REPORT

SEMI-ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT JULY 2013 EVENT

Trail Ridge Landfill

FDEP Permit Number 0013493-017-SO

WACS ID Number NED/16/00033628

5110 U.S. Highway 301

Duval County, Jacksonville, Florida 32234

Submitted To: Florida Department of Environmental Protection
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Brian Durden
Florida Department of Environmental Protection
Northeast District Office
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256-7598 USA

RE: SEMI-ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT FOR THE JULY 2013 MONITORING EVENT, TRAIL RIDGE LANDFILL, DUVAL COUNTY, FLORIDA, PERMIT NO. 0013493-017-SO

Dear Mr. Durden:

Golder Associates Inc. (Golder) has prepared this report summarizing the July 2013 semi-annual detection monitoring event for the Trail Ridge Landfill owned by the City of Jacksonville and operated by Waste Management under Florida Department of Environmental Protection (FDEP) Permit Number 0013493-017-SO and WACS ID Number NED/16/00033628. This semi-annual report is submitted in accordance with monitoring and reporting requirements of Chapters 62-160, 62-520, and 62-701 of the Florida Administrative Code (F.A.C.) and the Facility Permit.

If you have any questions regarding this report please contact the undersigned at (770) 496-1893.

Sincerely,

GOLDER ASSOCIATES INC.

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1.0 INTRODUCTION

The Trail Ridge Municipal Landfill (Site) is owned by the City of Jacksonville and operated by Waste Management in accordance with Florida Department of Environmental Protection (FDEP) Operation Permit Number 0013493-017-SO issued September 16, 2009. The Site is an active municipal solid waste landfill that serves the City of Jacksonville and Duval County.

Golder Associates Inc. (Golder) has been retained to report the results of semi-annual groundwater and surface water monitoring at the Site in accordance with Specific Conditions 45 and 46, and annual leachate monitoring at the Site in accordance with Specific Condition 40 of the Facility Permit, which follow the provisions of the Florida Administrative Code (F.A.C.) Chapters 62-160, 62-520, and 62-701. This report presents the methods and findings of the second 2013 semi-annual groundwater and surface water monitoring event, and annual leachate monitoring event conducted in July 2013. The following sections include general information concerning the Site history and setting, an evaluation of surficial aquifer groundwater flow, and groundwater and surface water quality conditions at the Site. Laboratory analytical data are summarized, evaluated, and compared to historic data where appropriate.

2.0 BACKGROUND

2.1 Site Location and Description

The Site is located in Jacksonville approximately five miles southwest of the intersection of US-301 and I-10 in southwestern Duval County along the border with Baker County, Florida (Figure 1).

2.2 Groundwater and Surface Water Monitoring Systems

Groundwater and surface water monitoring events are conducted concurrently on a semi-annual basis prior to March 30th and September 30th of each year.

Figure 2 shows the Site layout and groundwater monitoring well and surface water sampling locations. The Site groundwater monitoring system consists of thirty-seven (37) groundwater monitoring wells screened at shallow (S), intermediate (I), and deep (D) depths within the uppermost, surficial aquifer. These include:

- Sixteen (16) shallow wells: MWB-2(S), MWB-3(S), MWB-7(S), MWB-11(S), MWB-12(S), MWB-13(S), MWB-17(S), MWB-19(S), MWB-20(S), MWB-21(S), MWB-22(S), MWB-27(S), MWB-29(S), MWB-32(S), MWB-33(S), MWB-34(S);
- Twelve (12) intermediate wells: MWB-2(I), MWB-3(I), MWB-7(I), MWB-11(IR), MWB-12(I), MWB-13(I), MWB-17(I), MWB-19(I), MWB-27(I), MWB-29(I), MWB-32(I), MWB-34(I); and
- Nine (9) deep wells: MWB-7(D), MWB-12(D), MWB-17(D), MWB-19(D), MWB-27(D), MWB-29(D), MWB-31(D), MWB-32(D), MWB-34(D).

Background wells MWB-2(S), MWB-3(S), MWB-2(I), MWB-3(I), and MWB-31(D) demonstrate background water quality for the Facility because they are located upgradient from landfill waste. The remaining wells listed above are utilized for compliance or detection monitoring purposes associated with various phases of landfill development. The following table indicates which wells are associated with each phase and function (e.g., background, compliance, or detection).

Trail Ridge Groundwater Monitoring Program Details

Well Type	Well ID
Background Well Clusters	
Background	MWB-2(S), MWB-2(I), MWB-3(S), MWB-3(I), MWB-31(D)
Phase I	
Compliance	MWB-7(S), MWB-7(I), MWB-7(D), MWB-11(S), MWB-11(IR), MWB-12(S), MWB-12(I), MWB-12(D), *MWB-14(S)*, MWB-14(I)*, MWB-14(D)**, MWB-19(S), MWB-19(I), MWB-19(D), MWB-20(S), MWB-21(S), MWB-22(S)
Phase II	
Compliance	MWB-17(S), MWB-17(I), MWB-17(D)
Phase III and Phase IV	
Compliance	MWB-13(S), MWB-13(I), *MWB-23(S)**
Detection	MWB-33(S), MWB-34(S), MWB-34(I), MWB-34(D)
Phase V	
Compliance	*MWB-24(S)*, MWB-25(S)*, MWB-25(I)*, MWB-25(D)*, MWB-26(S)**, MWB-27(S), MWB-27(I), MWB-27(D), MWB-29(S), MWB-29(I), MWB-29(D)
Detection	MWB-32(S), MWB-32(I), MWB-32(D)

As indicated in the Facility Permit, the nine wells shown above in italics with an asterisk (*) -- MWB-14(S), MWB-14(I), MWB-14(D), MWB-23(S), MWB-24(S), MWB-25(S), MWB-25(I), MWB-25(D), and MWB-26(S) -- are maintained but are not currently utilized for routine monitoring.

The Site surface water monitoring system consists of three (3) surface water monitoring locations: SW-1, SW-2, and SW-3. Surface water monitoring location SW-1 is located in a wetland approximately 200 feet east of the Site's stormwater retention basin. SW-2 is located in an east-west trending drainage feature approximately 500 feet north of the landfill, and is considered a background water quality location because it does not receive surface water runoff from the landfill. SW-3 was established under the latest Permit issuance at the discharge point of the Site stormwater pond approximately 700 feet east of the landfill boundary. SW-3 is sampled at the discharge point if stormwater is actively discharging or from the center of the pond if there is no active discharge.

2.3 Leachate Monitoring System

Leachate monitoring is scheduled to occur on an annual basis before September 30th; resulting data is submitted in conjunction with the associated semi-annual groundwater and surface water monitoring report.

The Site leachate monitoring system currently consists of two (2) monitoring locations: LCS and LDSS. LCS is collected as a composite sample from leachate tanks 1 through 5 (COMP-1), which receives

leachate from all of the primary leachate collection sumps via one force main. LDSS is collected from the secondary leachate collection system from the drain valve of the leachate detection storage tank (TANK-6).

Previously, gas condensate samples were collected on a semi-annual basis from the pump station and analyzed for toxicity characteristic leaching procedure (TCLP) parameters. Under current Facility Permit Specific Condition 38, separate testing of the gas condensate is no longer required because the condensate is discharged into the leachate collection system.

