000	MW-16A 11/09/2004	MW-16A 4/11/2013	MW-16A 11/17/2021
MW-16A 5/25/2000	MW-16A 5/24/2005	MW-16A 11/19/2013	MW-16A 4/19/2022
MW-16A 8/22/2000	MW-16A 10/26/2005	MW-16A 4/29/2014	MW-16A 11/16/2022
MW-16A 11/08/2000	MW-16A 5/09/2006	MW-16A 11/18/2014	
MW-16A 1/30/2001	MW-16A 10/18/2006	MW-16A 5/07/2015	
MW-16A 4/24/2001	MW-16A 5/08/2007	MW-16A 12/28/2015	

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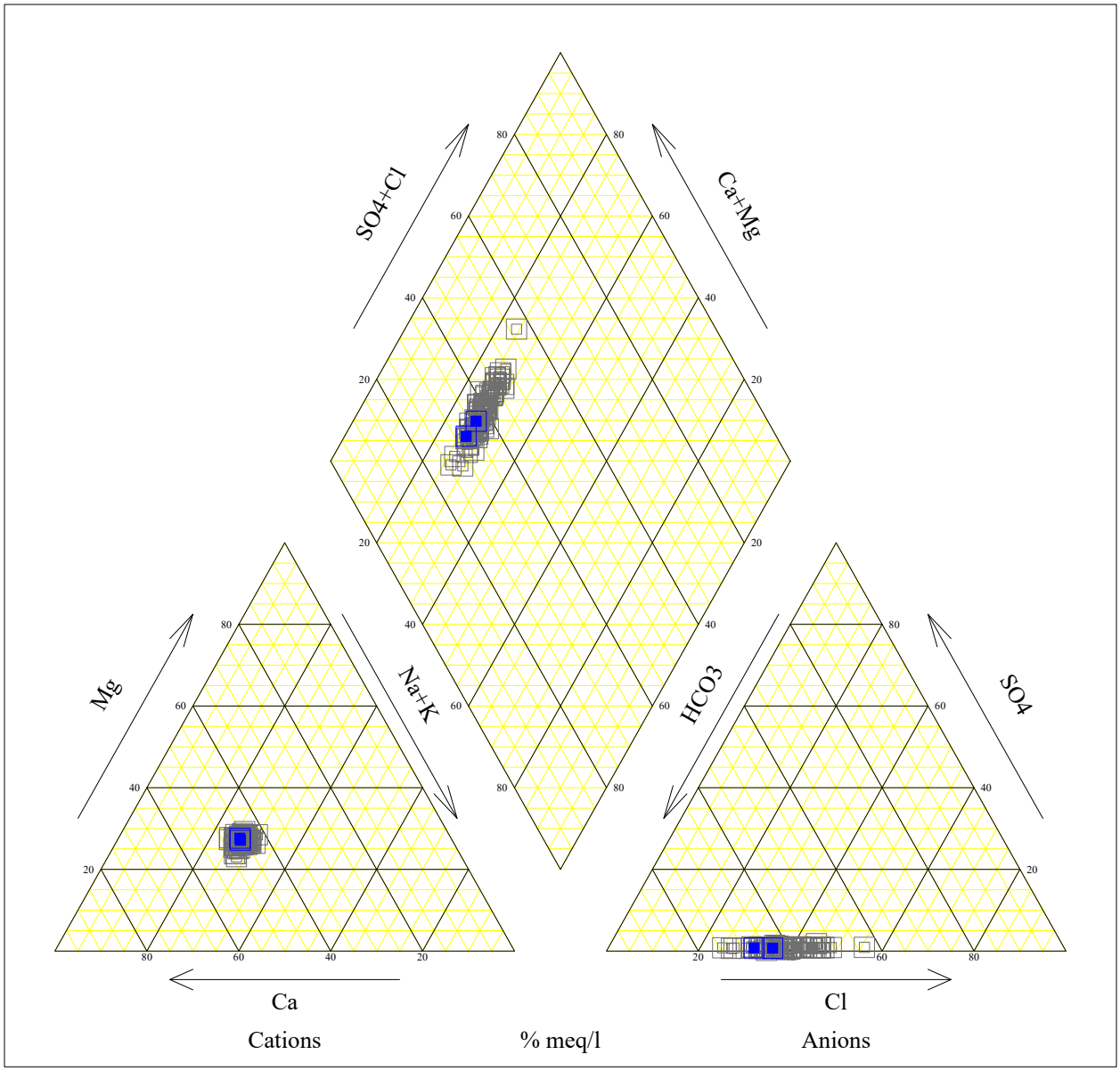
Figure F-8 MW-16B Groundwater



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	4/19/2022
MW-16B	5/25/2000	MW-16B	8/19/2003	MW-16B	11/17/2009	MW-16B	5/03/2016	MW-16B	11/15/2022

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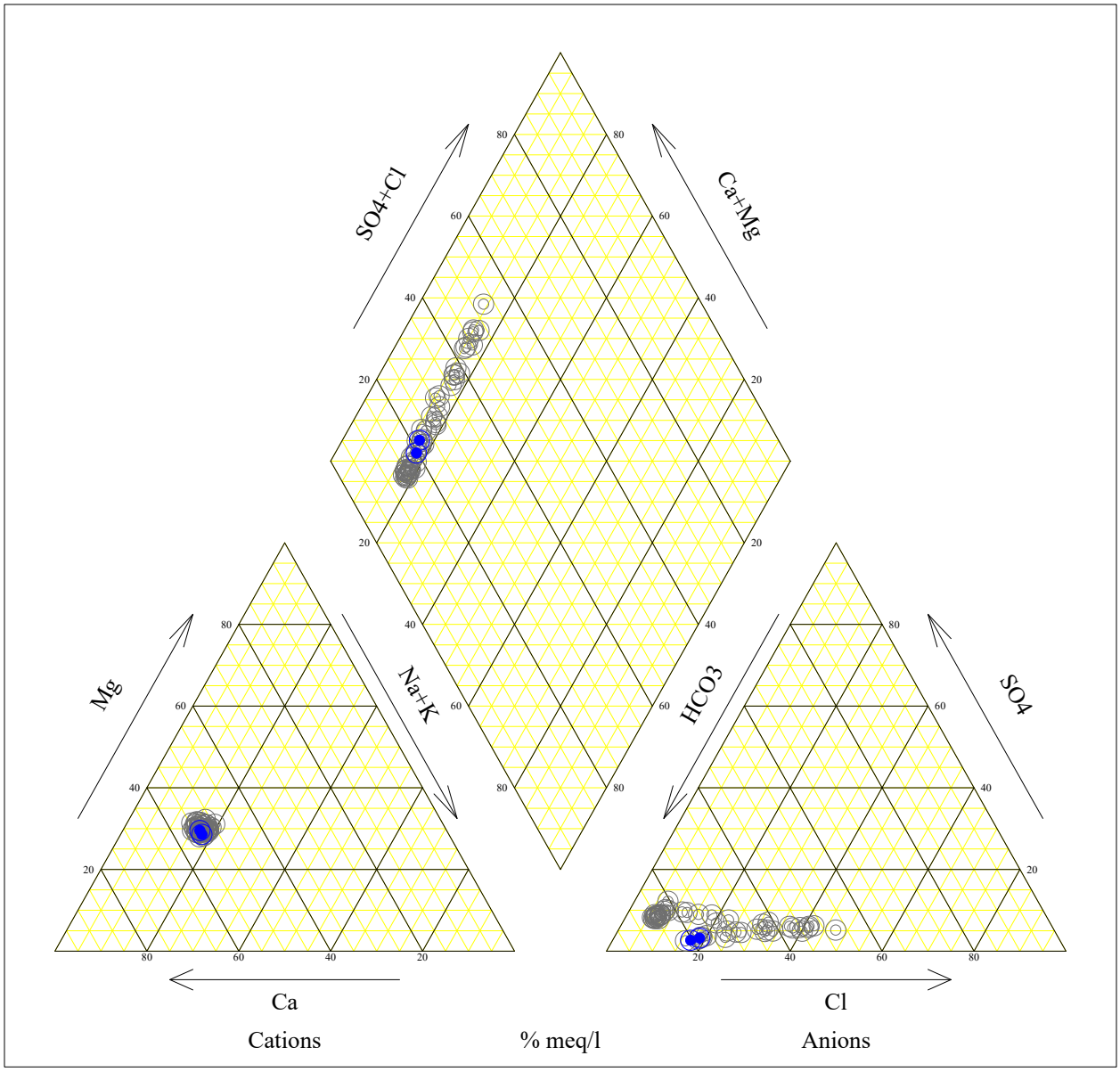
Figure F-9 MW-19A Groundwater



MW-19A	3/26/2001	MW-19A	4/22/2004	MW-19A	4/20/2010	MW-19A	11/12/2015	MW-19A	11/19/2021
MW-19A	5/09/2001	MW-19A	11/10/2004	MW-19A	10/06/2010	MW-19A	5/05/2016	MW-19A	4/22/2022
MW-19A	8/30/2001	MW-19A	5/27/2005	MW-19A	4/12/2011	MW-19A	11/17/2016	MW-19A	11/17/2022
MW-19A	11/08/2001	MW-19A	10/27/2005	MW-19A	11/01/2011	MW-19A	4/20/2017		
MW-19A	1/28/2002	MW-19A	5/11/2006	MW-19A	2/07/2012	MW-19A	11/07/2017		
MW-19A	4/11/2002	MW-19A	10/19/2006	MW-19A	5/01/2012	MW-19A	4/26/2018		
MW-19A	7/25/2002	MW-19A	5/10/2007	MW-19A	11/14/2012	MW-19A	11/06/2018		
MW-19A	10/09/2002	MW-19A	11/08/2007	MW-19A	4/10/2013	MW-19A	4/29/2019		
MW-19A	2/27/2003	MW-19A	5/21/2008	MW-19A	11/21/2013	MW-19A	11/20/2019		
MW-19A	5/16/2003	MW-19A	11/13/2008	MW-19A	5/02/2014	MW-19A	4/23/2020		
MW-19A	8/20/2003	MW-19A	5/07/2009	MW-19A	11/20/2014	MW-19A	11/10/2020		
MW-19A	11/20/2003	MW-19A	11/19/2009	MW-19A	5/14/2015	MW-19A	4/16/2021		

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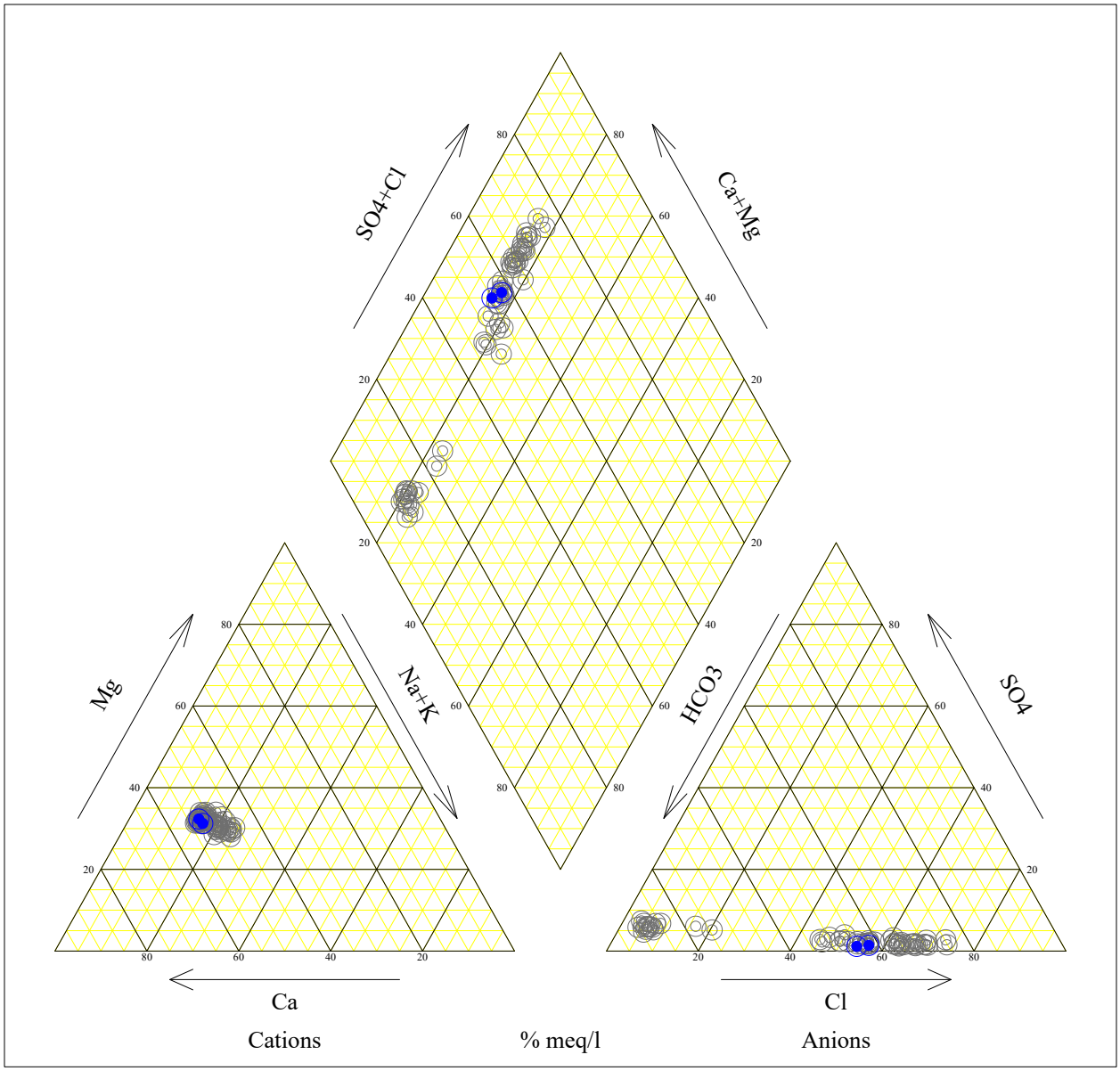
Figure F-10 MW-20A Groundwater



MW-20A	3/26/2001	MW-20A	4/22/2004	MW-20A	11/19/2009	MW-20A	5/14/2015	MW-20A	4/13/2021
MW-20A	5/09/2001	MW-20A	11/10/2004	MW-20A	4/21/2010	MW-20A	11/12/2015	MW-20A	11/16/2021
MW-20A	8/29/2001	MW-20A	5/27/2005	MW-20A	10/06/2010	MW-20A	5/05/2016	MW-20A	4/19/2022
MW-20A	11/08/2001	MW-20A	10/27/2005	MW-20A	4/12/2011	MW-20A	11/17/2016	MW-20A	11/16/2022
MW-20A	1/29/2002	MW-20A	5/11/2006	MW-20A	11/01/2011	MW-20A	4/18/2017		
MW-20A	4/12/2002	MW-20A	10/19/2006	MW-20A	2/09/2012	MW-20A	11/07/2017		
MW-20A	7/24/2002	MW-20A	5/10/2007	MW-20A	5/01/2012	MW-20A	5/01/2018		
MW-20A	10/08/2002	MW-20A	7/24/2007	MW-20A	11/14/2012	MW-20A	11/07/2018		
MW-20A	2/26/2003	MW-20A	11/08/2007	MW-20A	4/12/2013	MW-20A	4/23/2019		
MW-20A	5/15/2003	MW-20A	5/21/2008	MW-20A	10/25/2013	MW-20A	11/19/2019		
MW-20A	8/21/2003	MW-20A	11/13/2008	MW-20A	5/02/2014	MW-20A	4/20/2020		
MW-20A	11/20/2003	MW-20A	5/07/2009	MW-20A	11/19/2014	MW-20A	11/10/2020		

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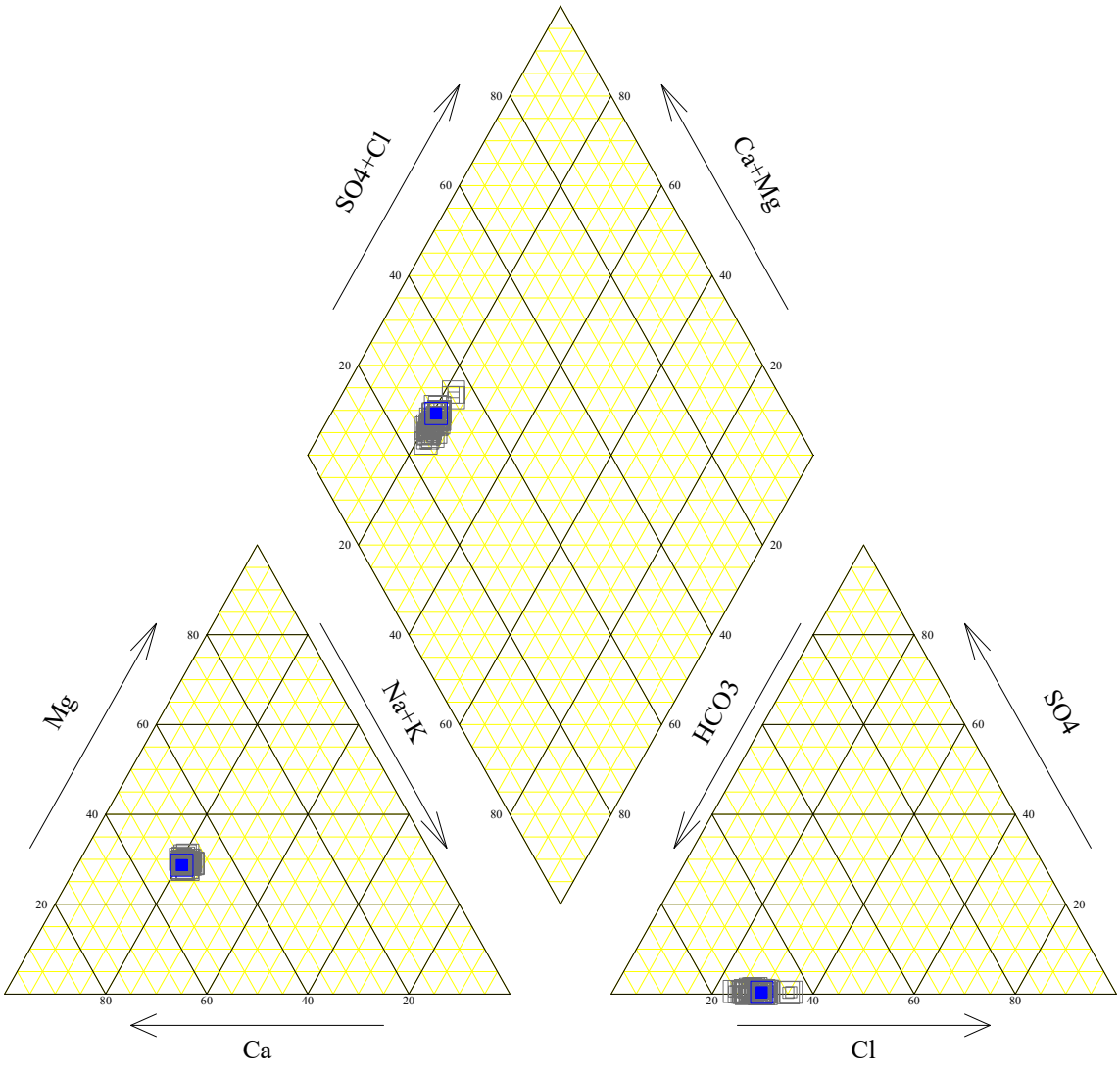
Figure F-11 MW-20B Groundwater



MW-20B	11/09/2000	MW-20B	5/15/2003	MW-20B	4/12/2011	MW-20B	4/13/2021
MW-20B	3/26/2001	MW-20B	8/21/2003	MW-20B	5/01/2012	MW-20B	4/19/2022
MW-20B	5/09/2001	MW-20B	11/20/2003	MW-20B	4/12/2013		
MW-20B	8/29/2001	MW-20B	4/22/2004	MW-20B	5/01/2014		
MW-20B	11/08/2001	MW-20B	5/27/2005	MW-20B	5/11/2015		
MW-20B	1/29/2002	MW-20B	5/11/2006	MW-20B	5/05/2016		
MW-20B	4/12/2002	MW-20B	5/10/2007	MW-20B	4/18/2017		
MW-20B	7/24/2002	MW-20B	5/21/2008	MW-20B	5/01/2018		
MW-20B	10/08/2002	MW-20B	5/07/2009	MW-20B	4/24/2019		
MW-20B	2/26/2003	MW-20B	4/21/2010	MW-20B	4/20/2020		

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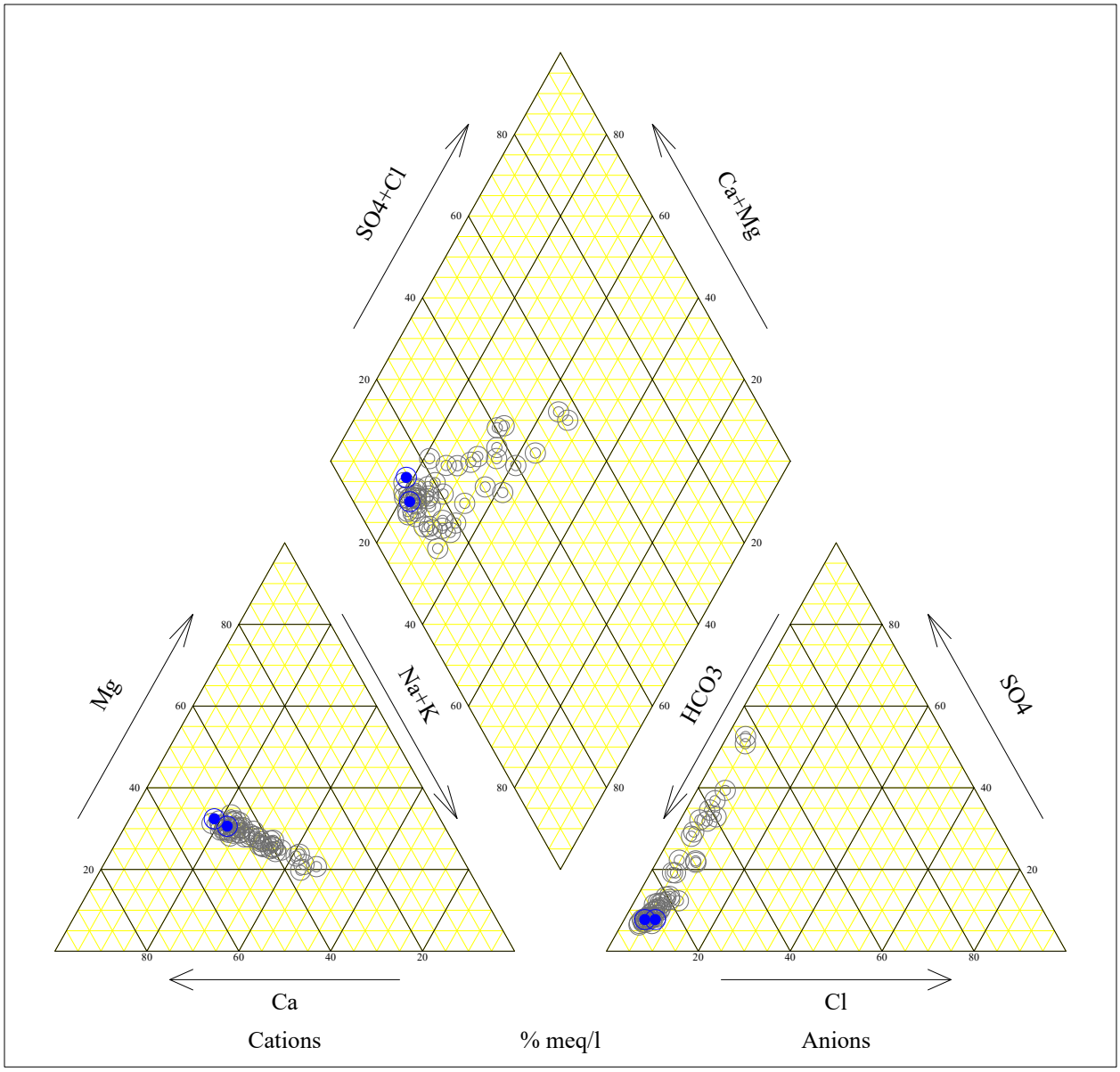
Figure F-12 MW-21A Groundwater



MW-21A	1/31/2001	MW-21A	5/25/2005	MW-21A	4/15/2011	MW-21A	4/20/2017
MW-21A	4/25/2001	MW-21A	10/27/2005	MW-21A	1/12/2012	MW-21A	11/08/2017
MW-21A	8/28/2001	MW-21A	5/10/2006	MW-21A	5/01/2012	MW-21A	4/25/2018
MW-21A	11/06/2001	MW-21A	11/22/2006	MW-21A	11/14/2012	MW-21A	12/17/2018
MW-21A	1/30/2002	MW-21A	5/09/2007	MW-21A	4/09/2013	MW-21A	4/29/2019
MW-21A	4/10/2002	MW-21A	11/08/2007	MW-21A	11/20/2013	MW-21A	12/26/2019
MW-21A	7/25/2002	MW-21A	5/21/2008	MW-21A	4/29/2014	MW-21A	4/21/2020
MW-21A	2/26/2003	MW-21A	11/12/2008	MW-21A	11/19/2014	MW-21A	1/28/2021
MW-21A	5/14/2003	MW-21A	5/06/2009	MW-21A	5/12/2015	MW-21A	4/13/2021
MW-21A	8/19/2003	MW-21A	11/18/2009	MW-21A	11/12/2015	MW-21A	11/18/2021
MW-21A	11/20/2003	MW-21A	4/21/2010	MW-21A	5/04/2016	MW-21A	4/21/2022
MW-21A	4/21/2004	MW-21A	11/24/2010	MW-21A	11/17/2016	MW-21A	11/15/2022