3.0 DATA COLLECTION METHODS

3.1 Groundwater Elevation Measurements

ProTech field personnel measured water levels in Site monitoring wells on July 23, 2013 prior to purging and sampling activities in accordance with procedures described in the Facility Permit. Water levels were measured at all active groundwater monitoring wells at the Site within a 24-hour period to evaluate static groundwater conditions across the entire Site. Field personnel opened the monitoring wells to allow groundwater levels to equilibrate to atmospheric conditions, and then measured the depth to groundwater to within 0.01 feet relative to the top of the inner PVC well casing using an electronic water level indicator. Golder calculated water table elevations at each well using record drawing elevations and details to evaluate the general direction of groundwater flow in the uppermost aquifer underlying the Site. The calculations were performed by taking the difference between the measured depth to groundwater and the top of casing elevation surveyed for each well. Table 1 provides a summary of groundwater elevation data collected during the July 2013 monitoring event.

3.2 Sample Collection and Analysis

Groundwater and surface water sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01).

ProTech field personnel collected groundwater samples for laboratory analysis from all thirty-seven monitoring wells between July 23rd and 24th, 2013. Groundwater monitoring wells were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Purging continued at each location until approximately three times the volume of water in the well casing had been removed. Field parameters including static water level, pH, specific conductance, temperature, turbidity, dissolved oxygen, and color/sheen (by observation) were recorded during purging and prior to sampling. Once purging was complete, ProTech field personnel collected groundwater samples from the dedicated pumps and tubing in laboratory-provided containers, and placed the samples in coolers with ice. Surface water samples were collected from three surface water monitoring points using a dipper or laboratory-provided container on July 24th, 2013. Field parameters including pH, specific conductance, temperature, turbidity, dissolved oxygen, and color/sheen (by observation) were recorded at the time of sampling. Instrument calibration records (FD 9000-8) are included in Appendix A, and completed groundwater sampling logs (FD 9000-24) are provided along with the laboratory report in Appendix B.

TestAmerica, a Florida-certified laboratory in Tallahassee, Florida, analyzed groundwater and surface water samples collected in July 2013 for the parameters identified in Attachments 6 and 9, respectively, of the Facility Permit as summarized in the following table. The full laboratory report and associated chain of custody records are included in Appendix B.

Laboratory Analyses for Trail Ridge Landfill Groundwater and Surface Water Samples

Sample Type	Analytical Parameter	Analysis Method
Groundwater	Total Ammonia - N	350.1
	Chlorides	300.0
	Iron	6010C
	Mercury	7470A
	Nitrate	353.2
	Sodium	6010C
	Total Dissolved Solids (TDS)	SM 2540C
	40 CFR Part 258 Appendix I VOCs	8260C
	40 CFR Part 258 Appendix I Metals	6020
Surface Water	Unionized Ammonia - N	Unionized NH3
	Total Hardness	SM 2340B
	Biochemical Oxygen Demand (BOD5)	SM 5210B
	Copper	6020
	Iron	6010C
	Mercury	1631E
	Nitrate	353.2, Nitrate by calc
	Zinc	6020
	Total Dissolved Solids (TDS)	SM 2540C
	Total Organic Carbon (TOC)	SM 5310C
	Fecal Coliform	SM 9222D
	Total Phosphates	SM 4500 P E
	Chlorophyll A	SM 10200H
	Total Nitrogen	9060
	Chemical Oxygen Demand (COD)	SM 5220D
	Total Suspended Solids (TSS)	SM 2540D
	40 CFR Part 258 Appendix I VOCs	8260C
	40 CFR Part 258 Appendix I Metals	6020

3.3 Leachate Sample Collection and Analysis

Leachate sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01).

ProTech field personnel collected leachate for laboratory analysis from one leachate sampling location (LCS) on July 24th, 2013. LCS is a composite sample of primary leachate collected from Tanks 1 through 5 (COMP-1). LDSS, a secondary leachate sampling location, reportedly contained insufficient liquids in Tank 6 for sampling. Field parameters including pH, specific conductance, temperature, turbidity, dissolved oxygen, and color/sheen (by observation) were recorded at the time of sampling. Instrument

calibration records (FD 9000-8) are included in Appendix A, and completed leachate sampling logs (FD 9000-24) are provided along with the laboratory report in Appendix B.

TestAmerica, a Florida-certified laboratory in Tallahassee, Florida, analyzed the leachate sample collected in July 2013 for the parameters identified in Specific Condition 40 of the Facility Permit as summarized in the following table. The full laboratory report and associated chain of custody records are included in Appendix B.

Laboratory Analyses for Trail Ridge Landfill Leachate Samples

Sample Type	Analytical Parameter	Analysis Method(s)
Leachate	Total Ammonia - N	350.1
	Chlorides	300.0
	Iron	6010B
	Mercury	7470A
	Nitrate	353.2
	Sodium	6010B
	Total Dissolved Solids (TDS)	SM 2540C
	Bicarbonate	SM 2320B
	40 CFR Part 258 Appendix II Parameters	
	Volatile Organic Compounds (VOCs)	8260C
	Metals	6020
	SVOCs	8270D
	EDB, DBCP, and 1,2,3-TCP	8011
	Polychlorinated Biphenyls (PCBs)	8082A
	Chlorinated Pesticides	8081B
	Herbicides	8151A
	Organophosphorus Compounds	8141B
	Dioxins/Furans	1613B-Tetras
	Total Sulfide	SM 4500 S2 F
	Total Cyanide	SM 4500 CN E

4.0 GROUNDWATER FLOW DIRECTION EVALUATION

4.1 Groundwater Elevations and Flow Direction

Golder calculated groundwater elevations based on water levels measured on July 23rd, 2013 and top of well casing elevations surveyed relative to the National Geodetic Vertical Datum (NGVD) provided in Table 1. Figures 3, 4, and 5 show shallow, intermediate, and deep potentiometric contours for the surficial aquifer, respectively. Groundwater flow beneath the Site in the uppermost aquifer is to the east at shallow, intermediate, and deep depths. The direction of groundwater flow is consistent with measurements from previous monitoring events.

4.2 Horizontal Hydraulic Gradients

Average horizontal hydraulic gradients for the July 2013 monitoring event were calculated for the shallow, intermediate, and deep depths within the surficial aquifer along flow paths oriented perpendicular to the potentiometric contours (Appendix C). The results are summarized in the following table and are consistent with historical gradient values for the Site.

Horizontal Hydraulic Gradient Values

Surficial Aquifer Unit	Calculation Description	Gradient (ft/ft)
Shallow	135-foot potentiometric contour and MWB-22(S) Distance 2,600 feet	0.010
Intermediate	135-foot potentiometric contour and MWB-12(I) Distance 2,500 feet	0.0086
Deep	MWB-31(D) and 120-foot potentiometric contour Distance 2,300 feet	0.0073
	Site Average Hydraulic Gradient	**0.0086**

5.0 WATER QUALITY MONITORING RESULTS

5.1 Quality Assurance and Quality Control (QA/QC) Results

5.1.1 Groundwater and Surface Water Analytical QA/QC

ProTech field personnel collected one field blank during the July 2013 sampling event and submitted the samples with trip blanks in coolers containing VOC samples to TestAmerica for analysis. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, laboratory control samples (LCS), and matrix spike/matrix spike duplicates (MS/MSD). Golder evaluated the QA/QC results for the laboratory reports associated with groundwater and surface water monitoring points from Test America Laboratory Report 640-44404-1.

The following QA/QC issues were identified:

- Several analytes were detected between method detection limits (MDLs) and practical quantitation limits (PQLs); these detections were qualified with an “I”.
- LCS/LCSD recoveries were outside control limits for bromomethane (batch 103395 and 103399), carbon tetrachloride (batch 103395), 1,1-dichloroethane (batch 103399), trichlorofluoromethane (batch 103395), and vinyl chloride (batch 103395) in method 8260; associated results have been qualified with a “J” or “UJ”, where results are non-detect.
- MS/MSD recoveries were outside control limits (biased high) for several 1,1,1-trichloroethane, carbon tetrachloride, and trichlorofluoromethane (batch 103395); target analytes are qualified as “J”. MS/MSD recoveries were biased low for nickel (batch 288061) and biased high for sodium (batch 286987) in method 6020; biased low for ammonia (batch 286965 and 287092); biased low for chemical oxygen demand (batch 287673); the associated LCS recoveries for the above parameters were within limits and the associated data are considered acceptable.
- Total dissolved solids (10 mg/L), ammonia (7.5 ug/L), and nitrate nitrite as N (15 I ug/L) were detected in the Field Blank.
- Elevated reporting limits are reported due to sample dilutions: SW-1, SW-2, and SW-3 were diluted for low level Mercury due to the sample matrix.
- The sample/sample duplicate precision was outside control limits for nitrate nitrite as N (method 353.2 batch 286994); the associated LCS/LCSD precision met acceptance criteria.

As indicated above, Test America qualified results for detections between the MDL and the PQL (I), and LCS/LCSD recoveries outside control limits (J or UJ). The laboratory did not qualify data based on field detections. There were no detections in the trip blank or method blanks. In addition, the subcontract laboratory (Diversified Environmental Laboratories, Inc.) qualified fecal coliform results for SW-2 results based on colony counts outside the acceptable range (B).

No other QA/QC issues were identified during data validation; therefore, remaining results from the July 2013 event are considered acceptable without qualification.

5.1.2 Leachate Analytical QA/QC

ProTech field personnel submitted the samples and trip blank(s) in coolers containing volatile organic compound samples to TestAmerica for analysis during the July 2013 event; no field blanks or duplicates were collected. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, LCS, and MS/MSD. Golder evaluated the QA/QC results for the laboratory reports associated with leachate samples from TestAmerica Laboratory Report 640-44431-1. The following QA/QC issues were identified and, if necessary, qualified accordingly:

- Several analytes were detected between MDLs and PQLs; these detections were qualified with an “I”.
- LCS/LCSD were outside control limits (biased high) for carbon tetrachloride (batch 103400) in method 8260C; were biased high for several SVOC analytes (batch 103337) in method 8270D; target analytes were qualified with a “J”.
- MS/MSD were outside accuracy and/or precision limits for several analytes (batch 103459) in method 8081B/8082A; the associated LCS/LCSD met acceptance criteria. MS/MSD were biased high for disulfoton (batch 103341) in method 8141B; the associated LCS/LCSD met acceptance criteria.
- COMP-1 was diluted due to the abundance of target analytes (method 8260C). Due to the level of dilution required for COMP-1, surrogate recoveries were not reported for method 8270D. COMP-1 was diluted for method 8151A due to the nature of the sample matrix; elevated reporting limits were provided. The extract of COMP-1 was centrifuged to aid in the removal of suspended solids, which were formed during the concentration process in method 8151A. Surrogates could not be recovered for COMP-1 (method 8151A) due to the level of dilution required.
- Two out of three surrogate recoveries were outside control limits for COMP-1, MS, and MSD in method 8081B/8082A; the associated results were qualified with a “J”. The

laboratory's SOP allows two of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis.

No other QA/QC issues were identified during data validation; therefore, remaining results from the July 2013 event are considered acceptable without qualification.

5.2 Laboratory Analysis Results

Tables 2A through 3 summarize laboratory analytical results for groundwater and surface water samples collected during the July 2013 monitoring event for Trail Ridge Landfill. Copies of the laboratory analytical reports are provided in Appendix B. An electronic copy of the ADaPT software results is provided in Appendix D. Groundwater Monitoring Report Certification is included as Appendix E.

5.2.1 Groundwater

Tables 2A, 2B, and 2C summarize laboratory analytical results for the shallow, intermediate, and deep zones of the surficial aquifer, respectively. Several inorganic analytes were detected in background, compliance, and detection wells at various depths: chloride, ammonia, nitrate, nitrate-nitrite, iron, sodium, Appendix I metals, mercury, and total dissolved solids.

In addition, certain VOCs were detected in groundwater samples:

- Benzene in samples MWB-33(S) at 0.27 I ug/L, MWB-34(D) at 0.51 I ug/L;
- Toluene in sample MWB-34(D) at 0.95 I ug/L;

VOC detections between the MDLs and PQLs were qualified with an "I". Benzene and Toluene have been detected in groundwater at comparable concentrations at wells at the site; including benzene at background well MWB-2(S) and toluene at background wells MWB-2(S) and MWB-2(I). Other VOCs (i.e., carbon disulfide and acetone) that were detected during previous events were not detected during this event. The VOC detections therefore do not appear to represent deterioration in groundwater quality related to the landfill.

5.2.2 Surface Water

Table 3 summarizes laboratory analytical results for surface water samples collected from the Site. Several inorganic analytes were detected at one or more surface water locations: nitrate, nitrate-nitrite, nitrogen, phosphorous and orthophosphate, iron, Appendix I metals, unionized ammonia, chlorophyll a, hardness, total dissolved solids, total suspended solids, COD, TOC, and fecal coliform.

VOCs were not detected during the July 2013 sampling event. Therefore, all VOCs for the July 2013 sampling event are therefore below Class I/III Water Quality Standards. VOCs that were detected during previous events (i.e., 2-Butanone, acetone, carbon disulfide, toluene) were not detected during this event.

5.2.3 Leachate

This section summarizes laboratory analytical results for the leachate sample collected from the Site; the complete laboratory report can be found in Appendix B.

Several inorganic analytes were detected at both leachate sampling locations: chloride, iron, sodium, Appendix I metals, mercury, ammonia, nitrate-nitrite, nitrate, bicarbonate alkalinity, total dissolved solids, total cyanide, and sulfide. In addition, several VOCs were detected in leachate samples, as shown in the attached laboratory report.

5.3 Field Parameter Measurement Results

Table 4 summarizes field parameter measurements for groundwater, surface water, and leachate samples collected during the July 2013 event. Original field forms with parameter measurements are included at the end of the laboratory report in Appendix B.

5.3.1 Groundwater

Groundwater field parameter readings and observations are consistent with those from previous semi-annual monitoring events, except for turbidity at certain locations discussed in this paragraph. The average pH increases with depth between the shallow, intermediate, and deep zones of the aquifers. The deep groundwater likely has higher pH values than the shallow wells due to carbonate rock buffering deeper in the aquifer. Conversely, dissolved oxygen concentrations tend to decrease with depth as less mixing occurs with shallow oxygenated recharge water. Turbidity values were lower than 20 nephelometric turbidity units (NTU), except for MWB-12(S) at 21.89 NTU, MWB-27(S) at 24.97 NTU, and MWB-32(I) at 28.99 NTU. The turbidity at these wells is comparable to recently reported values.

5.3.2 Surface Water

Surface water field parameter readings and observations are within the historic range of surface water measurements. The measured pH values ranged from 4.09 to 6.94 Standard Units (S.U.); dissolved oxygen ranged from 4.8 to 5.9 milligram per liter (mg/L); specific conductivity ranged from 0.073 to 0.370 milliSiemens per centimeter (mS/cm); and temperature ranged from 21.8 to 27.7 degrees Celsius. Turbidity values were below 20 NTU for all surface water samples during the July 2013 event. Turbidity at SW-3 is lower than has been historically recorded.