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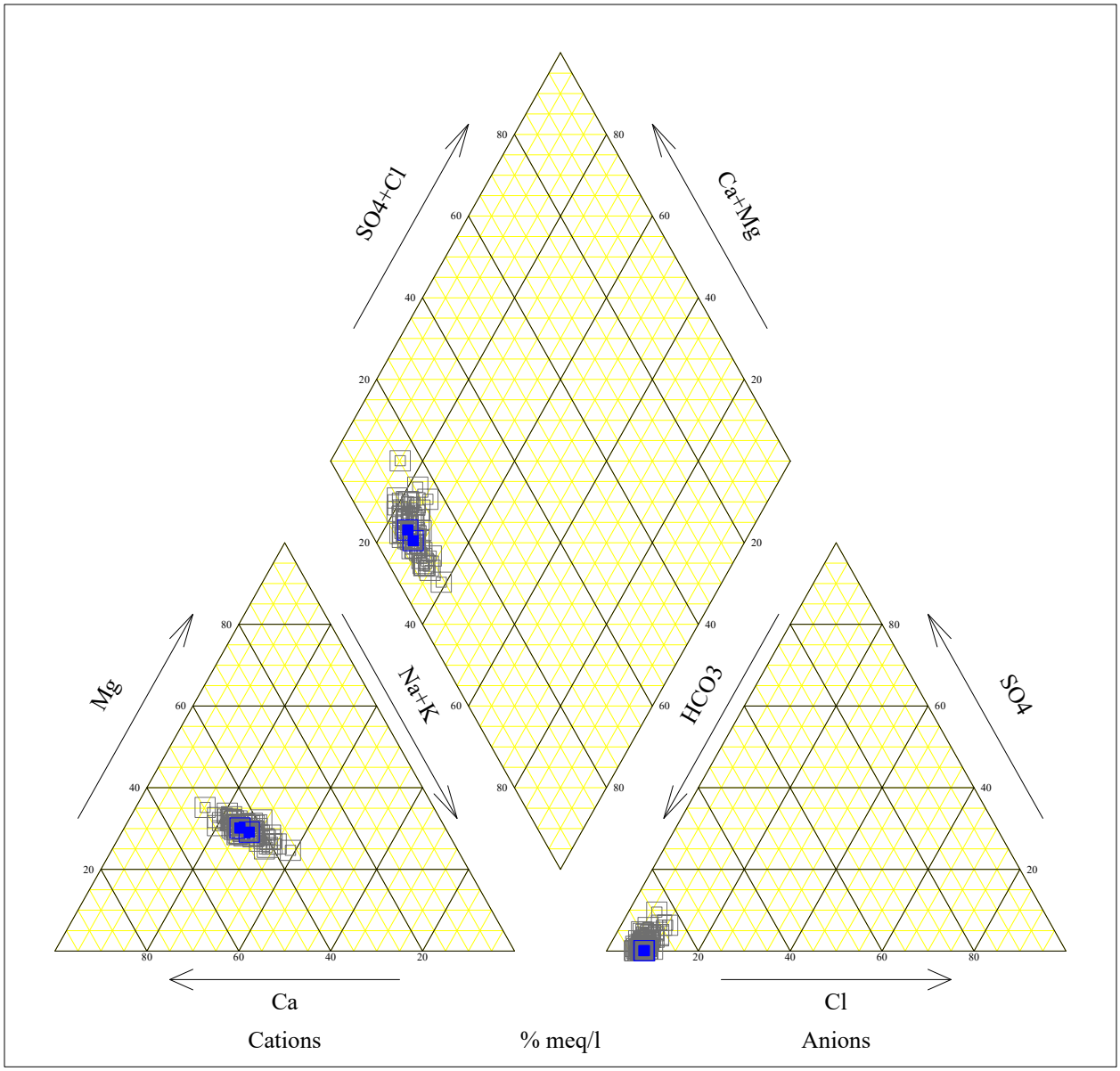
Figure F-13 MW-21B Groundwater



MW-21B	1/31/2001	MW-21B	4/21/2004	MW-21B	4/21/2010	MW-21B	5/04/2016	MW-21B	6/01/2022
MW-21B	4/25/2001	MW-21B	11/10/2004	MW-21B	10/06/2010	MW-21B	11/17/2016	MW-21B	11/15/2022
MW-21B	8/28/2001	MW-21B	5/25/2005	MW-21B	4/15/2011	MW-21B	4/20/2017		
MW-21B	11/06/2001	MW-21B	10/26/2005	MW-21B	11/01/2011	MW-21B	11/08/2017		
MW-21B	1/30/2002	MW-21B	5/10/2006	MW-21B	5/01/2012	MW-21B	4/25/2018		
MW-21B	4/10/2002	MW-21B	10/18/2006	MW-21B	11/14/2012	MW-21B	11/07/2018		
MW-21B	7/24/2002	MW-21B	5/09/2007	MW-21B	4/12/2013	MW-21B	4/29/2019		
MW-21B	10/08/2002	MW-21B	11/08/2007	MW-21B	11/20/2013	MW-21B	11/19/2019		
MW-21B	2/26/2003	MW-21B	5/21/2008	MW-21B	4/30/2014	MW-21B	4/21/2020		
MW-21B	5/14/2003	MW-21B	11/12/2008	MW-21B	11/19/2014	MW-21B	11/10/2020		
MW-21B	8/20/2003	MW-21B	5/06/2009	MW-21B	5/12/2015	MW-21B	4/14/2021		
MW-21B	11/19/2003	MW-21B	11/18/2009	MW-21B	11/12/2015	MW-21B	11/16/2021		

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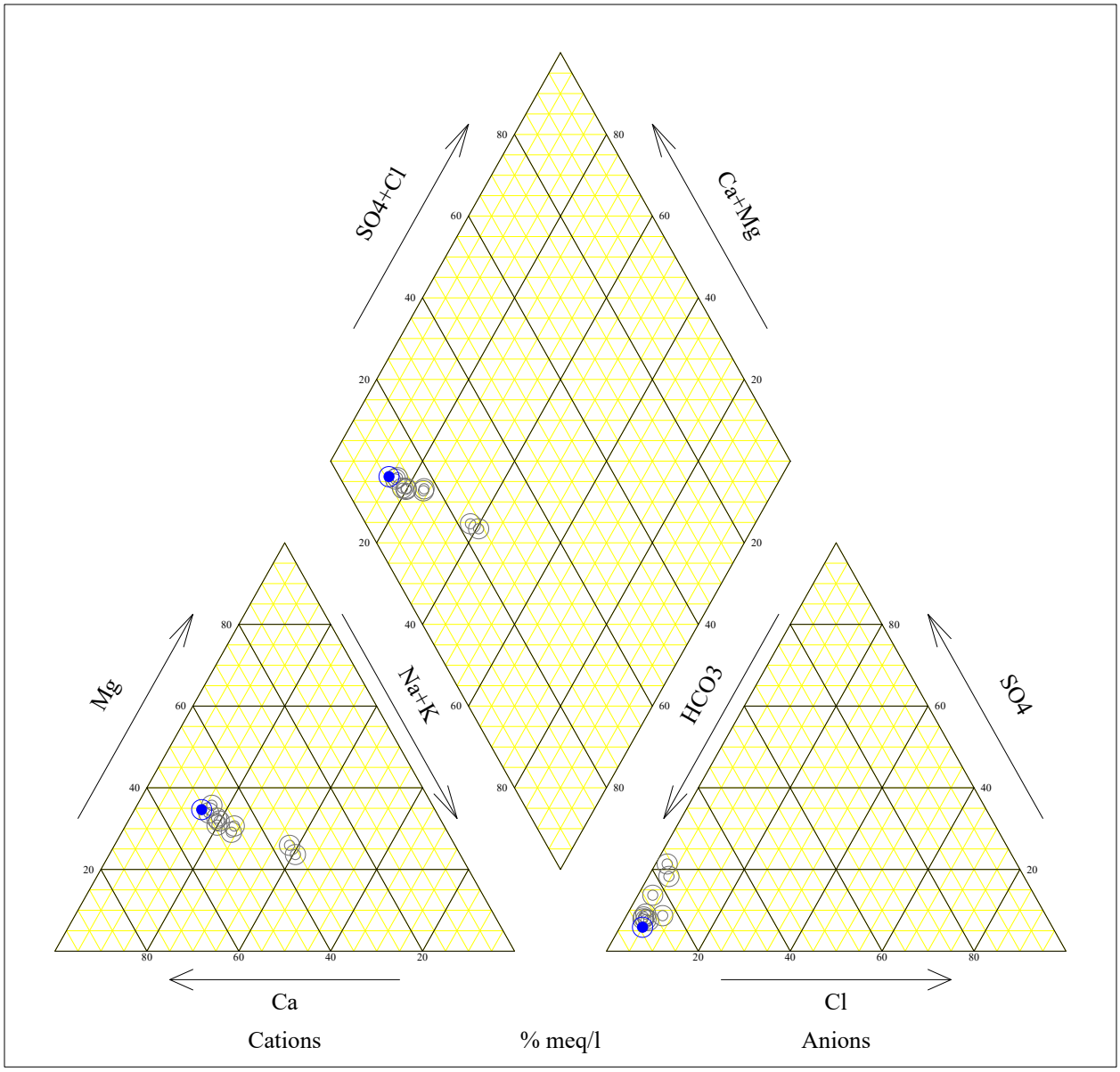
Figure F-14 MW-22A Groundwater



◎	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	
●	MW-22A	4/21/2022	

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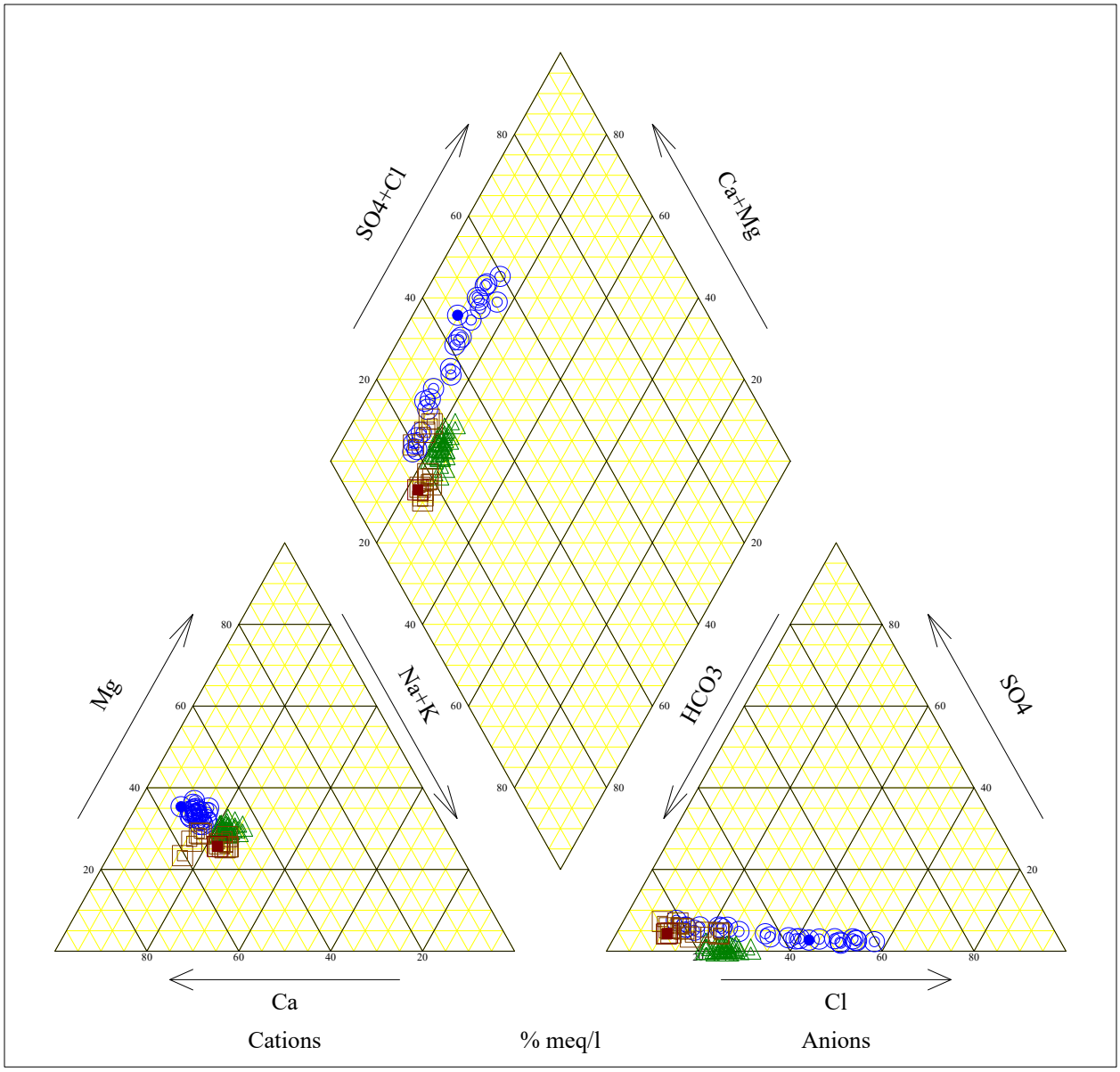
Figure F-15 P-05A, P-06A, and P-07A Groundwater



P-05A	10/27/2005	P-05A	5/03/2012	P-06A	5/12/2006	P-06A	4/10/2013	P-07A	4/09/2013
P-05A	5/12/2006	P-05A	4/09/2013	P-06A	10/19/2006	P-06A	5/02/2014	P-07A	5/01/2014
P-05A	10/19/2006	P-05A	5/02/2014	P-06A	5/10/2007	P-06A	5/06/2015	P-07A	5/06/2015
P-05A	5/10/2007	P-05A	5/06/2015	P-06A	7/24/2007	P-06A	5/06/2016	P-07A	5/05/2016
P-05A	7/24/2007	P-05A	5/05/2016	P-06A	11/07/2007	P-06A	4/19/2017	P-07A	4/18/2017
P-05A	11/07/2007	P-05A	4/18/2017	P-06A	5/22/2008	P-06A	5/01/2018	P-07A	4/30/2018
P-05A	5/22/2008	P-05A	4/30/2018	P-06A	11/14/2008	P-06A	4/24/2019	P-07A	4/24/2019
P-05A	11/14/2008	P-05A	4/23/2019	P-06A	5/08/2009	P-06A	4/28/2020	P-07A	4/23/2020
P-05A	5/07/2009	P-05A	4/23/2020	P-06A	4/28/2010	P-06A	4/14/2021	P-07A	4/13/2021
P-05A	4/23/2010	P-05A	4/13/2021	P-06A	4/12/2011	P-06A	4/20/2022	P-07A	4/19/2022
P-05A	4/12/2011	P-05A	4/19/2022	P-06A	2/09/2012	P-07A	2/09/2012		
P-05A	2/09/2012	P-06A	10/27/2005	P-06A	5/03/2012	P-07A	5/03/2012		