5.3.3 Leachate

The field parameter measurement values for LCS (COMP-1) were pH at 7.79 S.U.; dissolved oxygen at 0.1 mg/L; specific conductivity at 18.10 mS/cm; temperature at 25.6 degrees Celsius; and turbidity at 262.6 NTU. LDSS (Tank-6) reportedly contained insufficient liquids in Tank 6 for sampling.

6.0 COMPARISON TO ESTABLISHED STANDARDS

F.A.C. Chapter 62-701.510 and the Facility Permit require comparison of water quality monitoring data to water quality standards specified in F.A.C. Chapter 62-520 (Ground Water Classes, Standards, and Exemptions) and F.A.C. Chapter 62-302 (Surface Water Quality Standards). The following sections present a description of the established standards and comparison of results for groundwater and surface water.

6.1 Groundwater

6.1.1 Established Standards

F.A.C. Chapter 62-520 establishes classes and standards for groundwater. Facility Permit Specific Conditions 45.c and 45.d require that the water quality standards for Class G-II groundwater (Rule 62-520.420) will not be exceeded at the zone of discharge boundary and that minimum criteria for groundwater (Rule 62-520.400) are not violated within the zone of discharge.

The minimum criteria identified in F.A.C. Chapter 62-520.400 indicate that groundwater shall be “free from domestic, industrial, agricultural, or other man-induced non-thermal components of discharges” in concentrations which:

- Are harmful to plants, animals, or native organisms
- Are carcinogenic, mutagenic, teratogenic, or toxic to human beings unless specific criteria are established in Rule 62-520.420
- Are acutely toxic within surface waters affected by groundwater
- Pose a serious danger to public health, safety, or welfare and/or create a nuisance
- Impair the reasonable and beneficial use of adjacent waters

The Class G-II standards identified in F.A.C. Chapter 62-520.420 for potable groundwater in aquifers with total dissolved solids TDS content less than 10,000 mg/L refer to primary and secondary drinking water quality standards listed in Rules 62-550.310 and 62-550.320, respectively, with the exception that the total coliform bacteria standard shall be 4 per 100 milliliters. The primary drinking water standards (PDWS) and secondary drinking water standards (SDWS) for parameters included in laboratory analysis are listed on Tables 2A through 2C. The only field parameter with an established drinking water standard under F.A.C. Rule 62-550.310 and 62.550.320 is pH, with an SDWS in the range of 6.5 to 8.5.

F.A.C. Chapter 62-520.420 indicates that “if the concentration for any constituent listed in subsection (1) above in the natural background quality of the ground water is greater than the stated maximum, or in the

case of pH is also less than the minimum, the representative natural background quality shall be the prevailing standard for Class G-I and Class G-II ground water."

6.1.2 Comparison of Groundwater Data to Established Standards

The groundwater monitoring results from the July 2013 met minimum criteria established under F.A.C. Chapter 62-520.400 and PDWS established under F.A.C. Chapter 62-550.310. SDWS exceedances were identified for iron and pH at one or more wells. These exceedances have all been verified and are summarized below.

Iron (SDWS 0.3 mg/L)

- Shallow wells: Background well MWB-3(S), and MWB-11(S), MWB-19(S), MWB-21(S), MWB-29(S), and MWB-32(S);
- Intermediate wells: Background wells MWB-2(I) and MWB-3(I), and MWB-7(I), MWB-11(IR), MWB-12(I), MWB-17(I), MWB-19(I), MWB-27(I), MWB-29(I), MWB-32(I), and MWB-34(I); and
- Deep wells: Background well MWB-31(D), and MWB-12(D), MWB-17(D), MWB-19(D), MWB-27(D), MWB-29(D), MWB-32(D), and MWB-34(D)

pH (SDWS 6.5 to 8.5)

- Shallow wells: All background, compliance, and detection wells were below 6.5
- Intermediate wells: All background, compliance, and detection wells were below 6.5
- Deep wells: Background well MWB-31(D), and MWB-17(D), MWB-27(D), MWB-29(D), and MWB-32(D) were below 6.5

Metals (specifically iron) and pH have been historically detected at concentrations exceeding the applicable SDWS and reported to FDEP. Metals and pH have also been detected in background wells at concentrations out of compliance with the associated SDWS. These SDWS exceedances appear to be related to natural subsurface conditions rather than landfill impacts. Further discussion regarding the natural occurrence of metals (specifically iron) and low pH is provided in Section 7.0.

Previous groundwater monitoring reports attributed elevated parameter concentrations (conductivity, chloride, TDS, ammonia, and vanadium) in well MWB-34(S) to leachate pump issues that periodically occurred between 2005 and 2007. There were no exceedances during the July 2013 event at MWB-34(S), except for pH. These issues were corrected and concentrations have generally decreased since 2008, which indicates that conditions are improving.

6.2 Surface Water

6.2.1 Established Standards

Facility Permit Specific Condition 46.d requires that surface water discharges shall not exceed quality standards for drinking water or surface water. In this case, drinking and surface water quality standards under F.A.C. Chapter 62-302 apply. F.A.C. Chapter 62-302 establishes minimum criteria and water quality standards for several classes of water including: Class I (potable water supplies), Class II (shellfish propagation or harvesting), Class III (fish consumption, recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife), Class IV (agricultural water supplies), and Class V (navigation, utility, and industrial use).

The minimum criteria identified in F.A.C. Chapter 62-302.500 indicate that surface waters shall be "free from domestic, industrial, agricultural, or other man-induced non-thermal components of discharges" which:

- Settle to form putrescent deposits or create a nuisance
- Float as debris, scum, oil, or other matter in such amounts to create a nuisance
- Produce color, odor, taste, turbidity, or other conditions to create a nuisance
- Are acutely toxic
- Are present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant, locally occurring fish a wildlife
- Pose a serious danger to public health, safety, or welfare

The surface water quality standards for each defined class are established in F.A.C. Chapter 62-302.530. Class I and Class III (predominantly fresh water) are the only applicable surface water classes for the Site. Standards for these two classes are provided in Table 3 for laboratory parameters and Table 4 for field parameters. In some cases, F.A.C. Chapter 62-302.530 requires calculations for Class I and III standards based on sample hardness. Table 5 provides equations and calculation results for analytes which require standard calculation, including cadmium, chromium, copper, lead, nickel, and zinc.

6.2.2 Comparison of Surface Water Data to Established Standards

The surface water monitoring results from the July 2013 sampling event and the September 3, 2013 resampling event met minimum criteria established under F.A.C. Chapter 62-302.500. The following verified detections exceeded Class I/III surface water quality standards identified in Table 3 (laboratory parameters), Table 4 (field parameters), and/or Table 5 (calculated standards):

- Beryllium at SW-2;

- Iron at SW-1;
- Lead in SW-1 (concentration within historical range, but verified unusually low hardness that resulted in a low calculated standard);
- pH at SW-3 (varied greater than 1 standard pH unit above background)
- Fecal coliform at SW-2

The initial exceedances observed during the July 2013 event were within the historical range for each parameter, except for cadmium and copper is SW-3 and iron at SW-2. Following the identification of these surface water criteria exceedances FDEP was notified by telephone and e-mail in accordance with the facility permit. A plan to resample for the above exceedances was initiated. Subsequent confirmation sampling occurred on September 3rd, 2013 for iron, lead, and hardness at SW-1; beryllium and iron at SW-2; and cadmium, copper, hardness at SW-3, and field parameters at all three locations. The results of the subsequent resampling are summarized in Table 3, Table 4, and Table 5.

The SW-1 lead detection is confirmed to exceed calculated WQS Class I & Class III standards, however detected concentrations are within the historic range of detections at that location. At SW-3, cadmium was not detected and copper did not exceed the calculated WQS standard. However, beryllium at SW-2 and iron at SW-1 were confirmed to exceed WQS standards. Coliform did not exceed the WQS at SW-2 during the resampling event. The pH for SW-3 varies greater than one standard pH unit above SW-2, where the pH was measured below the drinking water SMCL of 6.5. However, SW-3 measures the discharge of a stormwater pond on site and is likely to have pH closer to neutral because the pH is more likely to reflect the pH of stormwater rather than stream water quality measured in SW-2. SW-1 and SW-2 are representative of waters within wetlands and streams, respectively, and are likely to be below 6.5. Turbidity was greater than 29 NTU above background at SW-3 for the resampling event, but was below the 29 NTU difference threshold during the July 2013.

Future resampling of surface water locations will be considered based on exceedances that are outside the range of historical detections for parameters at their corresponding locations, which may be affected by elevated turbidity and/or surface water parameters such as hardness or pH that are not comparable to measurements previously recorded for those parameters.

6.3 Leachate

6.3.1 Established Standards

Leachate data is compared to regulatory standard values provided in 40 CFR 261.24 which define toxicity characteristics. Facility Permit Specific Condition 40 indicates that “if a contaminant listed in 40 CFR 261.24 exceeds the regulatory level listed therein, the Permittee shall follow the procedures addressed in

F.A.C. Rule 62-701.510(6)(c)2, which includes notifying DEP of the results in writing and conducting monthly sampling and analysis, commencing within 30 days of the date of the sampling event in which the exceedance is first detected."

6.3.2 Comparison of Leachate to Established Standards

None of the detected parameters in leachate samples exceeded regulatory levels for toxicity characteristics listed in 40 CFR Part 261.24.

7.0 DISCUSSION AND RECOMMENDATIONS

During the most recent event, analytes were detected in groundwater and/or surface water at concentrations exceeding applicable drinking water and/or surface water quality standards. These include iron, lead, pH, and turbidity for groundwater; and unionized ammonia, iron, lead, antimony, beryllium, silver, cadmium, chromium, copper, lead, nickel, zinc, dissolved oxygen and turbidity for surface water. None of the detected parameters in leachate samples exceeded regulatory levels for toxicity characteristics listed in 40 CFR Part 261.24. SW-1, SW-2 and SW-3 surface water locations were resampled for exceeded criteria. The metals detection and lead exceedance in MWB-32S is likely the result of increased turbidity during sampling. Dissolved lead concentrations at MWB-32S were below applicable WQS standards. Beryllium and lead exceedances at SW-2 were confirmed, but detections were within the historical range at this location and are likely related to turbidity. Dissolved oxygen was confirmed below 5 mg/L at SW-3. Acetone, 2-butanone, carbon disulfide, toluene antimony, silver, cadmium, chromium and copper were not detected during the resampling event suggesting that these exceedances were introduced by the laboratory and/or were the result of elevated turbidity. With the exception of the confirmed surface water exceedances, groundwater and surface water detections for the most recent event were generally within the historical range of concentrations observed at the Site, and are likely related to naturally occurring conditions.

Iron was the most commonly detected parameter in both groundwater and surface water. Iron has historically been detected in background/upstream and downgradient/downstream locations at concentrations exceeding SDWS and surface water quality standards. In groundwater, iron concentrations typically increase with depth. Previous monitoring reports have attributed this to geochemical processes in the deeper surficial aquifer, where insoluble ferric iron is converted to soluble ferrous iron. This process results in a shift in groundwater pH from acidic to a more neutral state (i.e., closer to 7). This is consistent with observed groundwater pH values, which are lower (i.e., more acidic) near the surface and tend to increase with depth. In surface water, iron concentrations are consistent with those observed in surrounding soils in the region and can be explained by the local vegetative cover. The other metals detected in surface water (e.g., beryllium and lead) also naturally occur in area soils, and may be correlated to turbidity.

Analyte detections and standard exceedances observed during this event for both groundwater and surface water are consistent with historical conditions and/or background water quality. Based on these findings, Golder recommends continued semi-annual detection monitoring in accordance with F.A.C. Chapter 62-701 and the Facility Permit. The next semi-annual groundwater and surface water event should be conducted prior to March 30, 2013.

8.0 PROFESSIONAL CERTIFICATION

I hereby certify that I have supervised the current field work and preparation of this report, in accordance with Chapter 62-701, Florida Solid Waste Management Facility Regulations. As a registered professional engineer, I certify that I am a qualified professional with knowledge and experience in water quality assessment. To the best of my knowledge, the information and laboratory data summarized in this report (including the applicable attachments) are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

GOLDER ASSOCIATES INC.

Kevin S. Brown, P.E.
Senior Consultant and Principal

10/11/13
Date

9.0 REFERENCES

Florida Administrative Code (F.A.C.) Rules: 62-160, 62-302, 62-520, 62-550, 62-701, and 62-711.

Florida Department of Environmental Protection, DEP-SOP-001/01

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Florida Department of Environmental Protection, Notice of Permit, September 16, 2009, Permit Number 0013493-017-SO.

HDR Engineering, Inc., October 2010, Semiannual Water Quality Monitoring Report, Trail Ridge Landfill, Operating Permit No. 0013493-017-SO.

HDR Engineering, Inc., April 2010, Semiannual Water Quality Data Report, Trail Ridge Landfill, Operating Permit No. 0013493-017-SO.

HDR Engineering, Inc., October 2009, Semiannual Water Quality Monitoring Report, Trail Ridge Landfill, Operating Permit No. 0013493-010-SC.

HDR Engineering, Inc., April 2009, Semiannual Water Quality Monitoring Report, Trail Ridge Landfill, Operating Permit No. 0013493-010-SC.

TABLES

TABLE 1
Water Level Measurements
Trail Ridge Landfill, Jacksonville, Florida
FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628