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Stiff Plots

Groundwater

Figure F-16 2022 MW-12A and MW-12B Groundwater

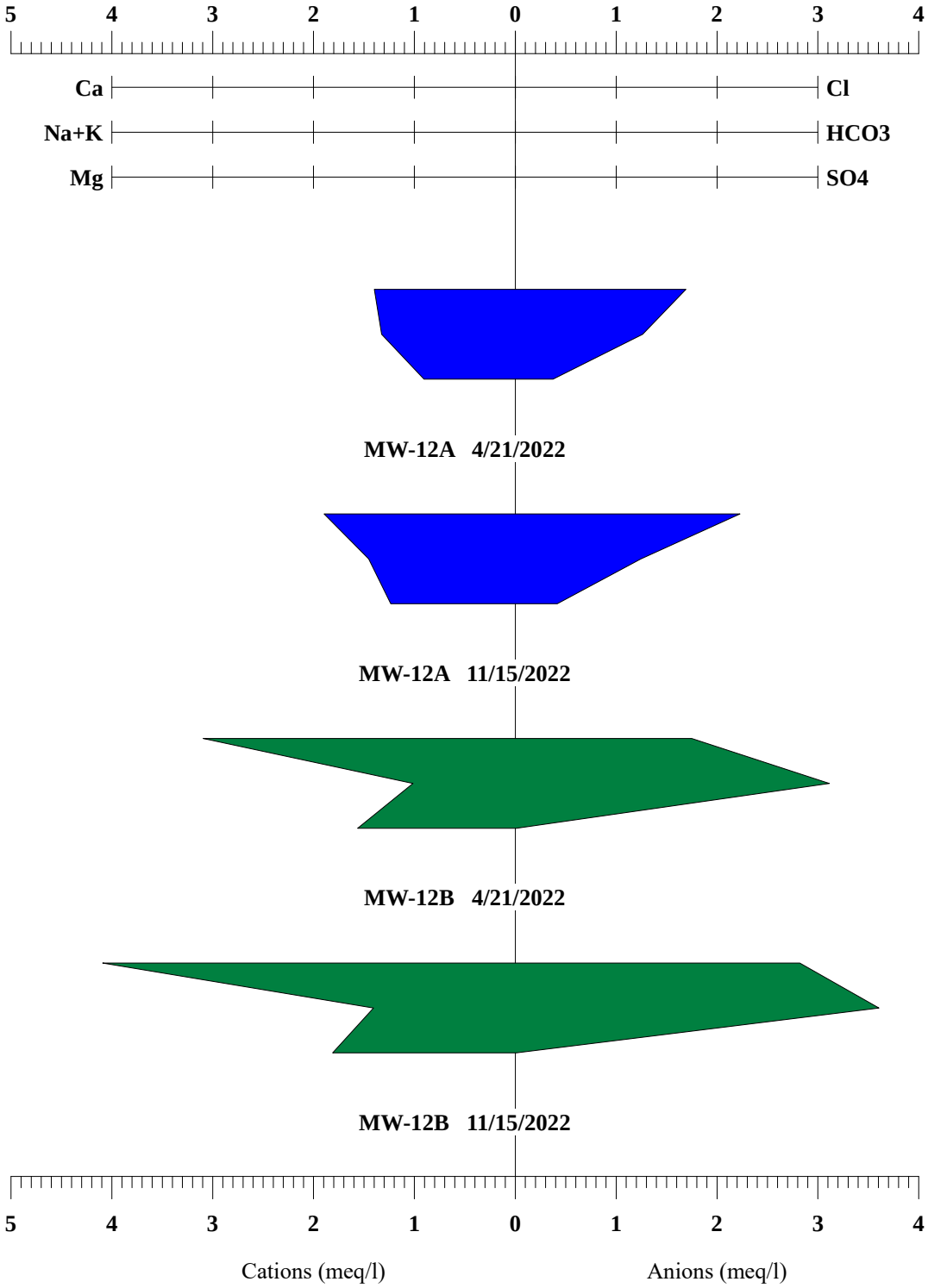


Figure F-17 2022 MW-14A and MW-14B Groundwater

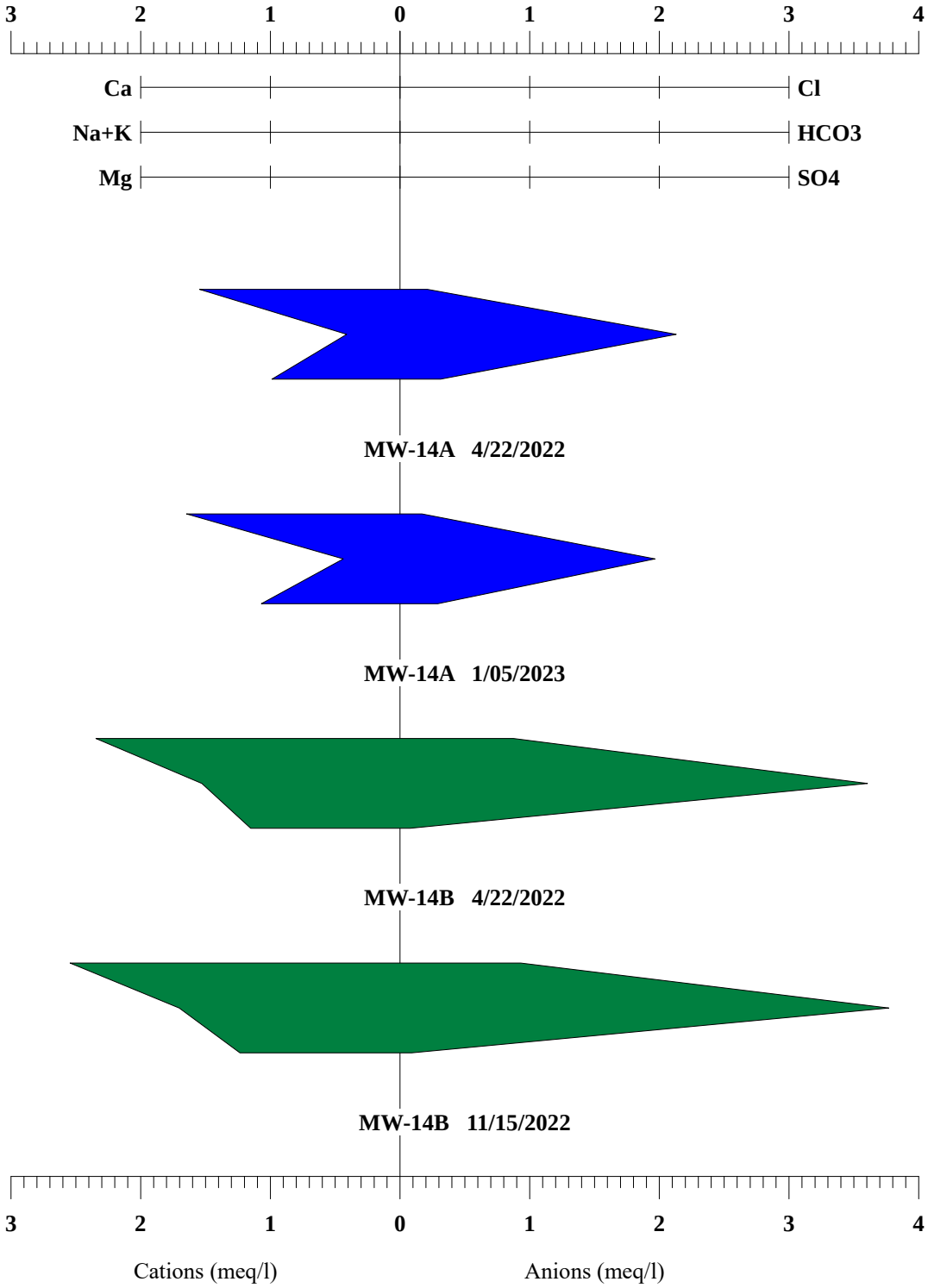


Figure F-18 2022 MW-15A and MW-15B Groundwater

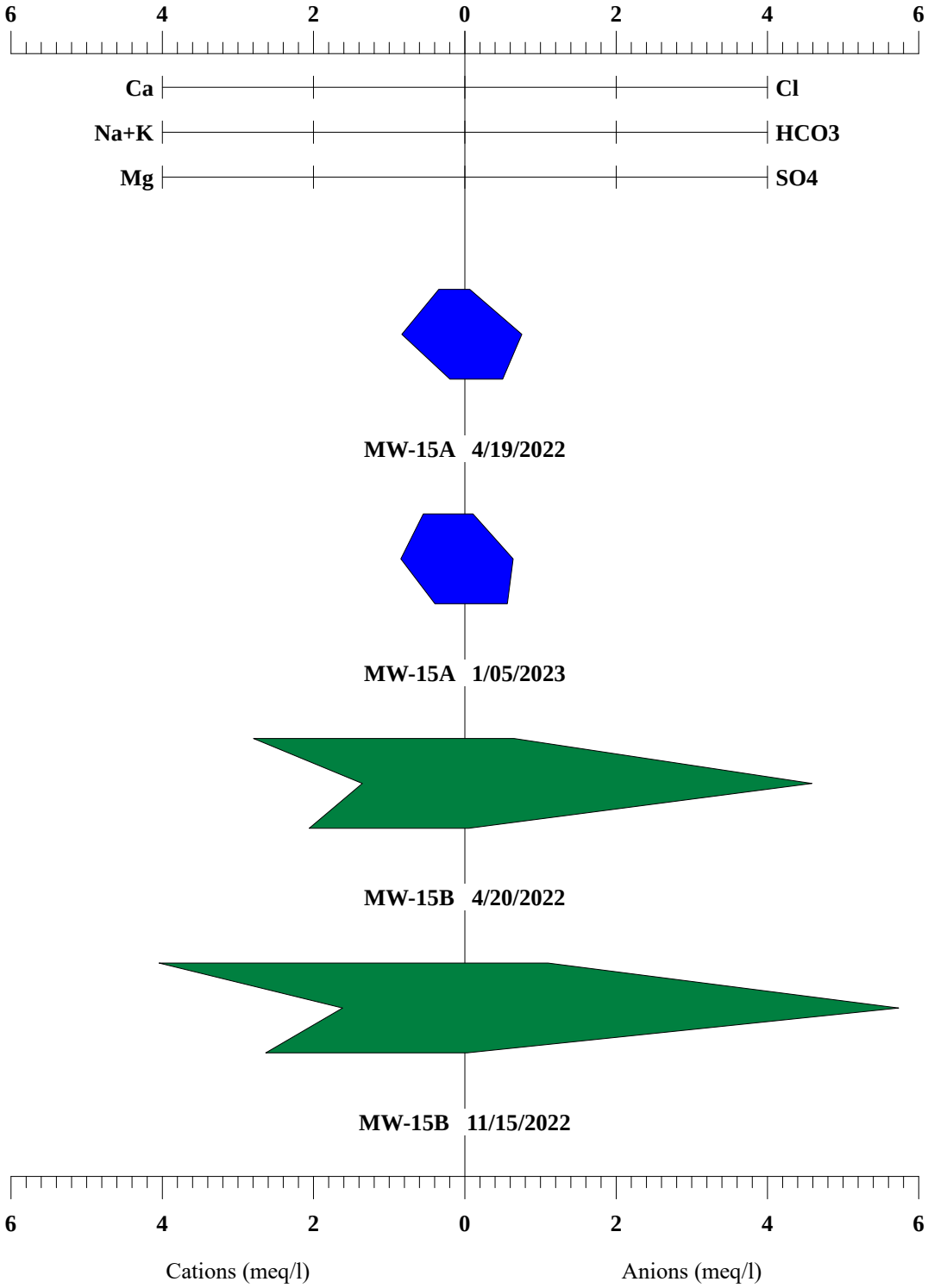


Figure F-19 2022 MW-16A and MW-16B Groundwater

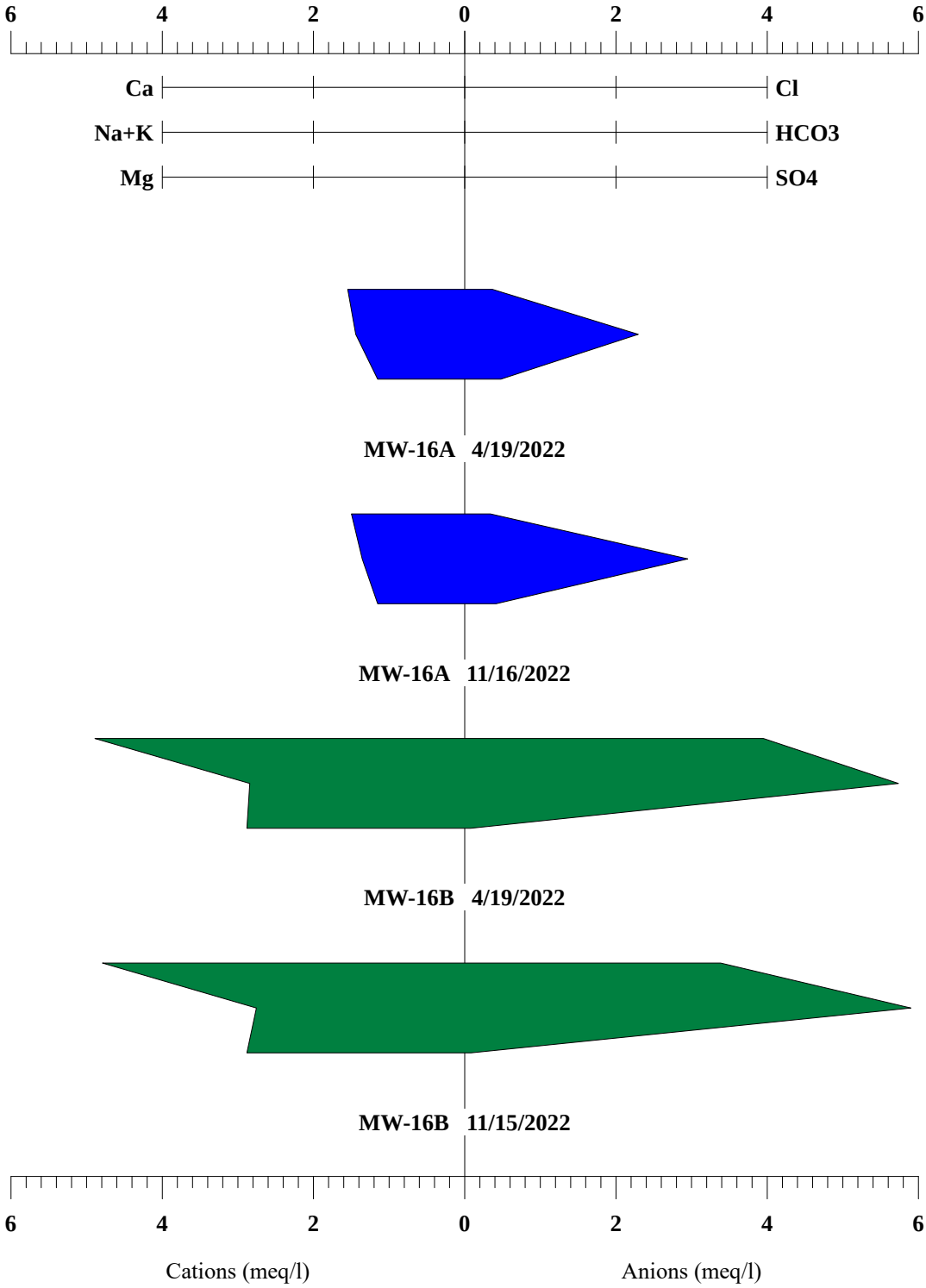


Figure F-20 2022 MW-19A and MW-20A-B Stiff

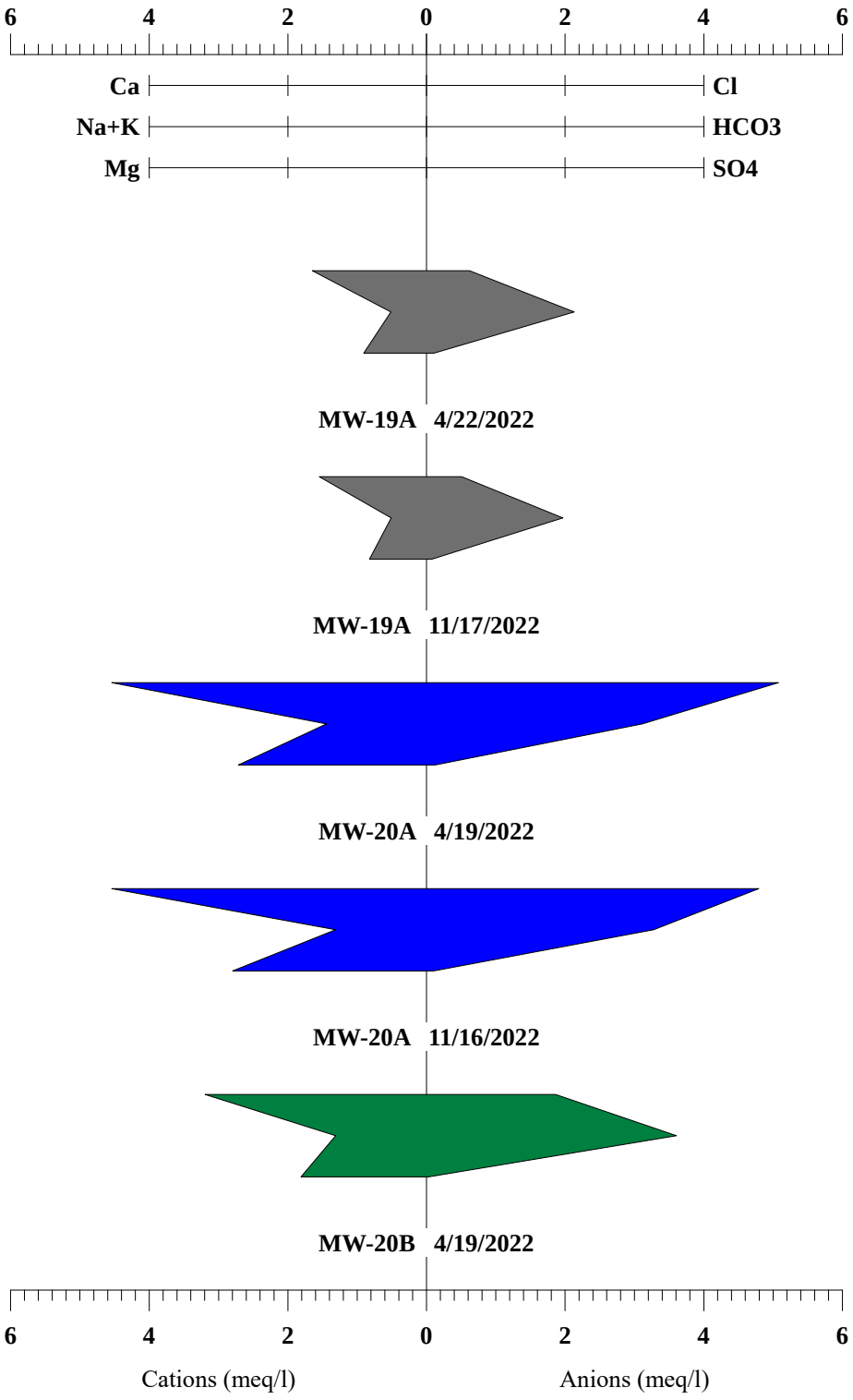


Figure F-21 2022 MW-21A and MW-21B

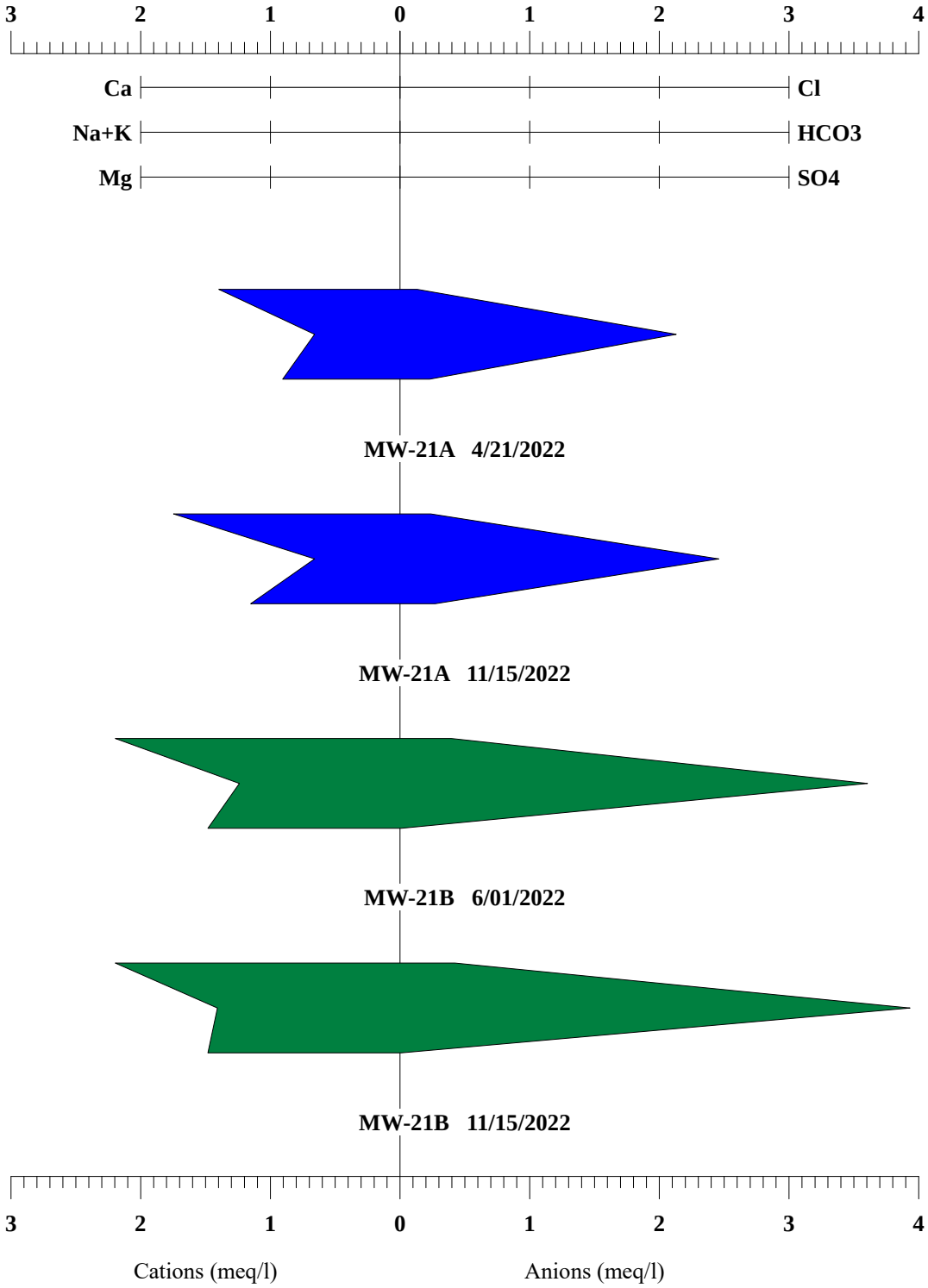
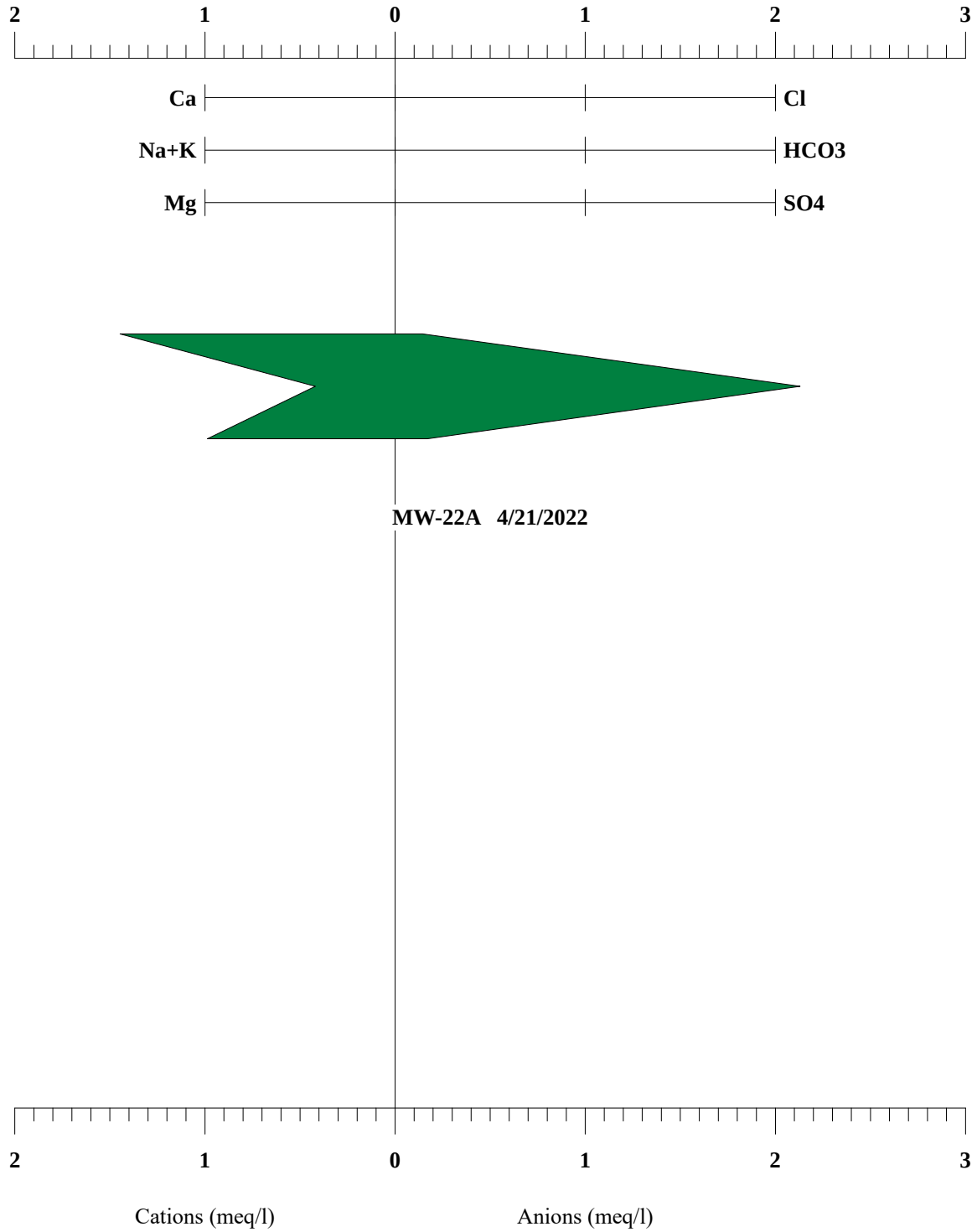
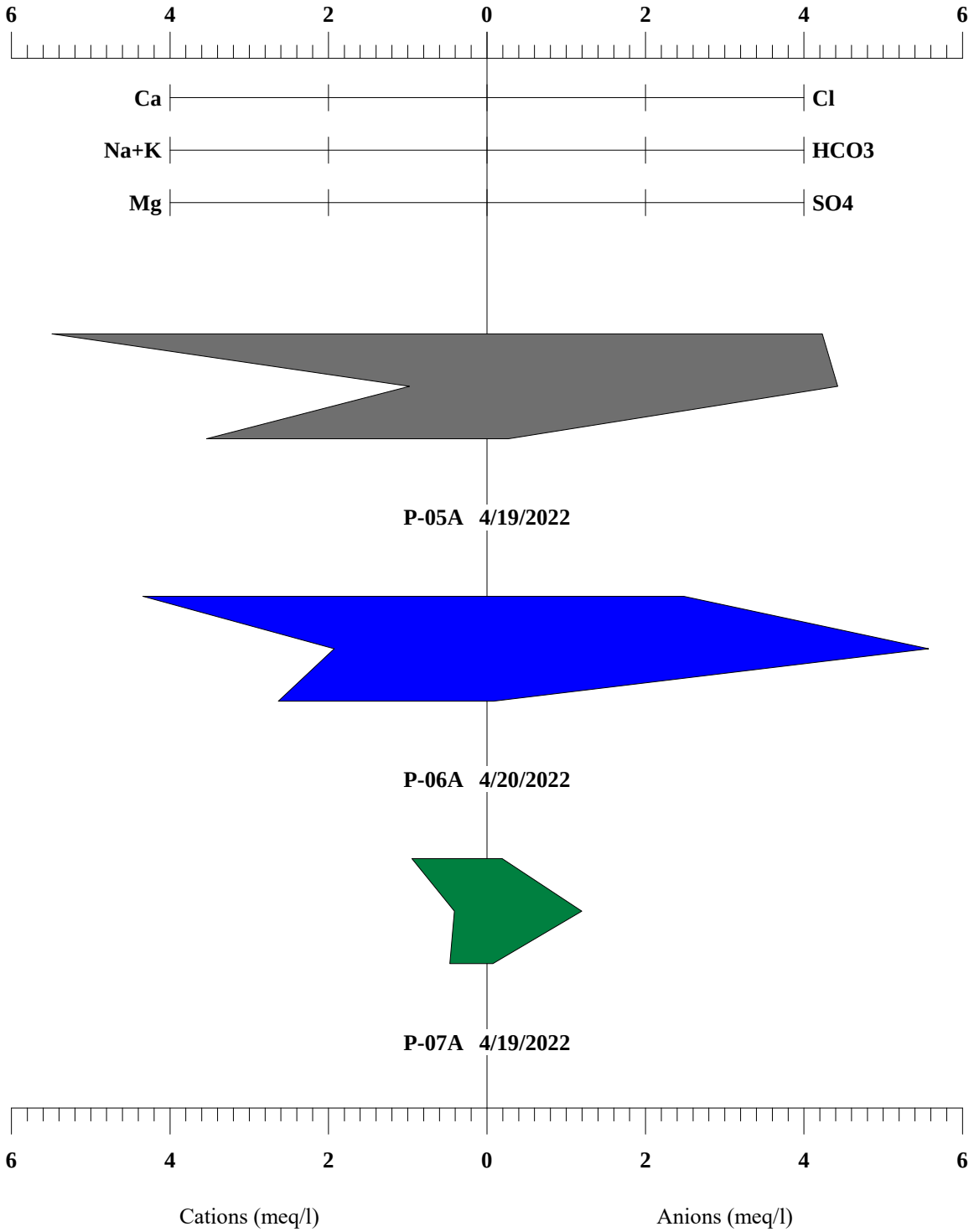


Figure F-22 2022 MW-22A Groundwater



Prepared by: SCS Engineers

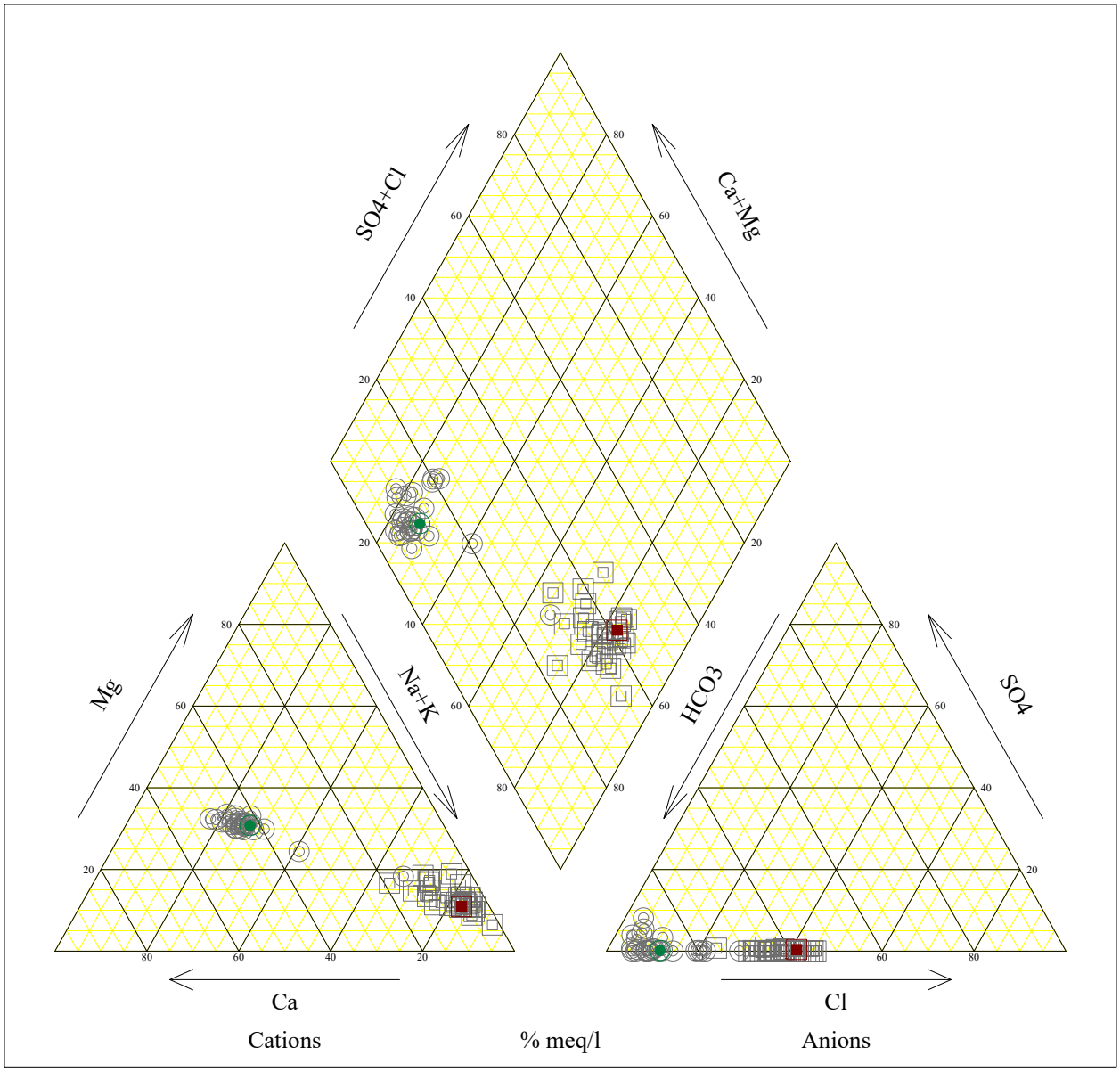
Figure F-23 2022 P-05A, P-06A, and P-07A Groundwater