Well ID	TOC Elevation (ft MSL)	Screened Interval (ft BTOC)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
Shallow Wells				
MWB-2(S)	146.64	10.00 to 20.00	8.80	137.84
MWB-3(S)	154.38	10.00 to 20.00	8.39	145.99
MWB-7(S)	123.29	10.00 to 20.00	7.84	115.45
MWB-11(S)	120.81	9.50 to 19.50	11.53	109.28
MWB-12(S)	124.63	14.50 to 24.50	10.30	114.33
MWB-13(S)	126.05	16.56 to 26.56	12.42	113.63
MWB-17(S)	138.31	13.30 to 18.30	6.42	131.89
MWB-19(S)	127.38	10.00 to 20.00	6.82	120.56
MWB-20(S)	121.01	10.00 to 20.00	7.48	113.53
MWB-21(S)	122.84	13.00 to 18.00	10.62	112.22
MWB-22(S)	126.97	16.00 to 26.00	11.91	115.06
MWB-27(S)	128.42	10.50 to 15.50	6.10	122.32
MWB-29(S)	138.02	10.00 to 20.00	7.57	130.45
MWB-32(S)	124.64	14.90 to 19.90	8.08	116.56
MWB-33(S)	125.90	10.30 to 20.30	10.20	115.70
MWB-34(S)	125.78	13.36 to 18.36	9.34	116.44
Intermediate Wells				
MWB-2(I)	145.73	51.50 to 61.50	9.14	136.59
MWB-3(I)	151.86	52.00 to 62.00	12.58	139.28
MWB-7(I)	121.53	55.00 to 65.00	3.00	118.53
MWB-11(IR)	120.43	45.00 to 55.00	10.50	109.93
MWB-12(I)	124.62	61.50 to 71.50	6.72	117.90
MWB-13(I)	125.98	50.40 to 60.40	16.61	109.37
MWB-17(I)	138.43	50.13 to 60.13	2.69	135.74
MWB-19(I)	127.94	49.00 to 59.00	6.78	121.16
MWB-27(I)	128.63	52.50 to 62.50	4.97	123.66
MWB-29(I)	138.08	53.50 to 63.50	5.42	132.66
MWB-32(I)	124.79	54.56 to 64.56	6.37	118.42
MWB-34(I)	125.80	43.95 to 53.95	7.79	118.01
Deep Wells				
MWB-7(D)	121.65	107.00 to 117.00	0.78	120.87
MWB-12(D)	124.56	102.00 to 112.00	4.48	120.08
MWB-17(D)	138.52	117.32 to 127.32	6.61	131.91
MWB-19(D)	128.23	105.50 to 115.50	6.49	121.74
MWB-27(D)	128.88	110.00 to 110.00	5.35	123.53
MWB-29(D)	138.18	100.50 to 110.50	5.53	132.65
MWB-31(D)	156.15	119.00 to 129.00	17.20	138.95
MWB-32(D)	124.93	98.81 to 108.81	6.61	118.32
MWB-34(D)	125.92	90.78 to 100.78	7.95	117.97

Notes:

TOC - top of casing; ft BTOC - feet below top of casing; ft MSL - feet above mean sea level