Trilinear Diagrams

Leachate Management Systems

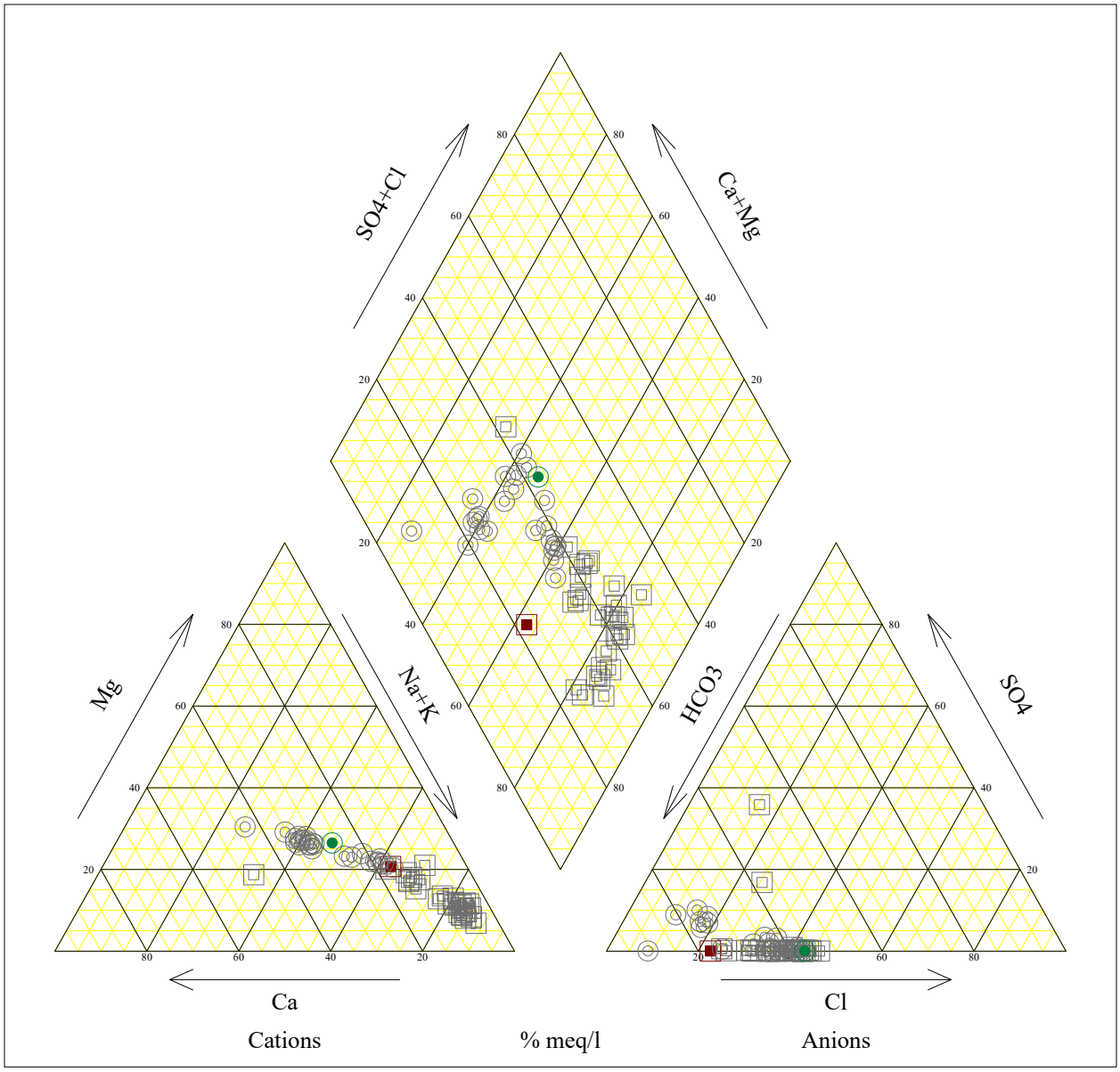
Figure F-24 Sumps 1/5 P and 4/5 S



1/5 P	12/30/1997	1/5 P	4/23/2010	1/5 P	2/08/2018	4/5 S	5/15/2003	4/5 S	5/06/2016
1/5 P	6/21/1999	1/5 P	4/11/2011	1/5 P	5/02/2018	4/5 S	5/26/2005	4/5 S	8/31/2016
1/5 P	11/08/2000	1/5 P	5/01/2012	1/5 P	4/24/2019	4/5 S	5/11/2007	4/5 S	4/18/2017
1/5 P	4/26/2001	1/5 P	4/10/2013	1/5 P	4/22/2020	4/5 S	5/22/2008	4/5 S	9/12/2017
1/5 P	4/15/2002	1/5 P	5/05/2014	1/5 P	4/15/2021	4/5 S	5/08/2009	4/5 S	11/09/2017
1/5 P	5/15/2003	1/5 P	5/08/2015	1/5 P	4/20/2022	4/5 S	4/23/2010	4/5 S	2/08/2018
1/5 P	5/26/2005	1/5 P	5/06/2016	4/5 S	12/30/1997	4/5 S	4/11/2011	4/5 S	5/03/2018
1/5 P	5/15/2006	1/5 P	8/31/2016	4/5 S	6/21/1999	4/5 S	5/01/2012	4/5 S	4/24/2019
1/5 P	5/11/2007	1/5 P	4/18/2017	4/5 S	11/08/2000	4/5 S	4/11/2013	4/5 S	4/22/2020
1/5 P	5/22/2008	1/5 P	9/12/2017	4/5 S	4/26/2001	4/5 S	5/05/2014	4/5 S	4/15/2021
1/5 P	5/08/2009	1/5 P	11/09/2017	4/5 S	4/15/2002	4/5 S	5/08/2015	4/5 S	4/20/2022

Prepared by: SCS Engineers

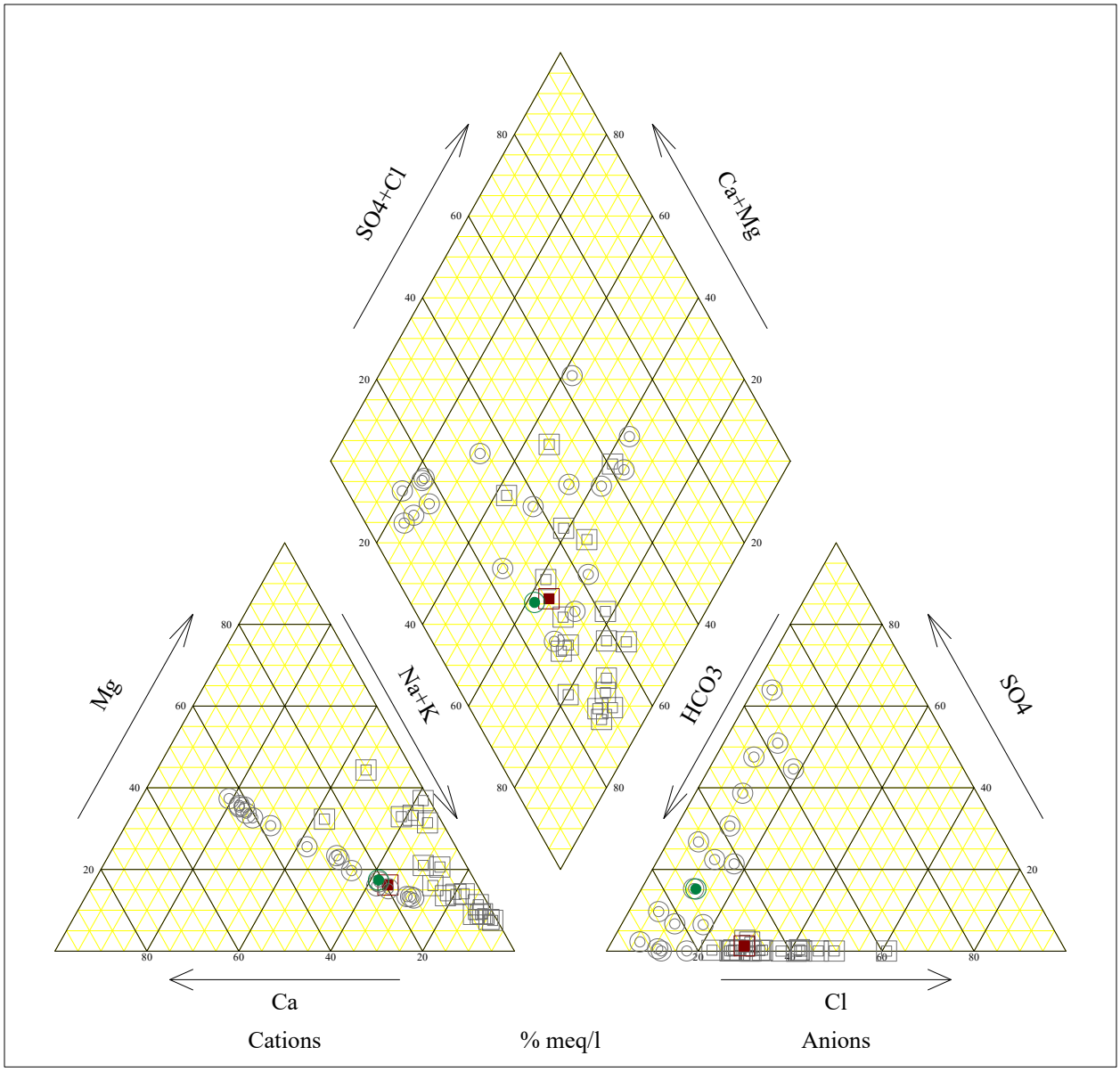
Figure F-25 Sumps 6-7P and 6-7S



6/7 P	12/30/1997	6/7 P	5/08/2009	6/7 P	2/07/2018	6/7 S	5/11/2007	6/7 S	9/12/2017
6/7 P	6/22/1999	6/7 P	4/22/2010	6/7 P	5/01/2018	6/7 S	5/22/2008	6/7 S	11/09/2017
6/7 P	11/07/2000	6/7 P	4/11/2011	6/7 P	4/24/2019	6/7 S	5/08/2009	6/7 S	2/07/2018
6/7 P	4/26/2001	6/7 P	5/01/2012	6/7 P	4/22/2020	6/7 S	4/28/2010	6/7 S	5/01/2018
6/7 P	4/15/2002	6/7 P	4/10/2013	6/7 P	4/15/2021	6/7 S	4/13/2011	6/7 S	4/24/2019
6/7 P	5/15/2003	6/7 P	5/05/2014	6/7 P	4/20/2022	6/7 S	5/01/2012	6/7 S	4/22/2020
6/7 P	4/22/2004	6/7 P	5/08/2015	6/7 S	6/22/1999	6/7 S	4/10/2013	6/7 S	4/15/2021
6/7 P	5/26/2005	6/7 P	4/28/2016	6/7 S	4/15/2002	6/7 S	5/05/2014	6/7 S	4/22/2022
6/7 P	5/12/2006	6/7 P	4/18/2017	6/7 S	5/15/2003	6/7 S	5/08/2015		
6/7 P	5/11/2007	6/7 P	9/12/2017	6/7 S	5/26/2005	6/7 S	4/28/2016		
6/7 P	5/22/2008	6/7 P	11/09/2017	6/7 S	5/12/2006	6/7 S	4/18/2017		

Prepared by: SCS Engineers

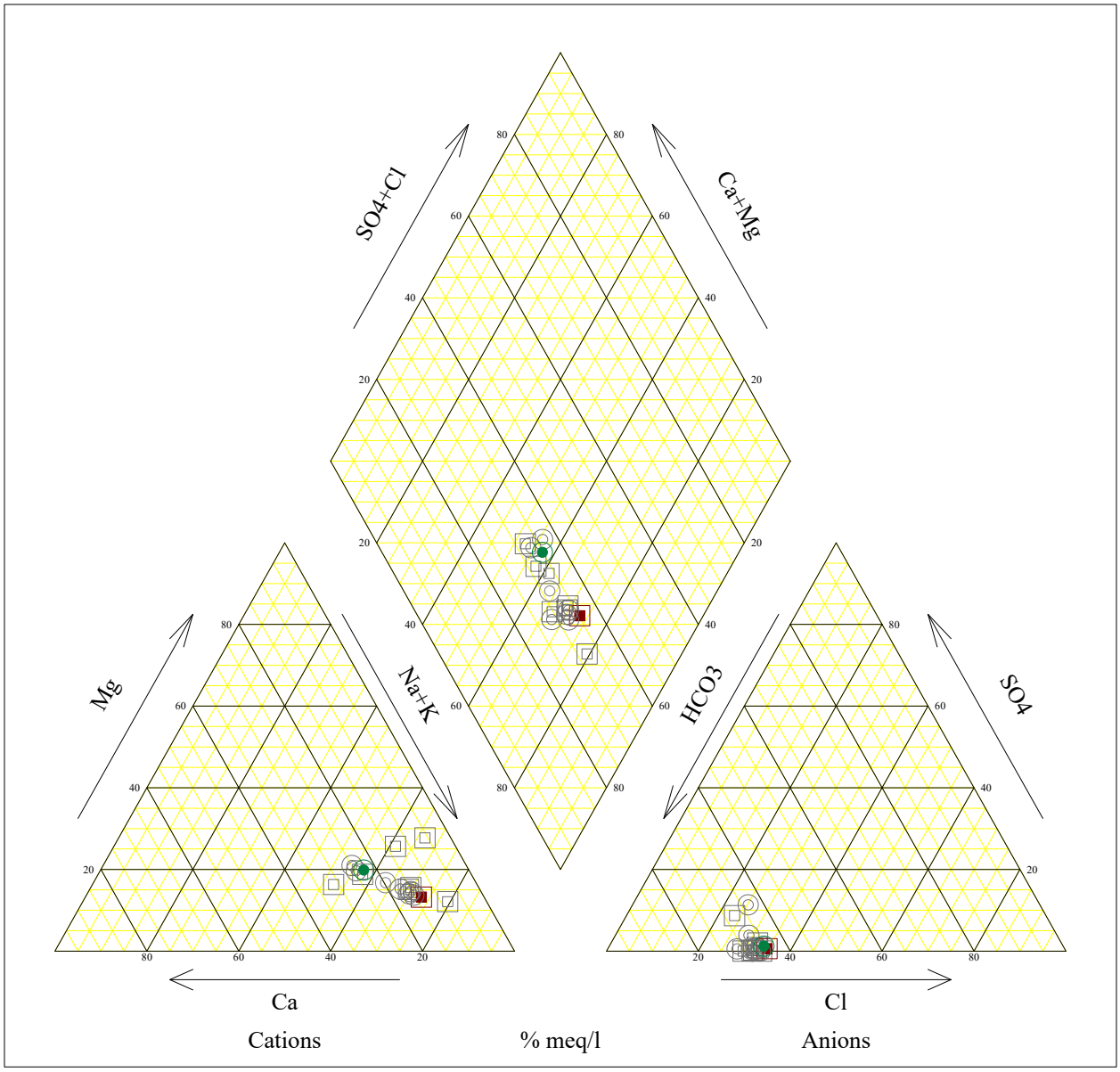
Figure F-26 Sumps 8P and 8S



8P	6/26/2003	8P	5/05/2014	8S	5/12/2006	8S	4/28/2016
8P	5/27/2005	8P	5/08/2015	8S	5/11/2007	8S	4/18/2017
8P	5/12/2006	8P	4/28/2016	8S	5/22/2008	8S	5/03/2018
8P	5/11/2007	8P	4/18/2017	8S	5/08/2009	8S	4/24/2019
8P	5/22/2008	8P	5/02/2018	8S	4/22/2010	8S	4/22/2020
8P	5/08/2009	8P	4/24/2019	8S	4/11/2011	8S	4/15/2021
8P	4/22/2010	8P	4/22/2020	8S	5/01/2012	8S	4/22/2022
8P	4/11/2011	8P	4/15/2021	8S	4/11/2013		
8P	5/01/2012	8P	4/22/2022	8S	5/05/2014		
8P	4/10/2013	8S	6/26/2003	8S	5/08/2015		

Prepared by: SCS Engineers

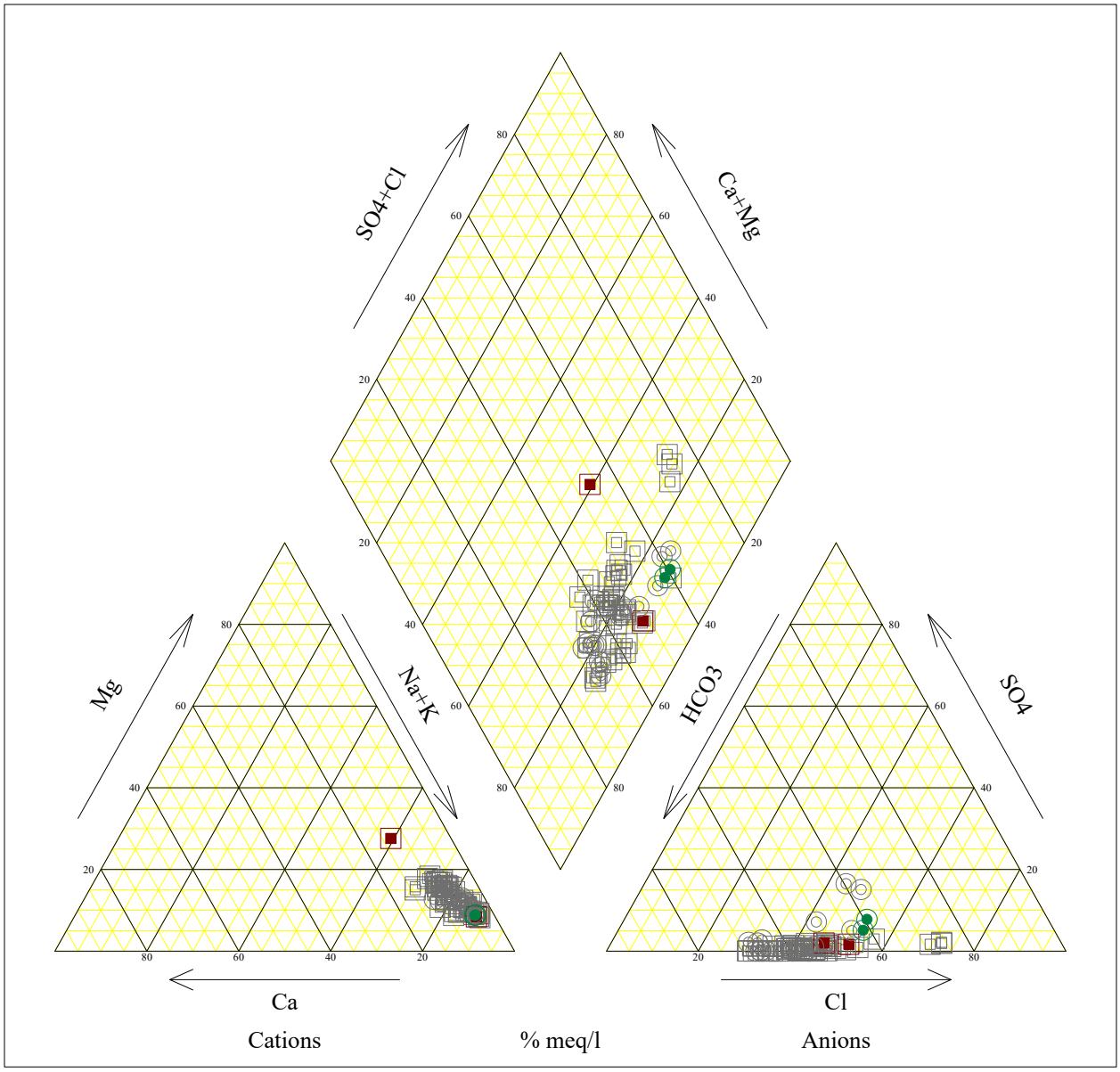
Figure F-27 Sumps 9P and 9S



□	9P	5/08/2015	◎	9S	5/08/2015
□	9P	5/06/2016	◎	9S	5/06/2016
□	9P	4/18/2017	◎	9S	4/18/2017
□	9P	5/02/2018	◎	9S	5/02/2018
□	9P	4/24/2019	◎	9S	4/24/2019
□	9P	4/22/2020	◎	9S	4/22/2020
□	9P	4/15/2021	◎	9S	4/15/2021
■	9P	4/22/2022	●	9S	4/22/2022

Prepared by: SCS Engineers

Figure F-28 Leachate Pond and Leachate Pond LDS



LEACHATE POND	12/06/2001	LEACHATE POND	5/04/2009	LEACHATE POND	11/17/2016	LPOND LDS	5/05/2014
LEACHATE POND	4/15/2002	LEACHATE POND	11/19/2009	LEACHATE POND	4/18/2017	LPOND LDS	11/20/2014
LEACHATE POND	10/09/2002	LEACHATE POND	4/22/2010	LEACHATE POND	11/09/2017	LPOND LDS	5/11/2015
LEACHATE POND	5/14/2003	LEACHATE POND	10/08/2010	LEACHATE POND	5/03/2018	LPOND LDS	11/11/2015
LEACHATE POND	11/18/2003	LEACHATE POND	4/11/2011	LEACHATE POND	11/06/2018	LPOND LDS	4/28/2016
LEACHATE POND	4/22/2004	LEACHATE POND	10/31/2011	LEACHATE POND	4/25/2019	LPOND LDS	11/17/2016
LEACHATE POND	11/11/2004	LEACHATE POND	5/01/2012	LEACHATE POND	11/20/2019	LPOND LDS	4/18/2017
LEACHATE POND	4/01/2005	LEACHATE POND	11/12/2012	LEACHATE POND	4/22/2020	LPOND LDS	11/09/2017
LEACHATE POND	10/27/2005	LEACHATE POND	4/08/2013	LEACHATE POND	11/11/2020	LPOND LDS	5/03/2018
LEACHATE POND	5/08/2006	LEACHATE POND	11/21/2013	LEACHATE POND	4/15/2021	LPOND LDS	4/28/2020
LEACHATE POND	10/18/2006	LEACHATE POND	5/05/2014	LEACHATE POND	11/18/2021	LPOND LDS	11/11/2020
LEACHATE POND	5/07/2007	LEACHATE POND	11/20/2014	LEACHATE POND	4/20/2022	LPOND LDS	4/15/2021
LEACHATE POND	11/06/2007	LEACHATE POND	5/11/2015	LEACHATE POND	11/17/2022	LPOND LDS	11/18/2021
LEACHATE POND	5/22/2008	LEACHATE POND	11/11/2015	LPOND LDS	4/11/2013	LPOND LDS	4/20/2022
LEACHATE POND	11/10/2008	LEACHATE POND	4/28/2016	LPOND LDS	11/21/2013	LPOND LDS	11/17/2022

Prepared by: SCS Engineers

Stiff Plots

Leachate Management Systems

Figure F-29 2022 Leachate and LDS Sump Samples

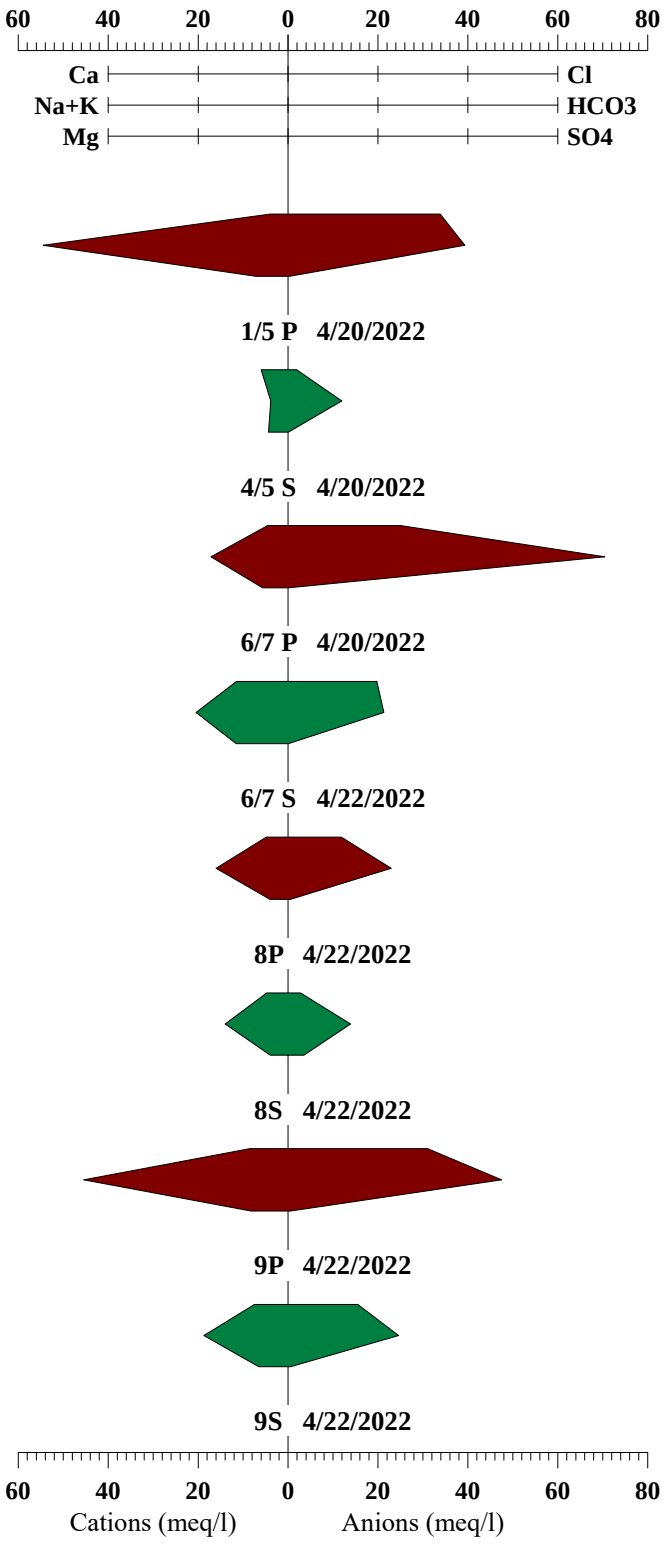
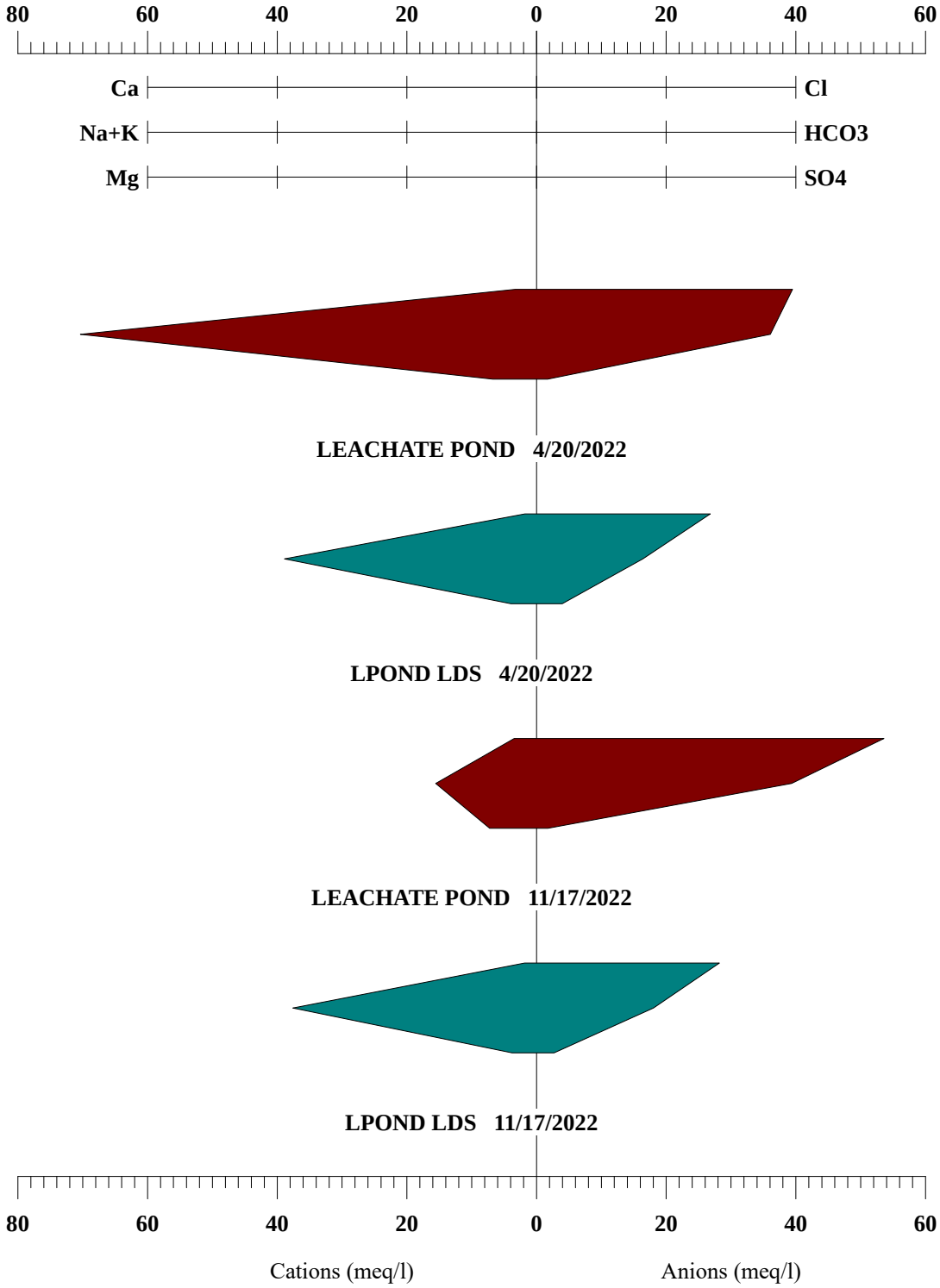


Figure F-30 2022 Leachate Pond and Leachate Pond LDS Samples



APPENDIX G

2022 Annual Geotechnical Monitoring Report, Riverbend Landfill, McMinnville, Oregon

(on CD)

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14 April 2023

Ms. Melody A. Adams
PNW/BC Area Project Manager
WM
7227 NE 55th Avenue
Portland, Oregon 97218

Subject: 2022 Annual Geotechnical Monitoring Report

Riverbend Landfill

McMinnville, Oregon

Dear Ms. Adams:

Geosyntec is pleased to present this summary of the 2022 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 2015). This report presents a summary of the monitoring instrumentation, a summary and assessment of the geotechnical monitoring measurements in 2022, and recommendations for future monitoring.