Depth to water measurements collected by ProTech on July 23 and 24, 2013. Top of casing elevations based on groundwater well survey data provided in October 2010 potentiometric maps (HDR Engineering).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-2(S)b	MWB-3(S)b	MWB-7(S)c	MWB-11(S)c	MWB-12(S)c	MWB-13(S)c
Laboratory Method EPA 300.0									
Chloride	mg/L		250	**9.6**	**11**	**18**	**27**	**9.7**	**40**
Laboratory Method EPA 350.1									
Ammonia (N)	ug/L			**83**	**90**	**340**	**110**	< 26	**250**
Laboratory Method EPA 353.2 (Nitrate (N))									
Nitrate (N)	mg/L	10		**0.057**	< 0.0054	**0.099**	**0.015**	**1.2**	**0.14**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))									
Nitrate-Nitrite (N)	mg/L	10		**0.057**	< 0.01	**0.099**	**0.015 I**	**1.2**	**0.14**
Laboratory Method EPA 6020									
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**11**	**16**	**5.2**	**87**	**2.7 I**	**4.6 I**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			**0.15 I**	< 0.15	< 0.15	**0.64**	< 0.15	< 0.15
Copper	ug/L		1000	< 1.1	< 1.1	< 1.1	< 1.1	**1.1 I**	**2.4 I**
Iron	ug/L		300	**170**	**550**	**170**	**1500**	**36 I**	**150**
Lead	ug/L	15		< 0.2	< 0.2	**0.22 I**	< 0.2	< 0.2	< 0.2
Nickel	ug/L	100		< 2	< 2	< 2	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1	**15**	**3.2**
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**4800**	**5600**	**16000**	**16000**	**5200**	**21000**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8	**62**	**32**
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470									
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011									
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0056	< 0.0057	< 0.0057	< 0.0057	< 0.0056
1,2-Dibromoethane	ug/L	0.02		< 0.006	< 0.006	< 0.0061	< 0.0061	< 0.0061	< 0.006
Laboratory Method EPA 8260									
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2	< 0.2	< 0.2 J	< 0.2 J	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-17(S)c	MWB-19(S)c	MWB-20(S)c	MWB-21(S)c	MWB-22(S)c	MWB-27(S)c
Laboratory Method EPA 300.0									
Chloride	mg/L		250	**7.7**	**12**	**4.4**	**6.8**	**12**	**11**
Laboratory Method EPA 350.1									
Ammonia (N)	ug/L			**210**	**370**	**160**	**390**	**190**	**91**
Laboratory Method EPA 353.2 (Nitrate (N))									
Nitrate (N)	mg/L	10		**0.012**	< 0.0054	**0.033**	**0.015**	< 0.0054	**0.017**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))									
Nitrate-Nitrite (N)	mg/L	10		**0.012 I**	< 0.01	**0.033 I**	**0.015 I**	< 0.01	**0.017 I**
Laboratory Method EPA 6020									
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	**1.5 I**
Barium	ug/L	2000		**2.8 I**	**59**	**10**	**20**	**4.5 I**	**14**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	**3.5 I**
Cobalt	ug/L			< 0.15	**0.25 I**	< 0.15	< 0.15	< 0.15	**0.16 I**
Copper	ug/L		1000	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	**1.6 I**
Iron	ug/L		300	**140**	**1100**	**130**	**600**	**94 I**	**110**
Lead	ug/L	15		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	**0.31 I**
Nickel	ug/L	100		< 2	< 2	< 2	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**5300**	**9700**	**3100**	**3600**	**8300**	**13000**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	**6.6 I**
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470									
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011									
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0057	< 0.0057	< 0.0056	< 0.0057	< 0.0056
1,2-Dibromoethane	ug/L	0.02		< 0.0061	< 0.0061	< 0.0061	< 0.006	< 0.0061	< 0.006
Laboratory Method EPA 8260									
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2 J	< 0.2 J	< 0.2 J	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-29(S)c	MWB-32(S)d	MWB-33(S)d	MWB-34(S)d
Laboratory Method EPA 300.0							
Chloride	mg/L		250	**7.3**	**36**	**9.8**	**48**
Laboratory Method EPA 350.1							
Ammonia (N)	ug/L			**110**	**630**	**1200**	**2700**
Laboratory Method EPA 353.2 (Nitrate (N))							
Nitrate (N)	mg/L	10		< 0.0054	**0.041**	**0.014**	**0.015**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))							
Nitrate-Nitrite (N)	mg/L	10		< 0.01	**0.041 I**	**0.014 I**	**0.015 I**
Laboratory Method EPA 6020							
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**9.1**	**53**	**15**	**5.0**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			< 0.15	**0.57**	< 0.15	**0.51**
Copper	ug/L		1000	< 1.1	**1.2 I**	< 1.1	**1.7 I**
Iron	ug/L		300	**360**	**1300**	**210**	**240**
Lead	ug/L	15		< 0.2	**0.89 I**	< 0.2	< 0.2
Nickel	ug/L	100		< 2	< 2	< 2	**4.7 I**
Selenium	ug/L	50		< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**3600**	**25000**	**8100**	**57000**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	**5.0 I**	< 3.8	**7.5 I**
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	**36**
Laboratory Method EPA 7470							
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011							
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0057	< 0.0056	< 0.0057
1,2-Dibromoethane	ug/L	0.02		< 0.0061	< 0.0061	< 0.006	< 0.006
Laboratory Method EPA 8260							
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-2(S)b	MWB-3(S)b	MWB-7(S)c	MWB-11(S)c	MWB-12(S)c	MWB-13(S)c
Laboratory Method EPA 8260									
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51 J	< 0.51 J	< 0.51 J	< 0.51 J	< 0.51	< 0.51
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18 J	< 0.18 J	< 0.18	< 0.18	< 0.18	< 0.18
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21 J	< 0.21 J	< 0.21	< 0.21	< 0.21	< 0.21
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22 J	< 0.22 J	< 0.22	< 0.22	< 0.22	< 0.22
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C									
Residues- Filterable (TDS)	mg/L		500	**38**	**26**	**120**	**100**	**190**	**220**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-17(S)c	MWB-19(S)c	MWB-20(S)c	MWB-21(S)c	MWB-22(S)c	MWB-27(S)c
Laboratory Method EPA 8260									
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51 J	< 0.51 J	< 0.51 J	< 0.51 J	< 0.51	< 0.51
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18	< 0.18	< 0.18	< 0.18 J	< 0.18	< 0.18
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21 J	< 0.21	< 0.21
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22	< 0.22	< 0.22	< 0.22 J	< 0.22	< 0.22
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C									
Residues- Filterable (TDS)	mg/L		500	**80**	**54**	**52**	**52**	**170**	**88**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2A
Summary of Groundwater Analytical Results - Shallow
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-29(S)c	MWB-32(S)d	MWB-33(S)d	MWB-34(S)d
Laboratory Method EPA 8260							
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	**0.27 I**	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51	< 0.51 J	< 0.51 J	< 0.51 J
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18	< 0.18 J	< 0.18 J	< 0.18 J
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21	< 0.21 J	< 0.21 J	< 0.21 J
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22	< 0.22 J	< 0.22 J	< 0.22 J
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C							
Residues- Filterable (TDS)	mg/L		500	**20**	**140**	**120**	**440**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2B
Summary of Groundwater Analytical Results - Intermdediate
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-2(I)b	MWB-3(I)b	MWB-7(I)c	MWB-11(IR)c	MWB-12(I)c	MWB-13(I)c
Laboratory Method EPA 300.0									
Chloride	mg/L		250	**7.2**	**6.0**	**5.3**	**5.4**	**5.2**	**5.2**
Laboratory Method EPA 350.1									
Ammonia (N)	ug/L			**91**	**120**	**44 I**	**61**	**60**	**57**
Laboratory Method EPA 353.2 (Nitrate (N))									
Nitrate (N)	mg/L	10		< 0.0054	**0.014**	**0.053**	< 0.0054	**0.016**	**0.016**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))									
Nitrate-Nitrite (N)	mg/L	10		< 0.01	**0.014 I**	**0.053**	< 0.01	**0.016 I**	**0.016 I**
Laboratory Method EPA 6020									
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**22**	**28**	**48**	**42**	**49**	**31**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			**0.17 I**	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Copper	ug/L		1000	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Iron	ug/L		300	**370**	**830**	**340**	**400**	**370**	**280**
Lead	ug/L	15		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel	ug/L	100		< 2	< 2	< 2	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**4500**	**3800**	**3500**	**3400**	**3000**	**2900**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470									
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011									
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0056	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.0056
1,2-Dibromoethane	ug/L	0.02		< 0.006	< 0.006	< 0.0061	< 0.0061	< 0.0061	< 0.006
Laboratory Method EPA 8260									
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2	< 0.2	< 0.2 J	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51 J	< 0.51 J	< 0.51 J	< 0.51	< 0.51	< 0.51
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18 J	< 0.18 J	< 0.18	< 0.18	< 0.18	< 0.18
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Summary of Groundwater Analytical Results - Intermdediate
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-17(I)c	MWB-19(I)c	MWB-27(I)c	MWB-29(I)c	MWB-32(I)d	MWB-34(I)d
Laboratory Method EPA 300.0									
Chloride	mg/L		250	**4.8**	**5.2**	**5.0**	**5.9**	**5.3**	**5.5**
Laboratory Method EPA 350.1									
Ammonia (N)	ug/L			**37 I**	**45 I**	**70**	**52**	**180**	**66**
Laboratory Method EPA 353.2 (Nitrate (N))									
Nitrate (N)	mg/L	10		**0.015**	**0.014**	**0.014**	**0.015**	**0.015**	**0.015**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))									
Nitrate-Nitrite (N)	mg/L	10		**0.015 I**	**0.014 I**	**0.014 I**	**0.015 I**	**0.015 I**	**0.015 I**
Laboratory Method EPA 6020									
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**35**	**49**	**48**	**44**	**36**	**48**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	**0.095 I**	< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			< 0.15	**0.18 I**	< 0.15	< 0.15	< 0.15	< 0.15
Copper	ug/L		1000	< 1.1	< 1.1	**3.0 I**	< 1.1	< 1.1	< 1.1
Iron	ug/L		300	**330**	**420**	**440**	**410**	**330**	**430**
Lead	ug/L	15		< 0.2	**0.2 I**	< 0.2	< 0.2	**0.69 I**	< 0.2
Nickel	ug/L	100		< 2	< 2	**110**	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**3400**	**3600**	**3400**	**3900**	**3300**	**3600**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
Zinc	ug/L		5000	< 8.3	**8.4 I**	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470									
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011									
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0056	< 0.0057	< 0.0057	< 0.0057	< 0.0057
1,2-Dibromoethane	ug/L	0.02		< 0.006	< 0.006	< 0.0061	< 0.0061	< 0.0061	< 0.0061
Laboratory Method EPA 8260									
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2 J	< 0.2 J	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51 J	< 0.51 J	< 0.51	< 0.51	< 0.51 J	< 0.51 J
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18	< 0.18	< 0.18	< 0.18	< 0.18 J	< 0.18 J
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

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Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Summary of Groundwater Analytical Results - Intermdediate
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-2(I)b	MWB-3(I)b	MWB-7(I)c	MWB-11(IR)c	MWB-12(I)c	MWB-13(I)c
Laboratory Method EPA 8260									
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21 J	< 0.21 J	< 0.21	< 0.21	< 0.21	< 0.21
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22 J	< 0.22 J	< 0.22	< 0.22	< 0.22	< 0.22
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C									
Residues- Filterable (TDS)	mg/L		500	**18**	**24**	**26**	**30**	**26**	**28**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Summary of Groundwater Analytical Results - Intermdediate
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-17(I)c	MWB-19(I)c	MWB-27(I)c	MWB-29(I)c	MWB-32(I)d	MWB-34(I)d
Laboratory Method EPA 8260									
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21 J	< 0.21 J
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22	< 0.22	< 0.22	< 0.22	< 0.22 J	< 0.22 J
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C									
Residues- Filterable (TDS)	mg/L		500	**26**	**14**	**52**	**14**	**36**	**30**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