The instrumentation readings were collected by Riverbend Landfill Co. personnel throughout 2022. The interpretation of the readings and this letter report were prepared by Zachary Tanguay (Geosyntec). The report was reviewed by Nicholas Yafrate (Geosyntec) in accordance with the quality assurance policies of Geosyntec.

SUMMARY OF MSE BERM CONSTRUCTION AND LANDFILL ACTIVITY

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.

Landfill activity in 2022 included construction of final cover within the instrument influence zones in July through mid-November. Waste placement activities were not performed within the instrument influence zones in 2022. The maximum elevation within the influence zone is

[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.

approximately 270 ft and did not change between the two most recent topographical surveys completed on 27 January 2022 and on 29 January 2023.

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 landfill 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 2022 MONITORING MEASUREMENTS

The geotechnical instrument measurement frequency in 2022 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*. Measurements were obtained once every two weeks during construction activities, and quarterly during other times of the year. Plots of measurements obtained in 2022 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 2022 between the final readings provided in the 2021 annual report (obtained on 5 January 2022) and the final readings obtained in 2022 on 16 December 2022. The cumulative displacement plots show the sum of the incremental displacements between the initial reading, immediately after installation, and the 16 December 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 was 0.012 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. 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 2022.

Displacement rates increased at SI-1A, SI-2A, and SI-2B during final cover construction. However, displacement rates in 2022 were significantly less than those observed during periods of waste placement (e.g., in 2016). Geosyntec compared the incremental displacement rates in 2022 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 2022 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 0.06% in SI-2A (B-direction) at an elevation of 117 ft to 1.78% in SI-1A (A-direction) at an elevation of 124 ft. The calculated maximum change in strain in 2022 ranged from 0.00% in SI-1B (A-Direction) at an elevation of 111 ft and SI-2B (B-direction) at an elevation of 160 ft to 0.05%, which was measured at SI-1A (A-direction) at an elevation of 124 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 2022.

Throughout the monitoring period, minor instances of measurement fluctuation were observed. 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 0.8inch of upward displacement at EX-1A to 6.5 inches of downward displacement at EX-1B. The magnitude of vertical displacements in 2022 ranged from 0.2 inches of upward displacement at EX-1A to 0.5 inches 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 at a critical surface (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 2022 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 2022 indicated minor settlement and small changes in pore pressure.

The results of monitoring performed in 2022 do not indicate stability concerns. Geosyntec recommends that monitoring continue according to the recommendations of the SMP and the April 2019 memorandum. If landfill activities resume within the instrument influence zones, Geosyntec should be notified, and activity monitoring should be performed according to the above-referenced documents.

Sincerely,

Zachary Tanguay, P.E.
Licensed in ME
Engineer

Nicholas Yafrate, P.E.
Licensed in AL, GA, LA, MA, ME, MS, NC, NH, OR, PA
Principal Engineer

EXPIRES: 30 June 2024

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 2021 (in.)	Incremental Displacement from Time of Installation through December 2022 (in.)	Incremental Displacement in 2022[2] (in.)	Total Strain from Time of Installation through December 2022[3] (%)	Change in Strain in 2022[3] (%)	Geotechnical Layer (Stratum)
SI-1A: A-Direction	149.9	124	0.414	0.426	0.012	1.78	0.05	Grey Clay
SI-1A: B-Direction	149.9	76	0.024	0.021	-0.003	0.09	0.01	Sand
SI-1B: A-Direction	179.2	111	0.376	0.377	0.001	1.57	0.00	Grey Clay
SI-1B: B-Direction	179.2	167	0.054	0.056	0.002	0.23	0.01	Engineered Fill
SI-2A: A-Direction	138.5	117	0.066	0.074	0.008	0.31	0.03	Brown Clay
SI-2A: B-Direction	138.5	117	0.017	0.015	-0.002	0.06	0.01	Brown Clay
SI-2B: A-Direction	171.9	122	0.068	0.072	0.004	0.30	0.02	Brown Clay
SI-2B: B-Direction	171.9	160	0.080	0.081	0.001	0.34	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) 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

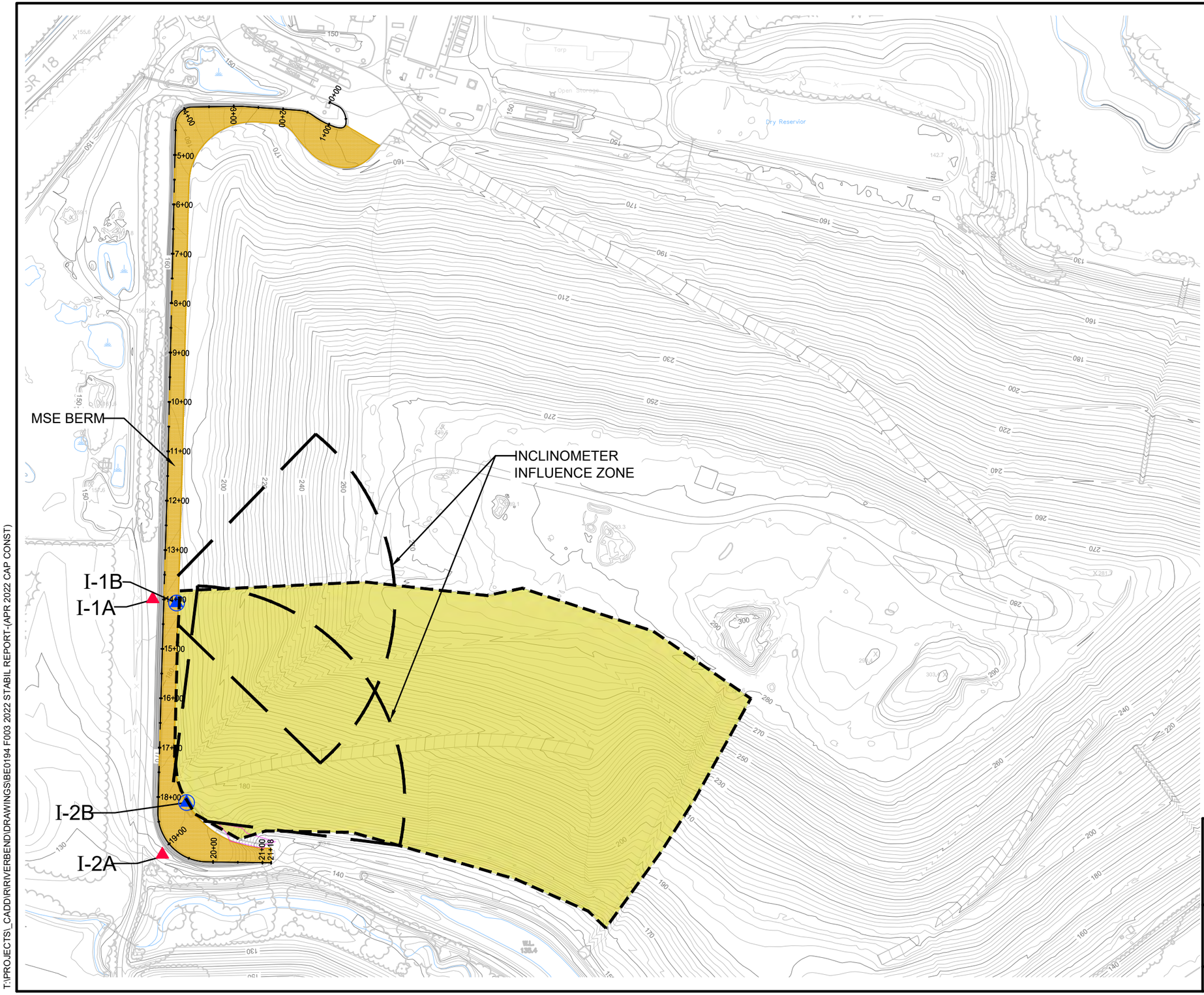
Extensometer	Initial Ground Surface Elevation (ft) [2]	Sensing Ring (No.)	Elevation of Ring Installation (ft)	Elevation as of December 2021 (ft)	Elevation as of December 2022 (ft)[3]	Maximum Vertical Displacement Since Installation (in)[1]	Maximum Vertical Displacement in 2022 (in)
EX-1A	149.9	3	75.14	75.19	75.21	-0.8	-0.2
EX-1B	179.2	14	182.28	181.74	181.74	6.5	0.0
EX-2A	138.5	8	139.31	139.19	139.19	1.4	0.0
EX-2B	171.9	10	162.08	161.87	161.83	3.0	0.5

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 calculated maximum vertical displacement in 2022 represents the displacement observed from early January 2022 to December 2022.



N

0 200' 400'

SCALE IN FEET

LEGEND

- EXISTING GRADE 10 FT CONTOUR (230)
- EXISTING GRADE 2 FT CONTOUR
- INCLINOMETER AND EXTENSOMETER
- INCLINOMETER AND EXTENSOMETER AND PIEZOMETER
- APPROXIMATE LIMIT OF 2022 CAP CONSTRUCTION
- BUILDING / STRUCTURE
- SURFACE WATER

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 FROM A FIELD SURVEY PERFORMED 29 JANUARY 2023 AND PROVIDED TO GEOSYNTEC ON 06 MARCH 2023. AS THE SITE IS AN ACTIVE LANDFILL, TOPOGRAPHY MAY HAVE CHANGED SINCE THE SURVEY.

2022 GEOTECHNICAL MONITORING REPORT
MONITORING INSTRUMENT LOCATIONS AND LANDFILL ACTIVITY
RIVERBEND LANDFILL
MCMINNVILLE, OREGON

Geosyntec consultants

Acton, MA | APRIL 2023

Figure: 1

T:\PROJECTS_CADD\RIVERBEND\DRAWINGS\BE0194 F003 2022 STABIL REPORT-(APR 2022 CAP CONST)

ATTACHMENT A
STABILITY MONITORING PLOTS

Geosyntec consultants

WASTE MANAGEMENT

Summary of Geotechnical Monitoring Measurements
2022
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
9-Nov-2021	Reference Reading	9-Nov-2021	Reference Reading	9-Nov-2021	Reference Reading	9-Nov-2021	Reference Reading
5-Jan-2022	Activity Monitoring	5-Jan-2022	Post Activity Monitoring	5-Jan-2022	Post Activity Monitoring	5-Jan-2022	Post Activity Monitoring
14-Apr-2022	Activity Monitoring	14-Apr-2022	Post Activity Monitoring	14-Apr-2022	Post Activity Monitoring	14-Apr-2022	Post Activity Monitoring
24-May-2022	Activity Monitoring	24-May-2022	Activity Monitoring	24-May-2022	Activity Monitoring	24-May-2022	Activity Monitoring
31-May-2022	Activity Monitoring	31-May-2022	Activity Monitoring	31-May-2022	Activity Monitoring	31-May-2022	Activity Monitoring
7-Jun-2022	Activity Monitoring	7-Jun-2022	Activity Monitoring	7-Jun-2022	Activity Monitoring	7-Jun-2022	Activity Monitoring
22-Jul-2022	Activity Monitoring	22-Jul-2022	Activity Monitoring	22-Jul-2022	Activity Monitoring	22-Jul-2022	Activity Monitoring
5-Aug-2022	Activity Monitoring	5-Aug-2022	Activity Monitoring	5-Aug-2022	Activity Monitoring	5-Aug-2022	Activity Monitoring
19-Aug-2022	Activity Monitoring	19-Aug-2022	Activity Monitoring	19-Aug-2022	Activity Monitoring	19-Aug-2022	Activity Monitoring
26-Aug-2022	Activity Monitoring	26-Aug-2022	Activity Monitoring	26-Aug-2022	Activity Monitoring	26-Aug-2022	Activity Monitoring
9-Sep-2022	Activity Monitoring	9-Sep-2022	Activity Monitoring	9-Sep-2022	Activity Monitoring	9-Sep-2022	Activity Monitoring
30-Sep-2022	Activity Monitoring	30-Sep-2022	Activity Monitoring	30-Sep-2022	Activity Monitoring	30-Sep-2022	Activity Monitoring
10-Oct-2022	Activity Monitoring	10-Oct-2022	Activity Monitoring	10-Oct-2022	Note 5	10-Oct-2022	Activity Monitoring
1-Nov-2022	Activity Monitoring	1-Nov-2022	Activity Monitoring	1-Nov-2022	Note 5	1-Nov-2022	Activity Monitoring
18-Nov-2022	Activity Monitoring	18-Nov-2022	Activity Monitoring	18-Nov-2022	Activity Monitoring	18-Nov-2022	Activity Monitoring
2-Dec-2022	Post Activity Monitoring	2-Dec-2022	Post Activity Monitoring	2-Dec-2022	Post Activity Monitoring	2-Dec-2022	Post Activity Monitoring
16-Dec-2022	Post Activity Monitoring	16-Dec-2022	Post Activity Monitoring	16-Dec-2022	Post Activity Monitoring	16-Dec-2022	Post Activity Monitoring

Notes:

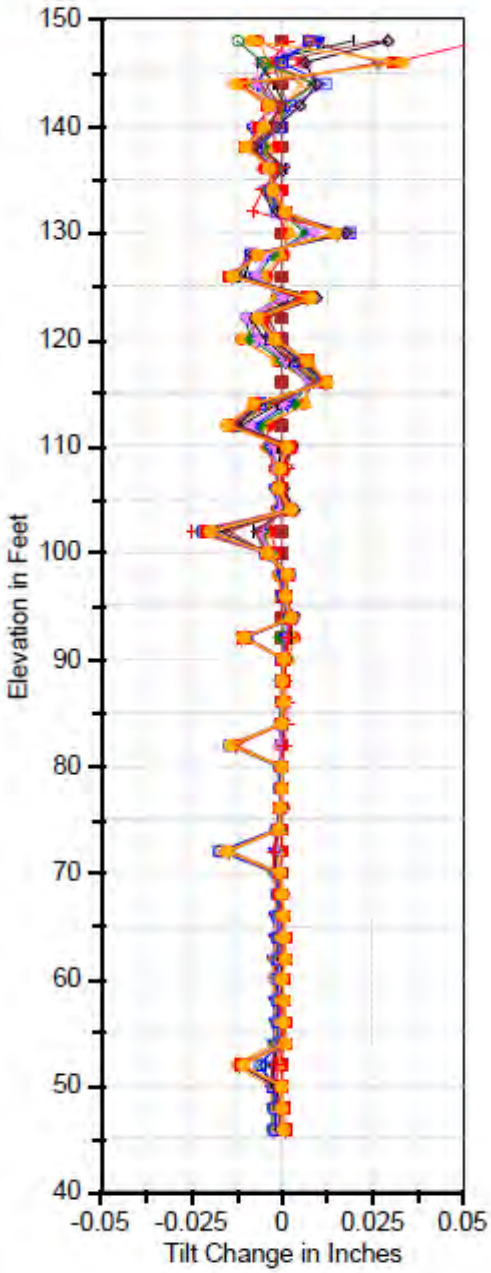
1. Incremental (Tilt) and cumulative (Profile) displacement plots are presented on the following pages. Incremental tilt readings are calculated from the reference reading at each discrete measurement depth. The reference reading is defined as the most recent reading of the previous reporting period. 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. Measurerments are not presented due to instrument measurement fluctuation.

RIVERBEND LANDFILL

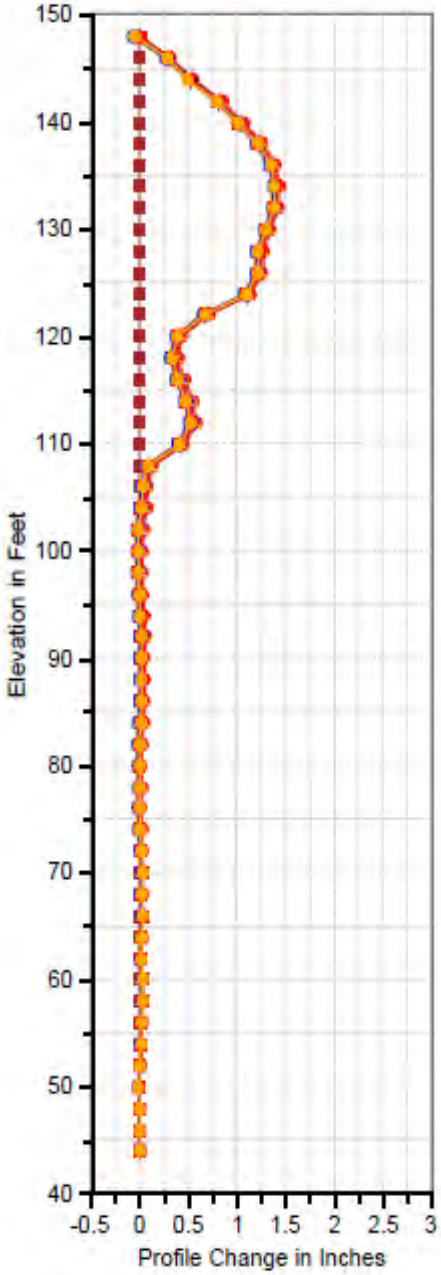
INCLINOMETER SI-1A

Riverbend Landfill
Inclinometer Measurements

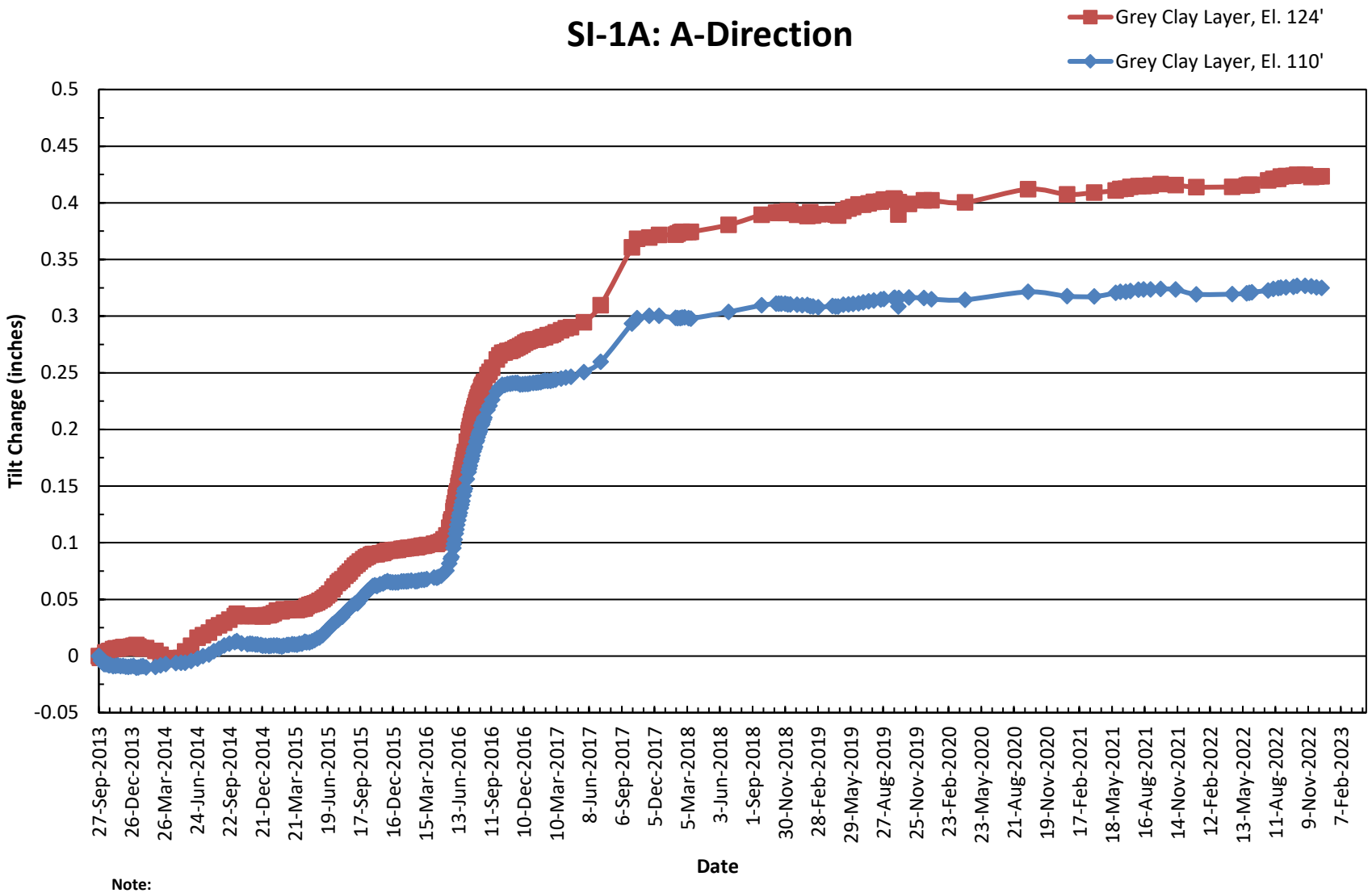
I-1A:A-Direction Incremental Tilt



I-1A:A-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1A: A-Direction

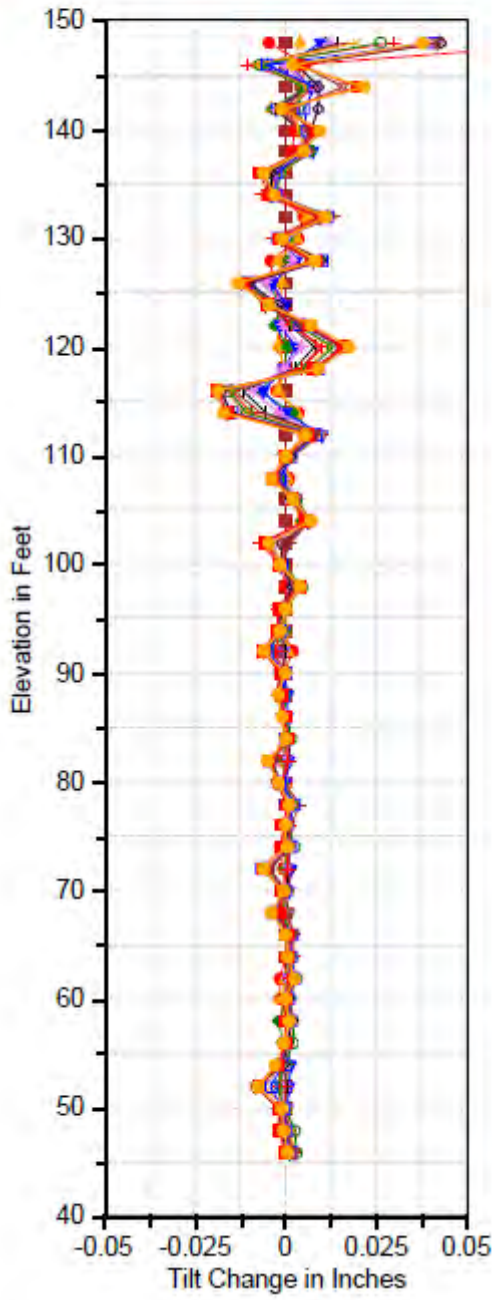


Note:

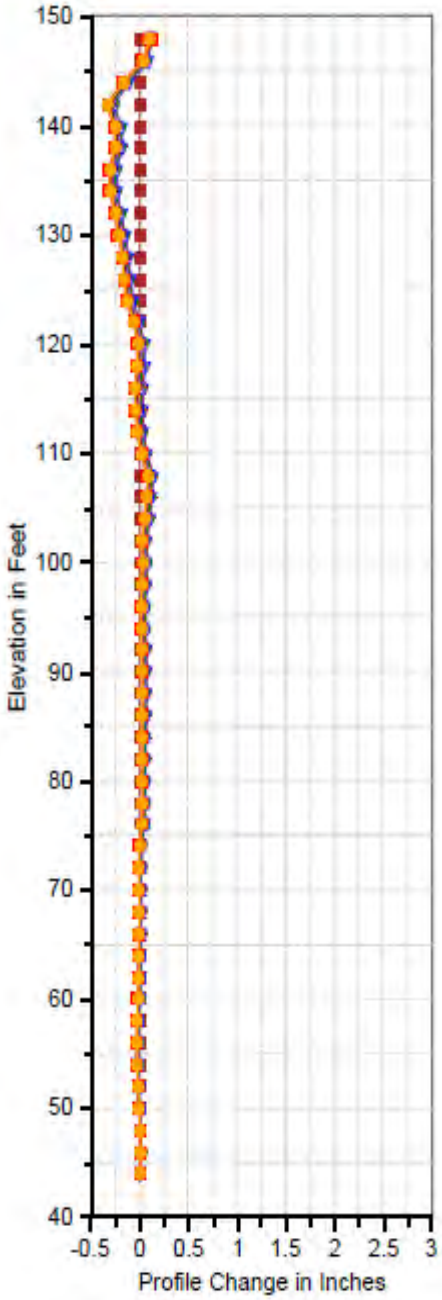
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements

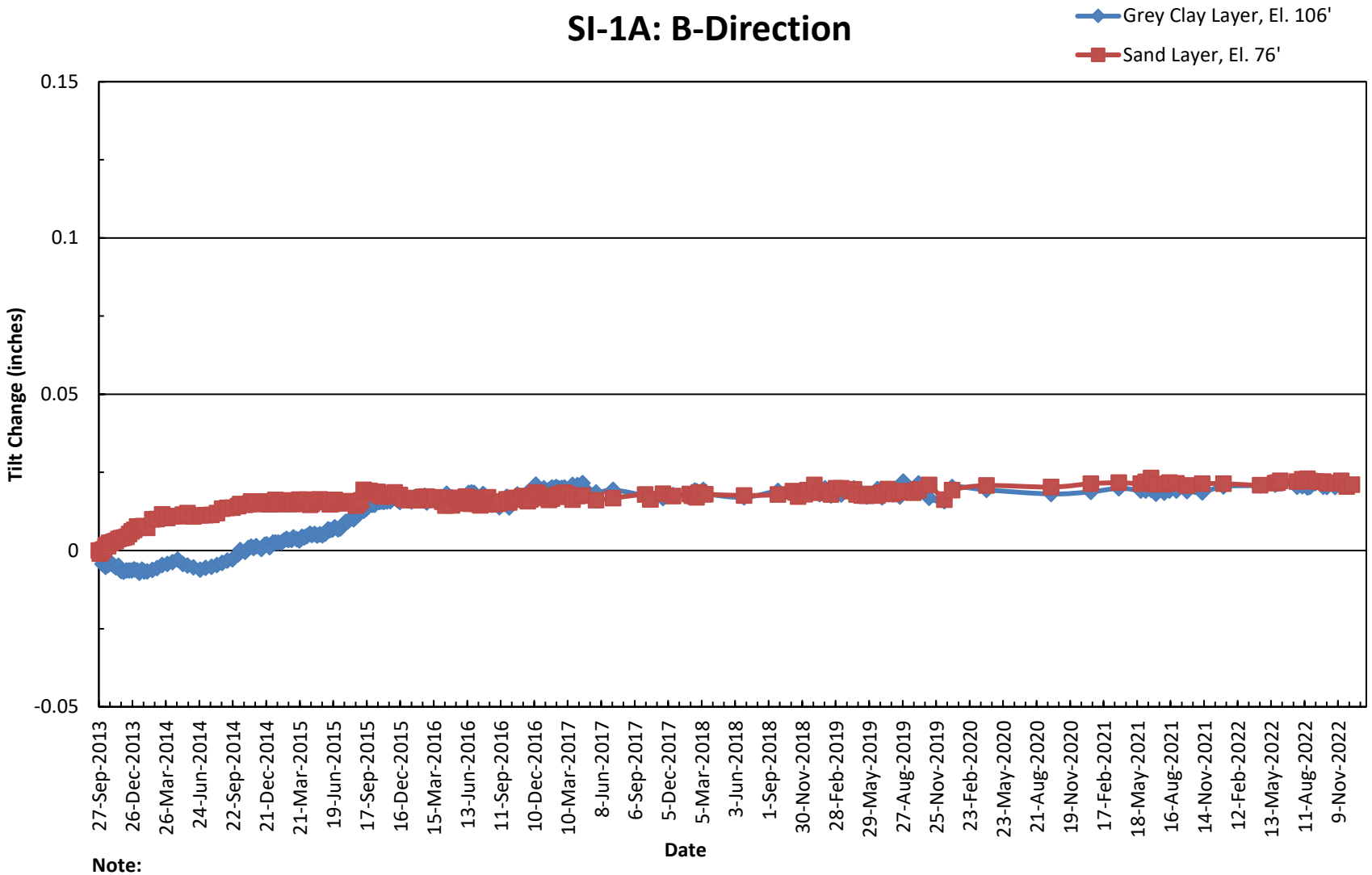
I-1A:B-Direction Incremental Tilt



I-1A:B-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1A: B-Direction

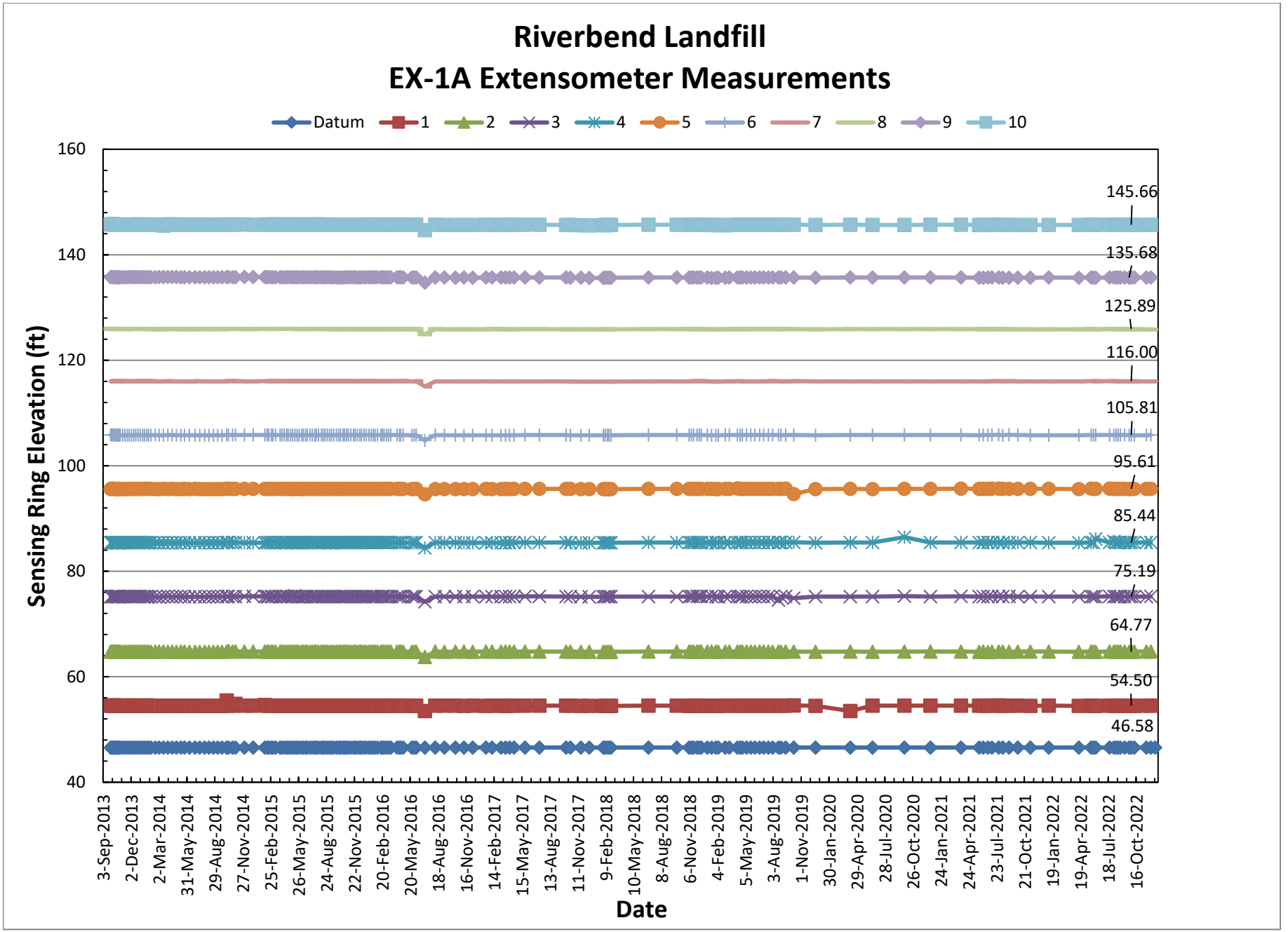


Note:

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

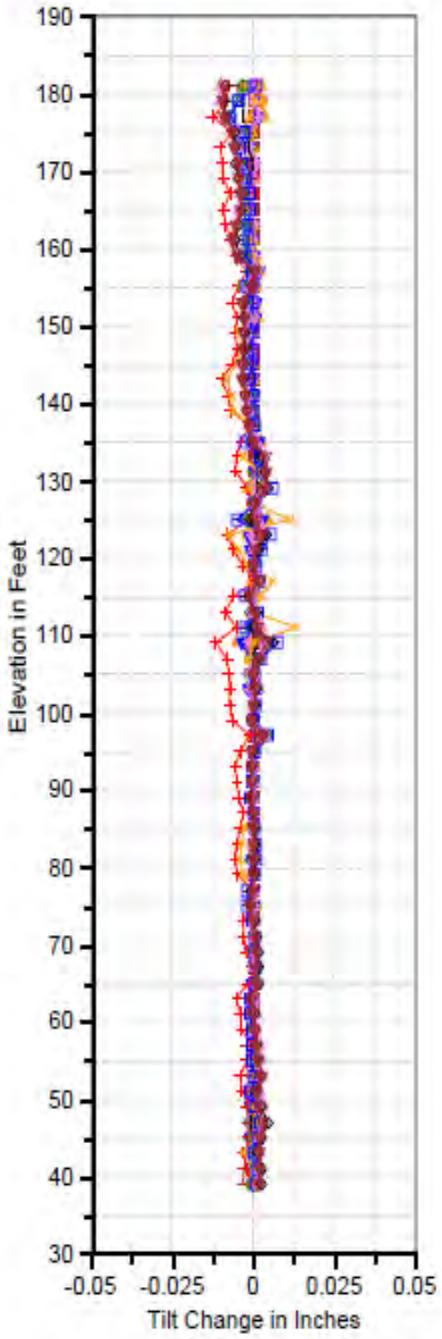

Riverbend Landfill
EX-1A Extensometer Measurements
Datum
1
2
3
4
5
6
7
8
9
10
Sensing Ring Elevation (ft)
160
140
120
100
80
60
40
145.66
135.68
125.89
116.00
105.81
95.61
85.44
75.19
64.77
54.50
46.58
3-Sep-2013
2-Dec-2013
2-Mar-2014
31-May-2014
29-Aug-2014
27-Nov-2014
25-Feb-2015
26-May-2015
24-Aug-2015
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
19-Apr-2022
18-Jul-2022
16-Oct-2022
Date

RIVERBEND LANDFILL

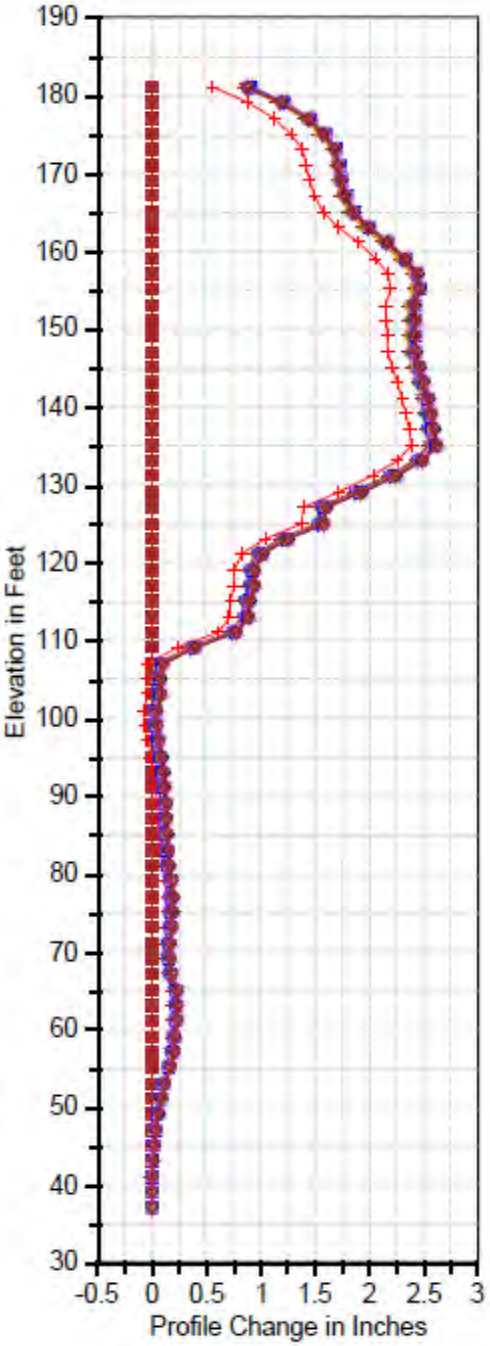
INCLINOMETER SI-1B

Riverbend Landfill
Inclinometer Measurements

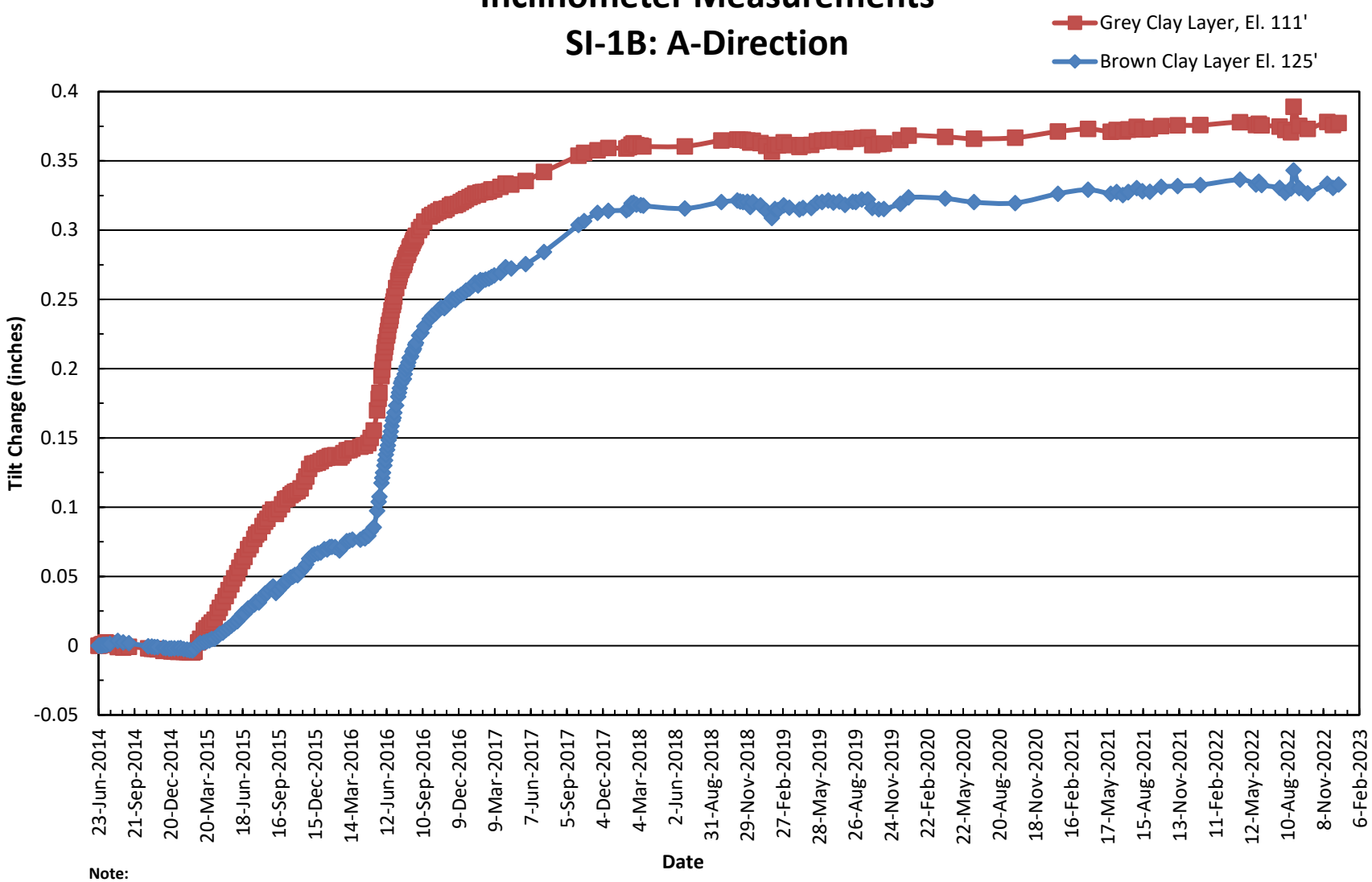
I-1B:A-Direction Incremental Tilt



I-1B:A-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1B: A-Direction

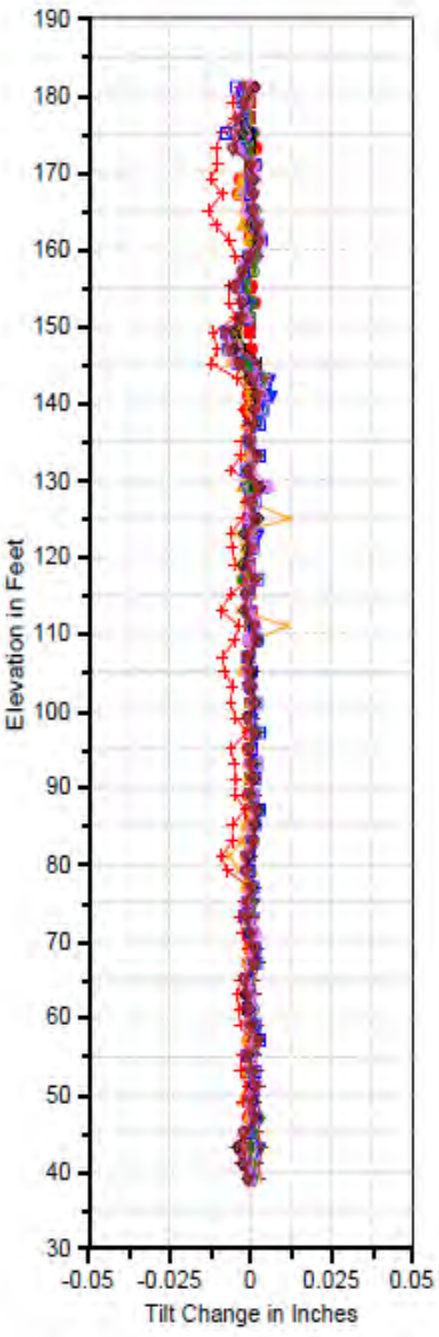


Note:

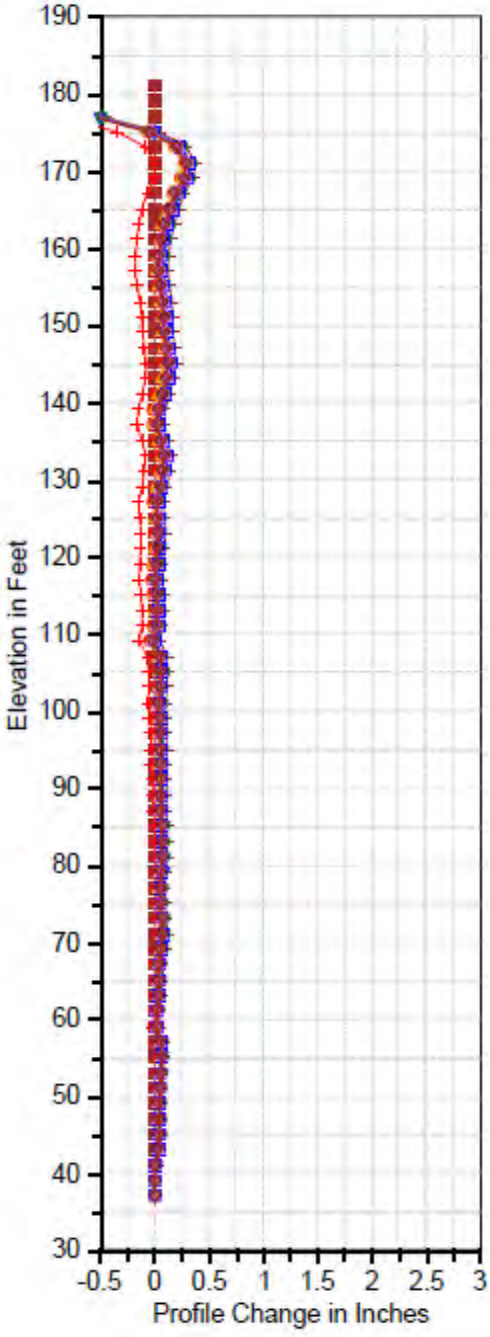
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements

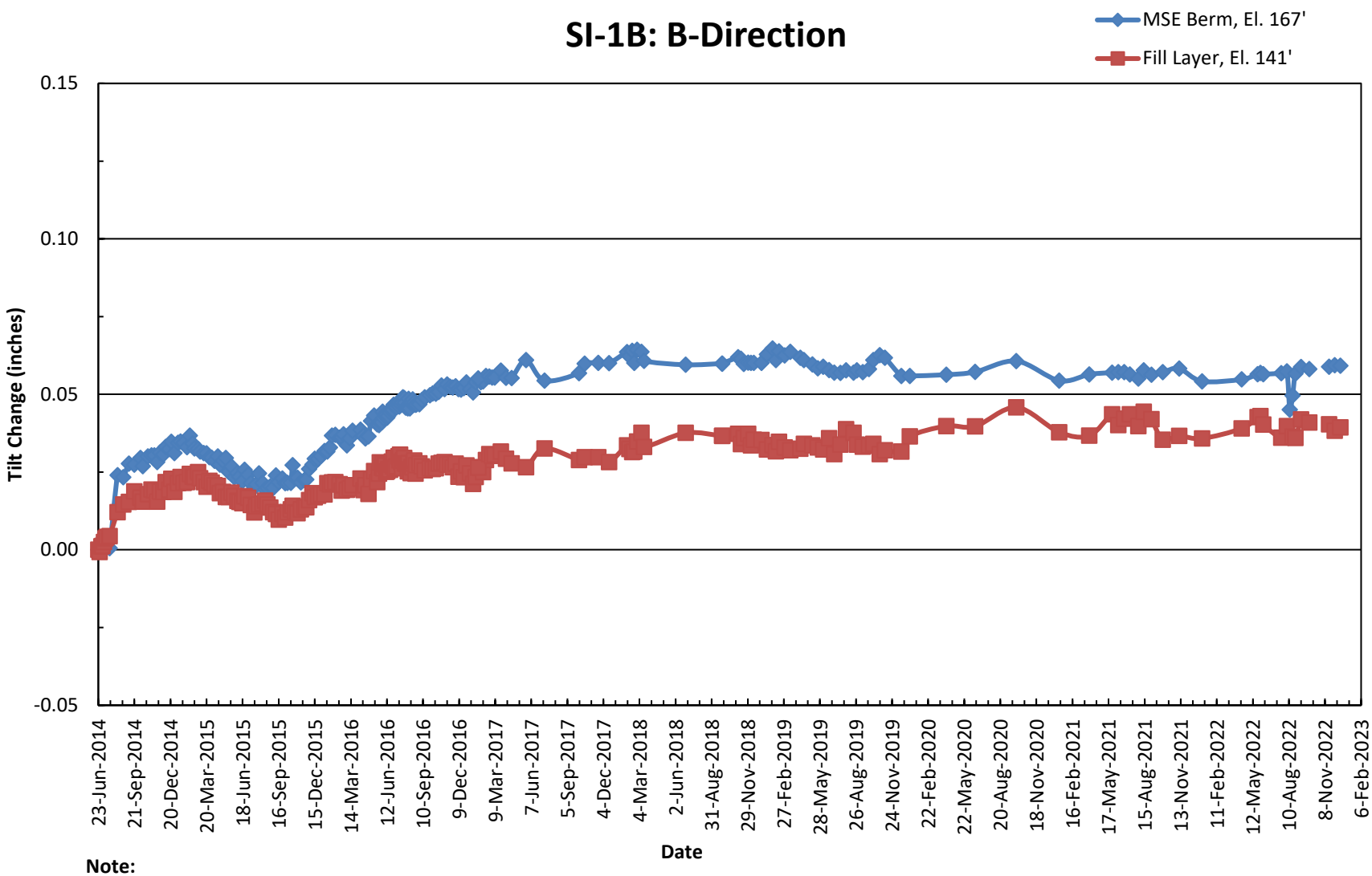
I-1B:B-Direction Incremental Tilt



I-1B:B-Direction Cumulative Profile



Riverbend Landfill
Inclinometer Measurements
SI-1B: B-Direction



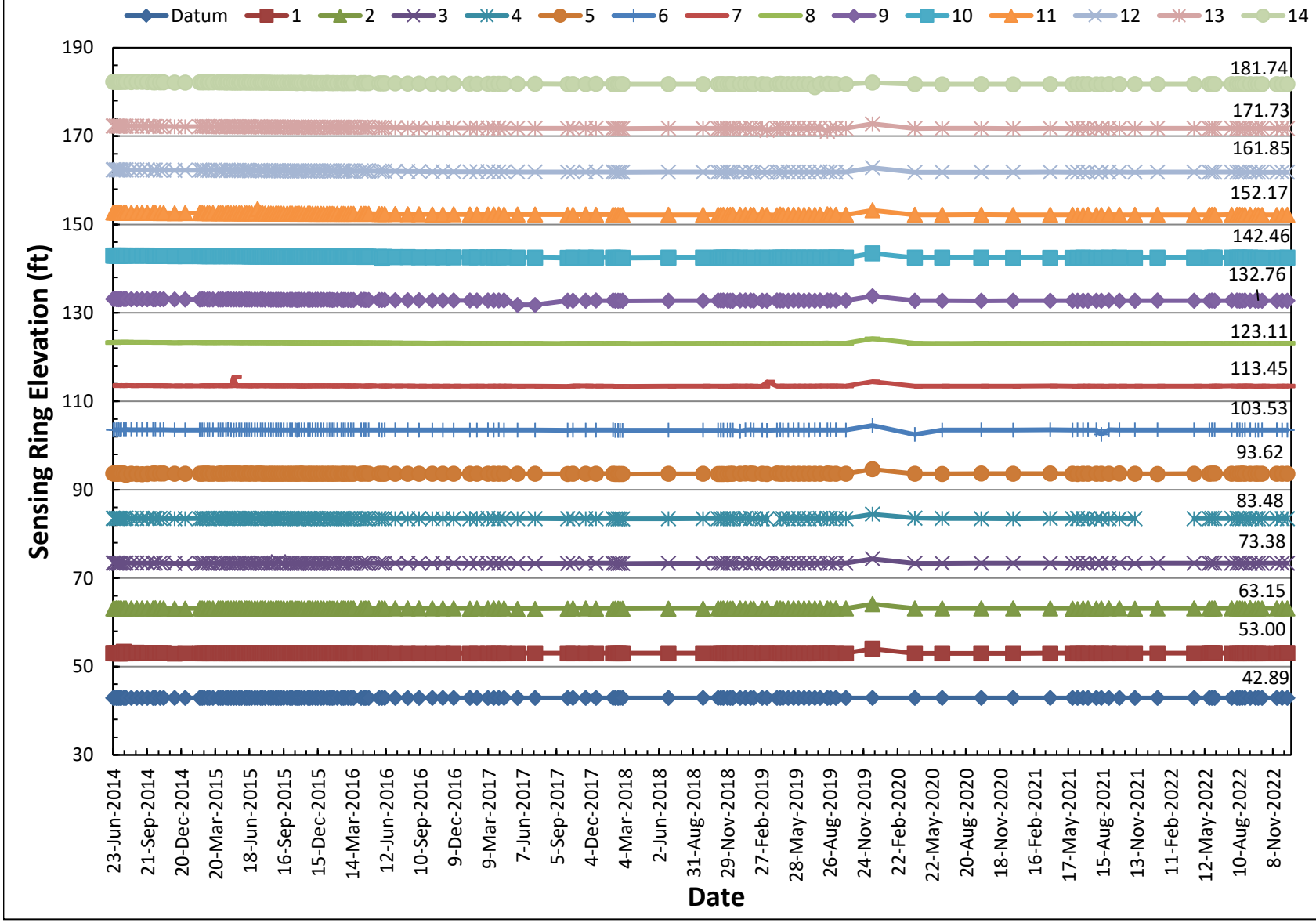
Note:

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

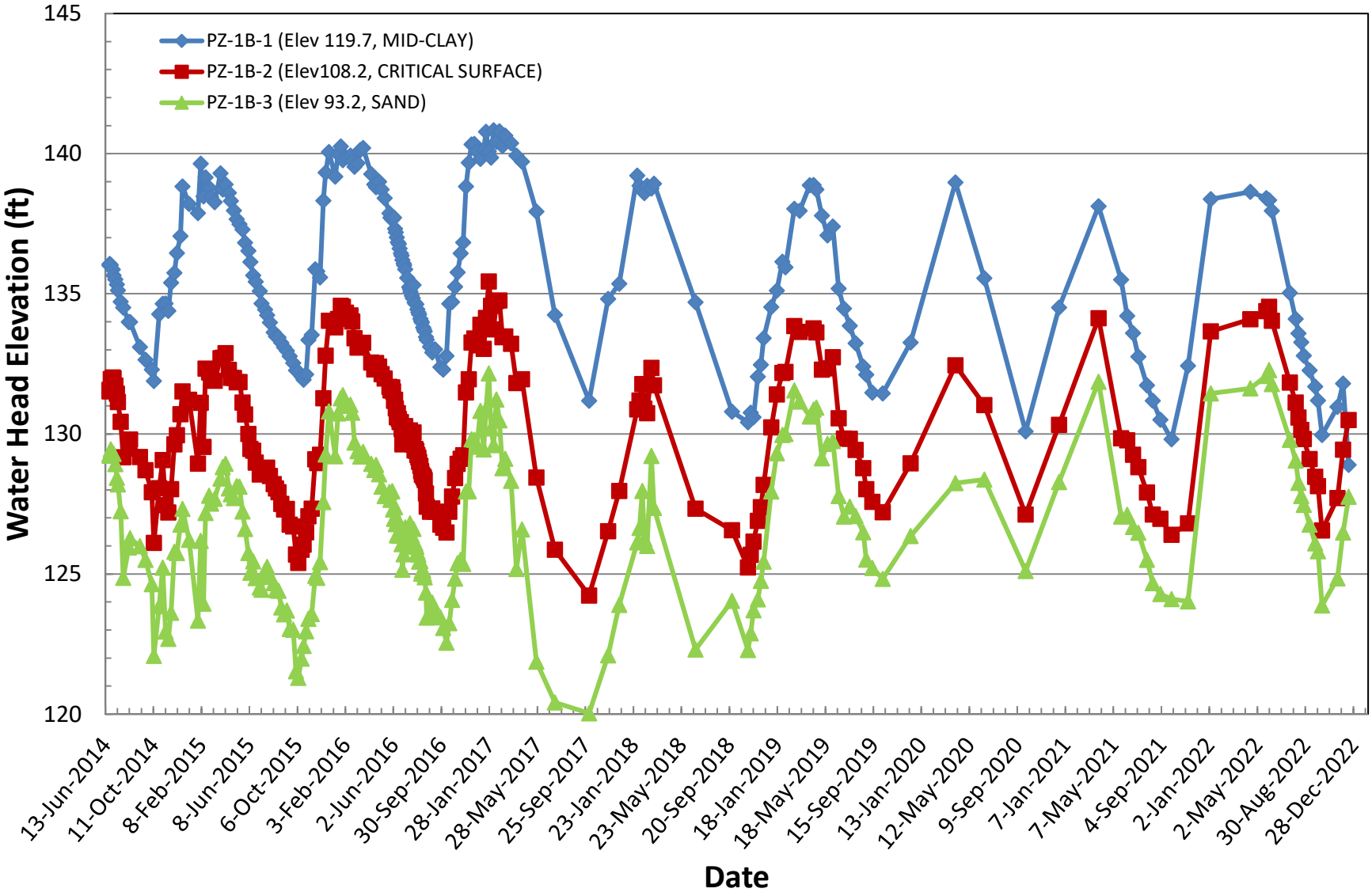
Riverbend Landfill
EX-1B Extensometer Measurements



RIVERBEND LANDFILL

PIEZOMETER PZ-1B

PIEZOMETER PZ-1B
RIVERBEND LANDFILL- MCMINNVILLE, OREGON

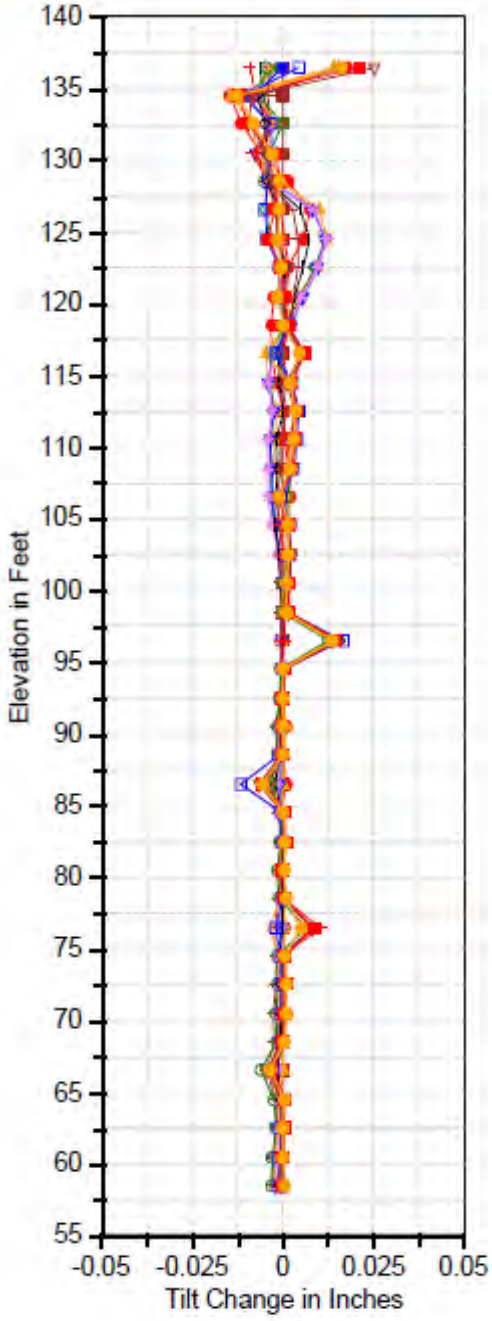


RIVERBEND LANDFILL

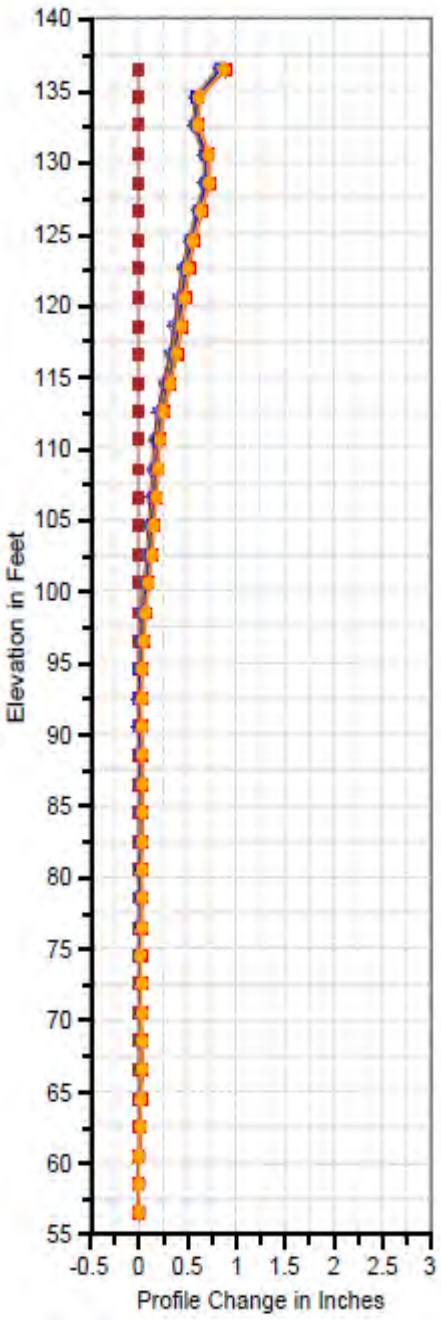
INCLINOMETER SI-2A

Riverbend Landfill
Inclinometer Measurements

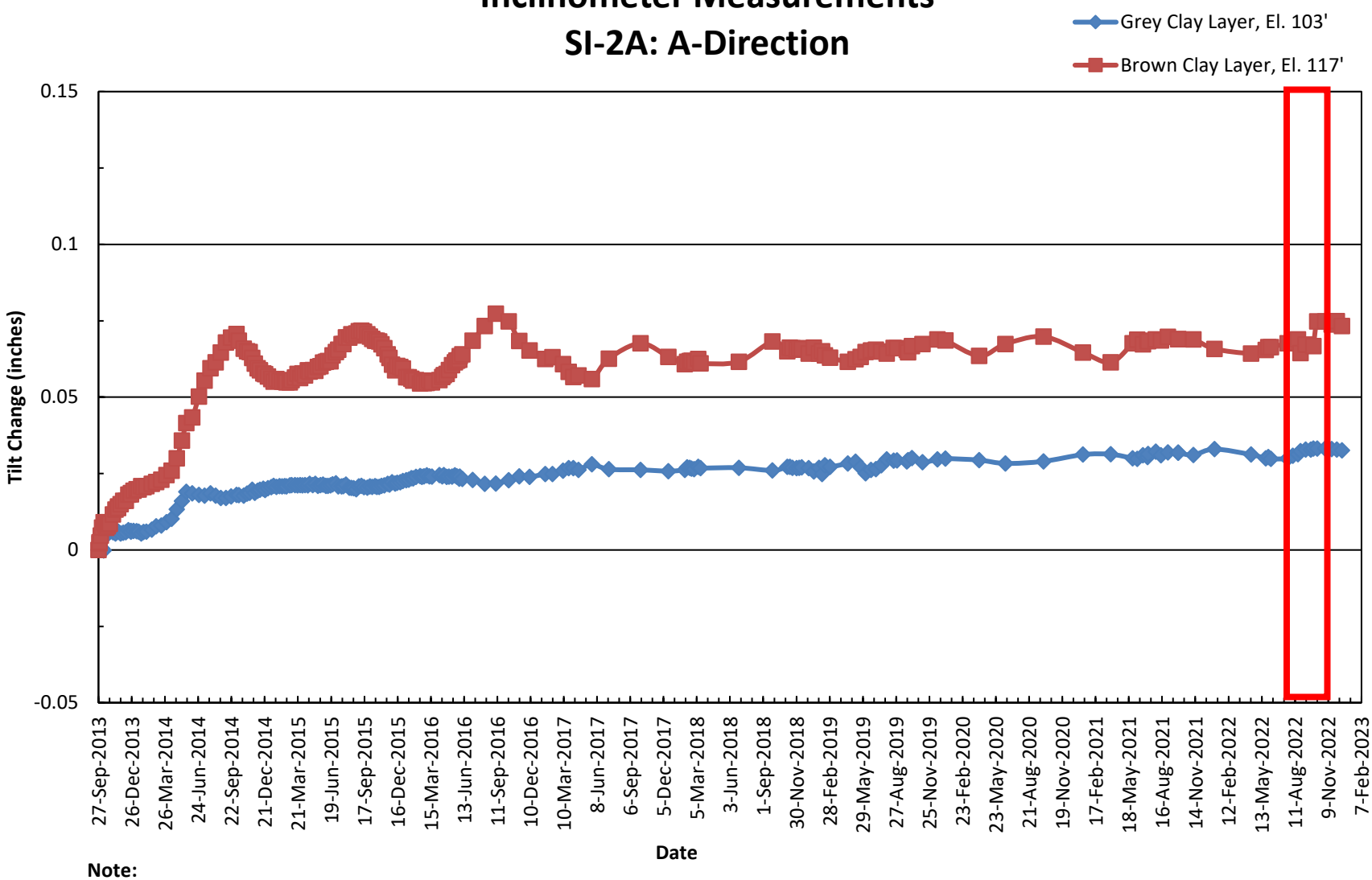
I-2A:A-Direction Incremental Tilt



I-2A:A-Direction Cumulative Profile



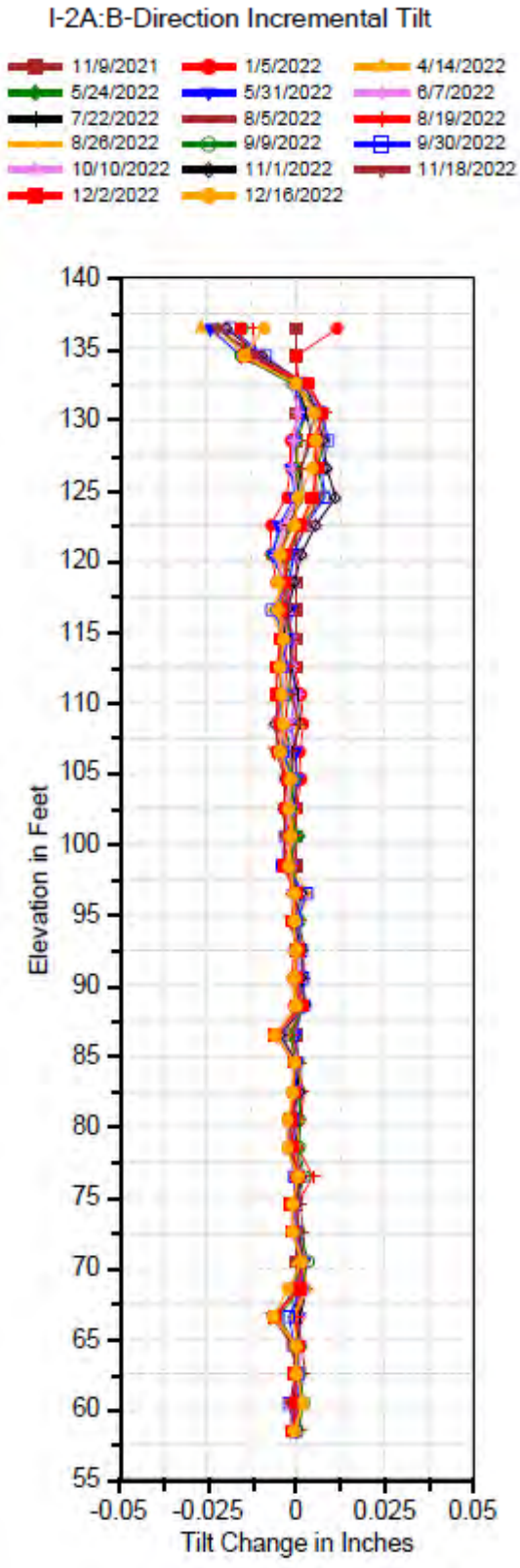
Riverbend Landfill
Inclinometer Measurements
SI-2A: A-Direction

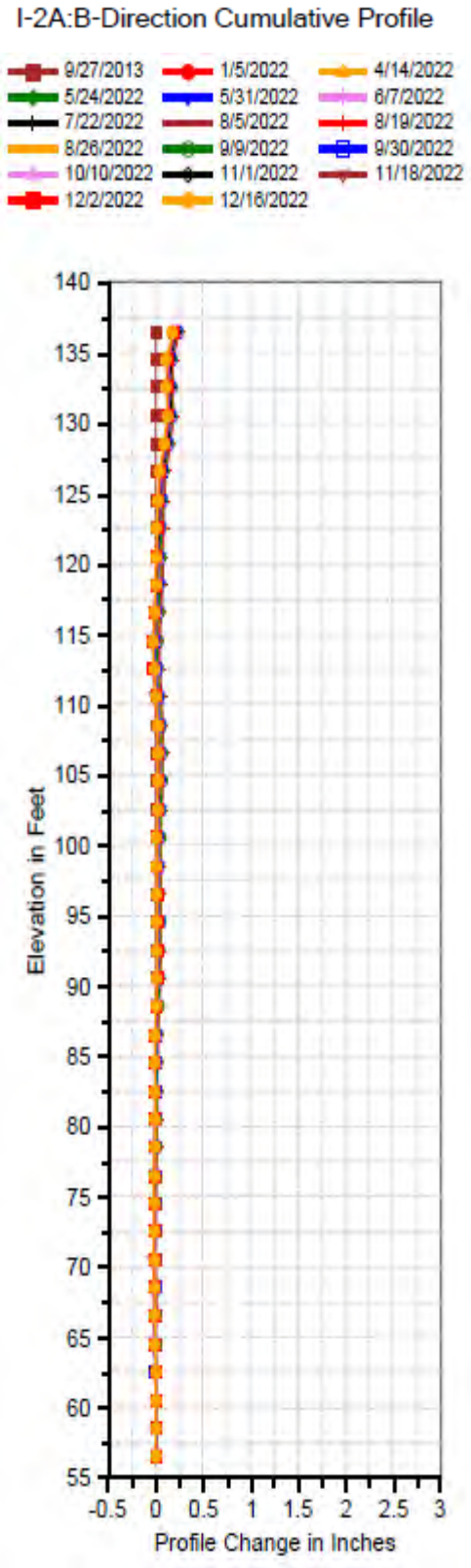


Note:

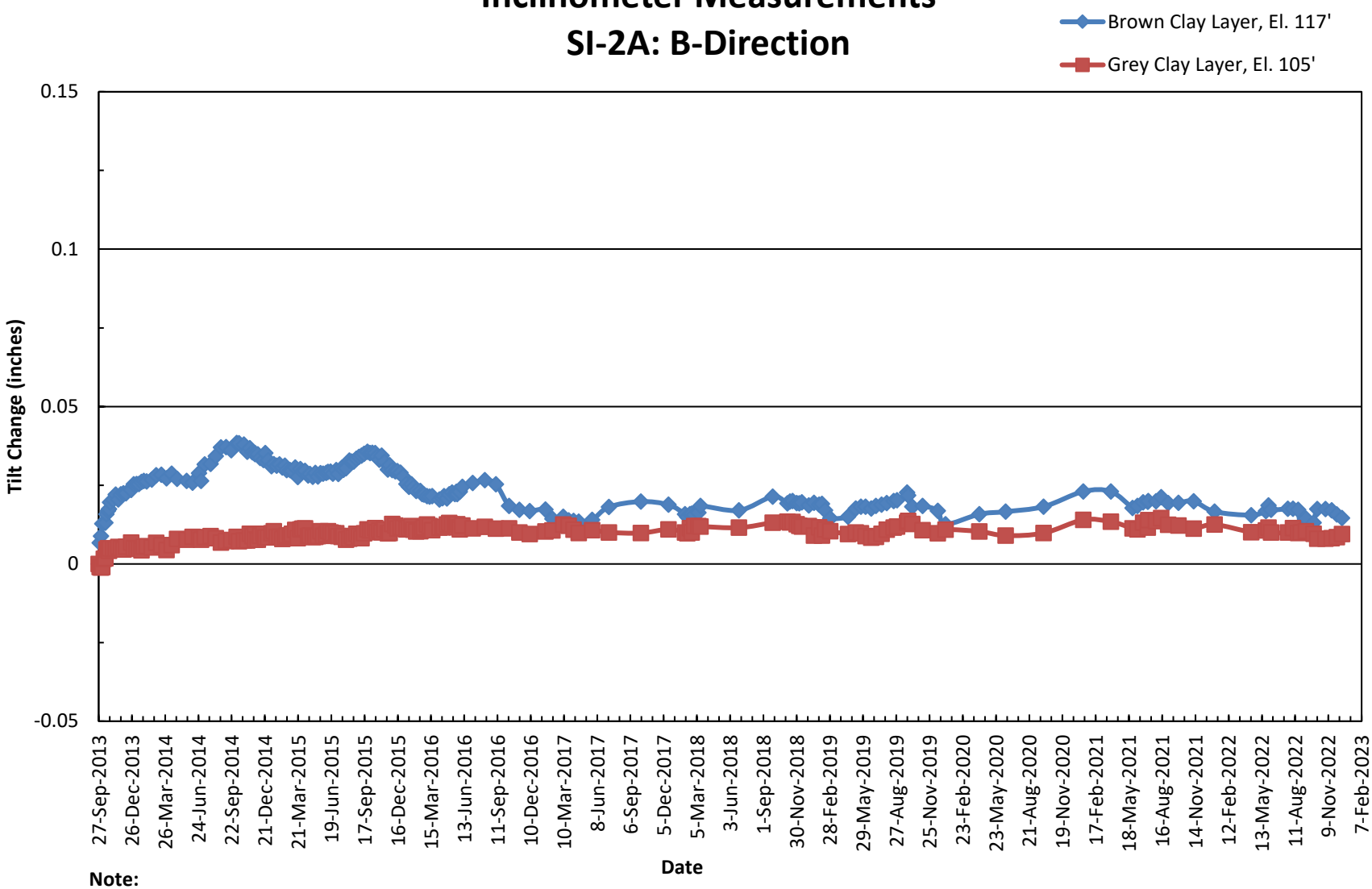
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements





Riverbend Landfill
Inclinometer Measurements
SI-2A: B-Direction

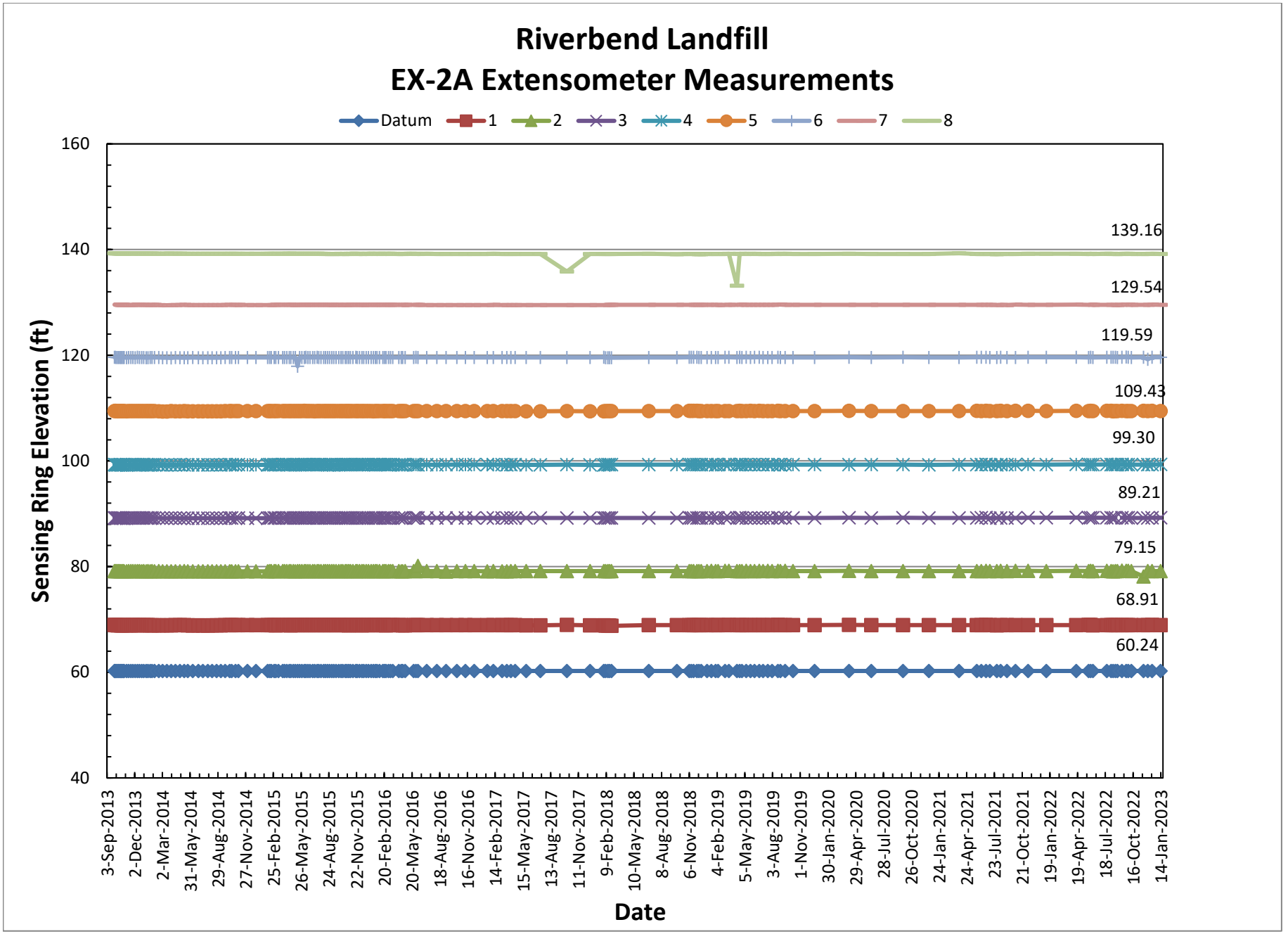


Note:

1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

RIVERBEND LANDFILL

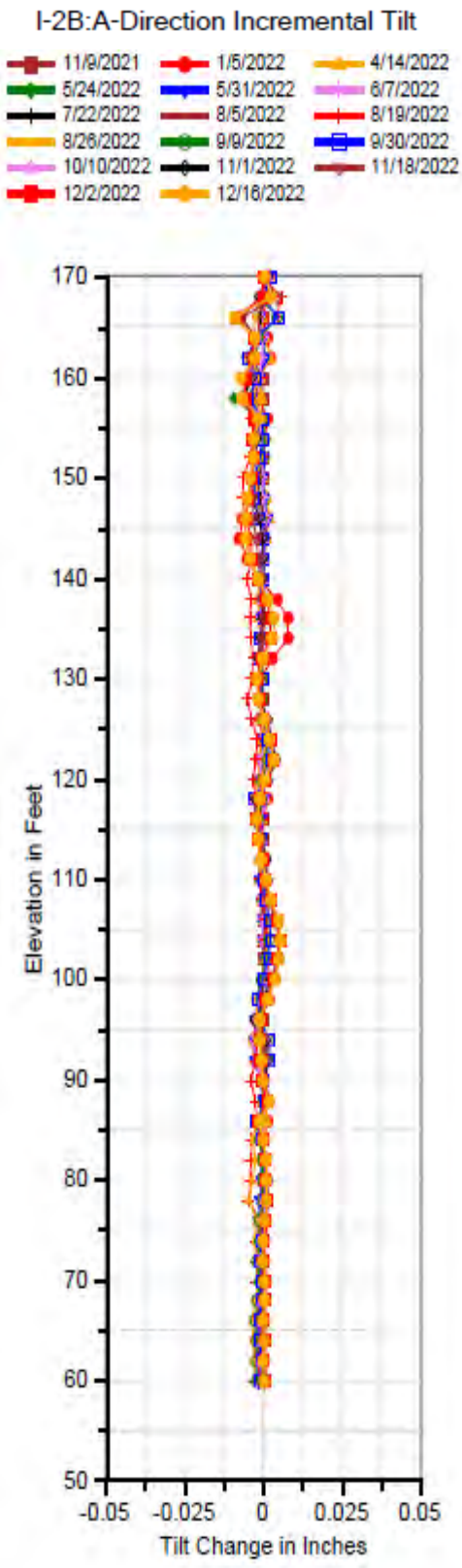
EXTENSOMETER EX-2A

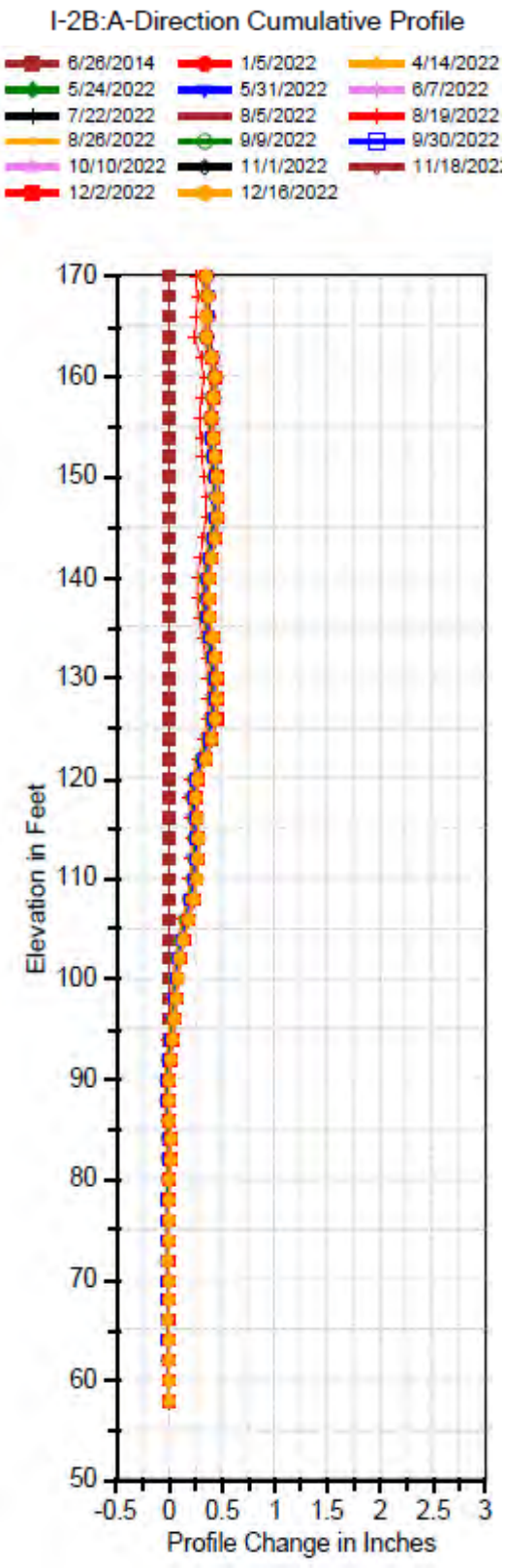

Riverbend Landfill
EX-2A Extensometer Measurements
Datum
1
2
3
4
5
6
7
8
Sensing Ring Elevation (ft)
160
140
120
100
80
60
40
139.16
129.54
119.59
109.43
99.30
89.21
79.15
68.91
60.24
3-Sep-2013
2-Dec-2013
2-Mar-2014
31-May-2014
29-Aug-2014
27-Nov-2014
25-Feb-2015
26-May-2015
24-Aug-2015
22-Nov-2015
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
19-Apr-2022
18-Jul-2022
16-Oct-2022
14-Jan-2023
Date

RIVERBEND LANDFILL

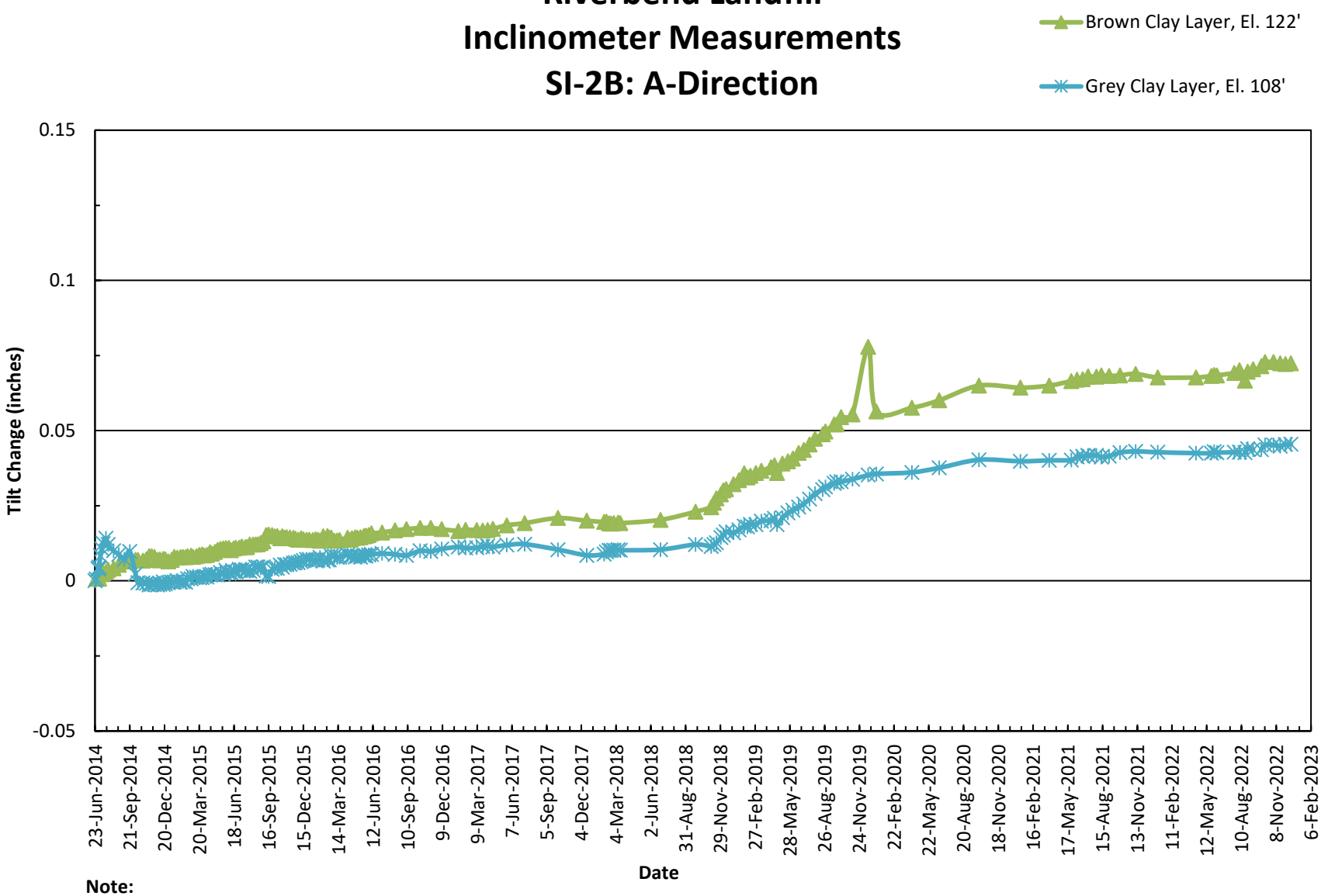
INCLINOMETER SI-2B

Riverbend Landfill
Inclinometer Measurements





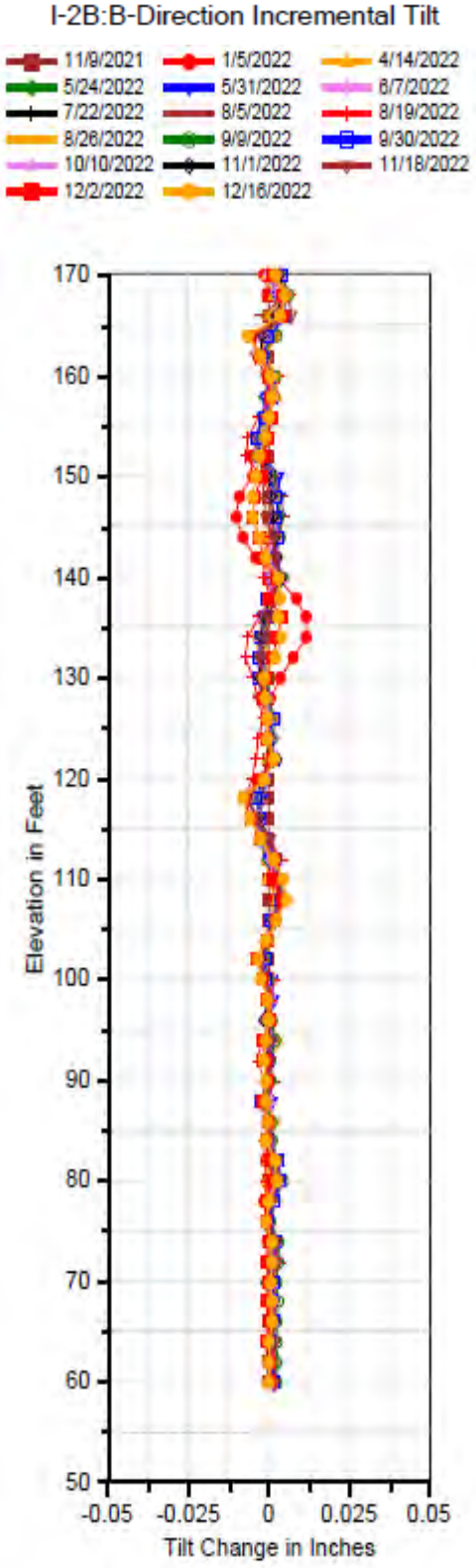
Riverbend Landfill
Inclinometer Measurements
SI-2B: A-Direction

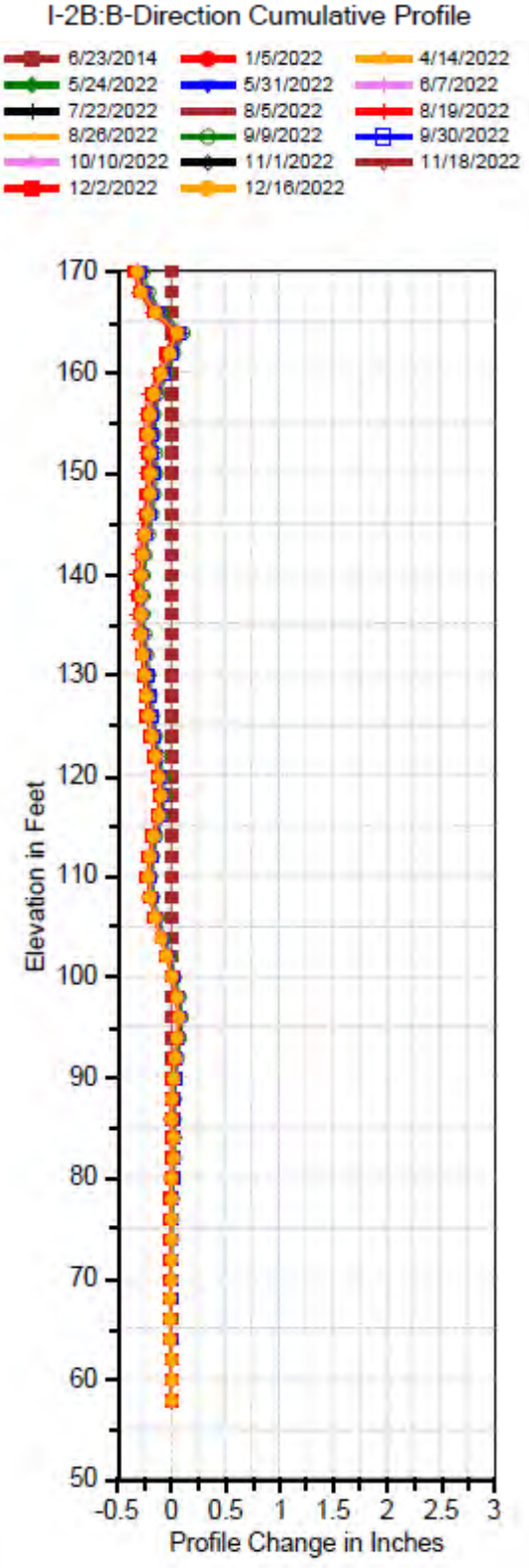


Note:

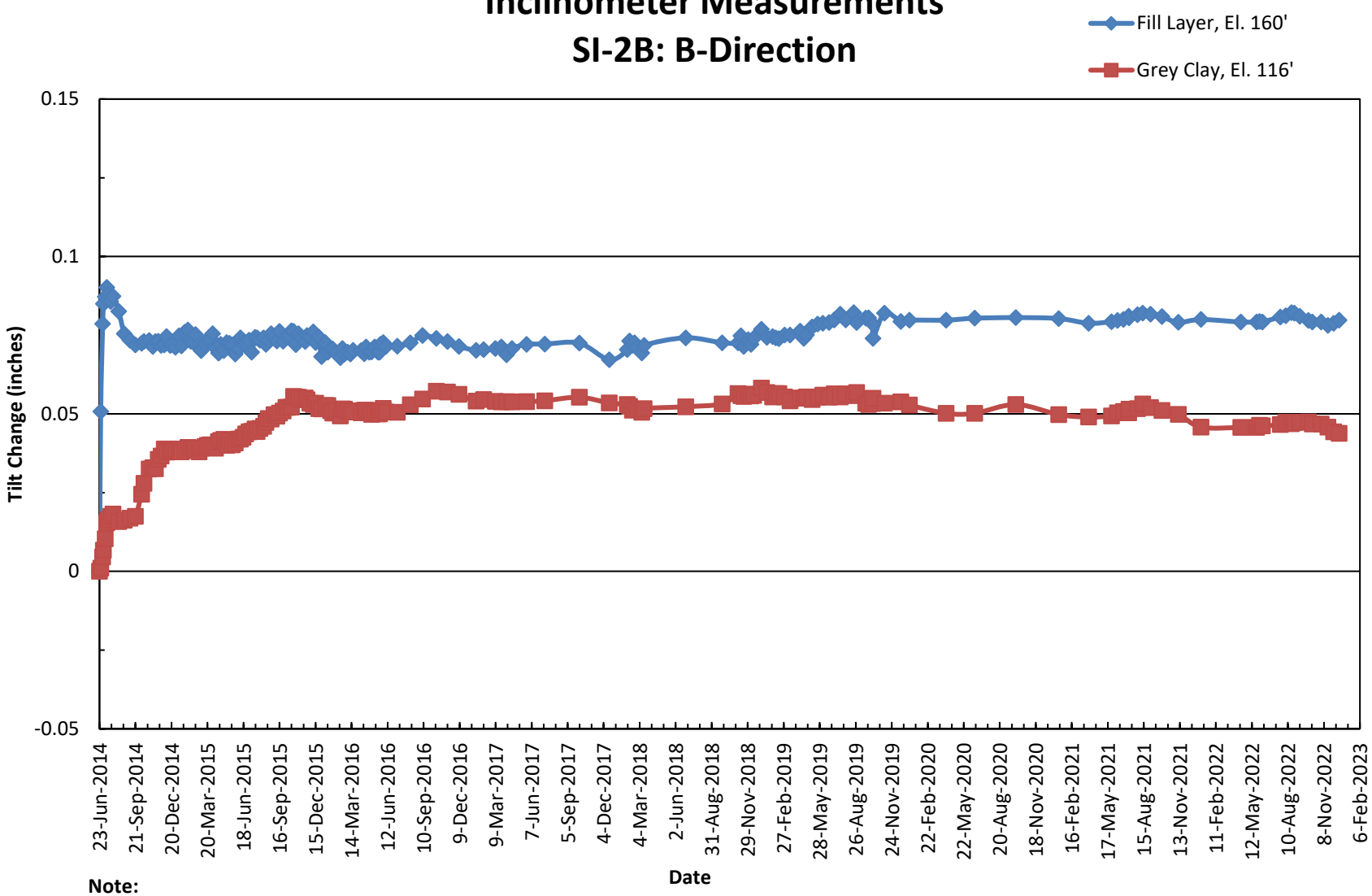
1. Selected elevations of tilt change represent locations at which maximum tilt change was measured since installation of the inclinometer.

Riverbend Landfill
Inclinometer Measurements





Riverbend Landfill
Inclinometer Measurements
SI-2B: B-Direction

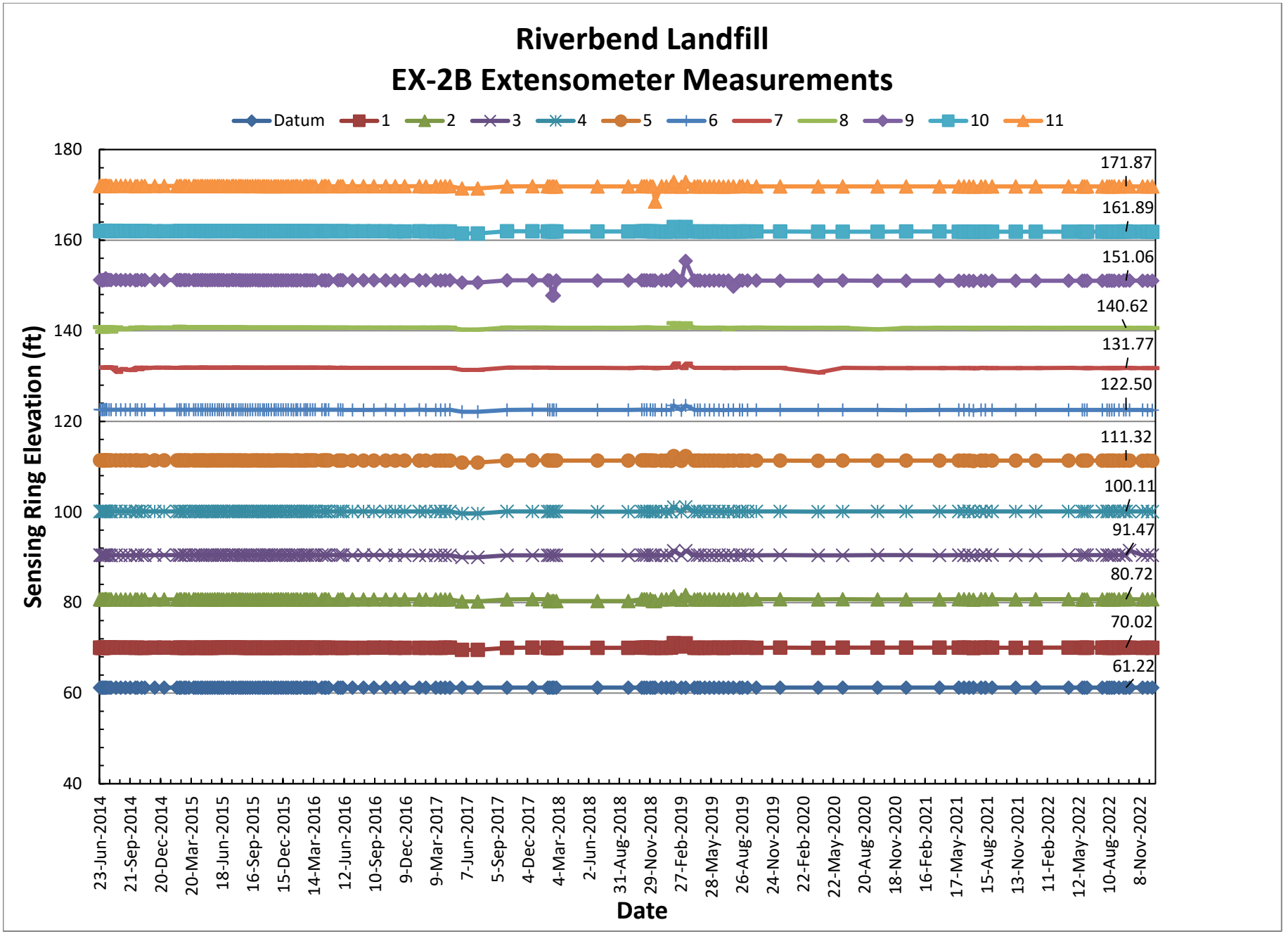


Note:

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
171.87
161.89
151.06
140.62
131.77
122.50
111.32
100.11
91.47
80.72
70.02
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
12-May-2022
10-Aug-2022
8-Nov-2022
Date

RIVERBEND LANDFILL

PIEZOMETER PZ-2B

PIEZOMETER PZ-2B
RIVERBEND LANDFILL - MCMINNVILLE, OREGON