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Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2C
Summary of Groundwater Analytical Results - Deep
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-7(D)c	MWB-12(D)c	MWB-17(D)c	MWB-19(D)c	MWB-27(D)c
Laboratory Method EPA 300.0								
Chloride	mg/L		250	**4.4**	**4.4**	**6.2**	**4.6**	**5.7**
Laboratory Method EPA 350.1								
Ammonia (N)	ug/L			**150**	**150**	**140**	**100**	**78**
Laboratory Method EPA 353.2 (Nitrate (N))								
Nitrate (N)	mg/L	10		**0.015**	**0.019**	< 0.0054	**0.027**	**0.038**
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))								
Nitrate-Nitrite (N)	mg/L	10		**0.015 I**	**0.019 I**	< 0.01	**0.027 I**	**0.038 I**
Laboratory Method EPA 6020								
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**89**	**130**	**31**	**100**	**52**
Beryllium	ug/L	4		< 0.25	< 0.25	**0.26 I**	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	**0.16 I**	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Copper	ug/L		1000	< 1.1	< 1.1	**2.2 I**	< 1.1	**1.1 I**
Iron	ug/L		300	**290**	**1400**	**340**	**610**	**570**
Lead	ug/L	15		< 0.2	< 0.2	< 0.2	**0.23 I**	< 0.2
Nickel	ug/L	100		< 2	< 2	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**4600**	**5200**	**3500**	**4900**	**3200**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470								
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011								
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0057	< 0.0056	< 0.0057	< 0.0056
1,2-Dibromoethane	ug/L	0.02		< 0.0061	< 0.006	< 0.006	< 0.006	< 0.006
Laboratory Method EPA 8260								
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2 J	< 0.2	< 0.2 J	< 0.2 J	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8	< 2.8
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51 J	< 0.51	< 0.51 J	< 0.51 J	< 0.51
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

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Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Golder Associates

Table 2C
Summary of Groundwater Analytical Results - Deep
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-29(D)c	MWB-31(D)b	MWB-32(D)d	MWB-34(D)d
Laboratory Method EPA 300.0							
Chloride	mg/L		250	**6.3**	**5.5**	**5.5**	**5.2**
Laboratory Method EPA 350.1							
Ammonia (N)	ug/L			**98**	**280**	**220**	**330**
Laboratory Method EPA 353.2 (Nitrate (N))							
Nitrate (N)	mg/L	10		**0.061**	< 0.0054	**0.017**	< 0.0054
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))							
Nitrate-Nitrite (N)	mg/L	10		**0.061**	< 0.01	**0.017 I**	< 0.01
Laboratory Method EPA 6020							
Antimony	ug/L	6		< 2.3	< 2.3	< 2.3	< 2.3
Arsenic	ug/L	10		< 1.3	< 1.3	< 1.3	< 1.3
Barium	ug/L	2000		**55**	**94**	**51**	**91**
Beryllium	ug/L	4		< 0.25	< 0.25	< 0.25	< 0.25
Cadmium	ug/L	5		< 0.095	< 0.095	< 0.095	< 0.095
Chromium	ug/L	100		< 2.5	< 2.5	< 2.5	< 2.5
Cobalt	ug/L			< 0.15	< 0.15	< 0.15	< 0.15
Copper	ug/L		1000	< 1.1	< 1.1	< 1.1	< 1.1
Iron	ug/L		300	**660**	**710**	**630**	**470**
Lead	ug/L	15		< 0.2	**0.35 I**	< 0.2	< 0.2
Nickel	ug/L	100		< 2	< 2	< 2	< 2
Selenium	ug/L	50		< 1	< 1	< 1	< 1
Silver	ug/L		100	< 0.25	< 0.25	< 0.25	< 0.25
Sodium	ug/L	160000		**4000**	**6500**	**4500**	**5800**
Thallium	ug/L	2		< 0.5	< 0.5	< 0.5	< 0.5
Vanadium	ug/L			< 3.8	< 3.8	< 3.8	< 3.8
Zinc	ug/L		5000	< 8.3	< 8.3	< 8.3	< 8.3
Laboratory Method EPA 7470							
Mercury	ug/L	2		< 0.091	< 0.091	< 0.091	< 0.091
Laboratory Method EPA 8011							
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.0057	< 0.0057	< 0.0057	< 0.0056
1,2-Dibromoethane	ug/L	0.02		< 0.006	< 0.006	< 0.0061	< 0.006
Laboratory Method EPA 8260							
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
1,1,1-Trichloroethane	ug/L	200		< 0.16	< 0.16	< 0.16	< 0.16
1,1,2,2-Tetrachloroethane	ug/L			< 0.11	< 0.11	< 0.11	< 0.11
1,1,2-Trichloroethane	ug/L	5		< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2
1,1-Dichloroethene	ug/L	7		< 0.23	< 0.23	< 0.23	< 0.23
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23	< 0.23
1,2-Dibromo-3-Chloropropane	ug/L	0.2		< 0.31	< 0.31	< 0.31	< 0.31
1,2-Dibromoethane	ug/L	0.02		< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichlorobenzene	ug/L	600		< 0.14	< 0.14	< 0.14	< 0.14
1,2-Dichloroethane	ug/L	3		< 0.15	< 0.15	< 0.15	< 0.15
1,2-Dichloropropane	ug/L	5		< 0.17	< 0.17	< 0.17	< 0.17
1,4-Dichlorobenzene	ug/L	75		< 0.2	< 0.2	< 0.2	< 0.2
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6	< 2.6
2-Hexanone	ug/L			< 1	< 1	< 1	< 1
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5	< 1.5
Acetone	ug/L			< 2.8	< 2.8	< 2.8	< 2.8
Acrylonitrile	ug/L			< 3	< 3	< 3	< 3
Benzene	ug/L	1		< 0.13	< 0.13	< 0.13	**0.51 I**
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21
Bromodichloromethane	ug/L			< 0.17	< 0.17	< 0.17	< 0.17
Bromoform	ug/L			< 0.18	< 0.18	< 0.18	< 0.18
Bromomethane	ug/L			< 0.51	< 0.51 J	< 0.51 J	< 0.51 J
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23	< 0.23
Carbon tetrachloride	ug/L	3		< 0.18	< 0.18 J	< 0.18 J	< 0.18 J
Chlorobenzene	ug/L	100		< 0.13	< 0.13	< 0.13	< 0.13
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33	< 0.33
Chloroform	ug/L			< 0.12	< 0.12	< 0.12	< 0.12
Chloromethane	ug/L			< 0.18	< 0.18	< 0.18	< 0.18
cis-1,2-Dichloroethene	ug/L	70		< 0.21	< 0.21	< 0.21	< 0.21

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 2C
Summary of Groundwater Analytical Results - Deep
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-7(D)c	MWB-12(D)c	MWB-17(D)c	MWB-19(D)c	MWB-27(D)c
Laboratory Method EPA 8260								
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22	< 0.22	< 0.22	< 0.22	< 0.22
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C								
Residues- Filterable (TDS)	mg/L		500	**180**	**210**	**44**	**170**	**66**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

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Table 2C
Summary of Groundwater Analytical Results - Deep
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	MCL	SMCL	MWB-29(D)c	MWB-31(D)b	MWB-32(D)d	MWB-34(D)d
Laboratory Method EPA 8260							
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
Dibromochloromethane	ug/L			< 0.15	< 0.15	< 0.15	< 0.15
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2	< 0.2
Ethylbenzene	ug/L	700		< 0.16	< 0.16	< 0.16	< 0.16
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13	< 0.13
Methylene chloride	ug/L	5		< 0.21	< 0.21	< 0.21	< 0.21
Styrene	ug/L	100		< 0.12	< 0.12	< 0.12	< 0.12
Tetrachloroethene	ug/L	3		< 0.19	< 0.19	< 0.19	< 0.19
Toluene	ug/L	1000		< 0.14	< 0.14	< 0.14	**0.95 I**
trans-1,2-Dichloroethene	ug/L	100		< 0.26	< 0.26	< 0.26	< 0.26
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14	< 0.14
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43	< 0.43
Trichloroethene	ug/L	3		< 0.16	< 0.16	< 0.16	< 0.16
Trichlorofluoromethane	ug/L			< 0.21	< 0.21 J	< 0.21 J	< 0.21 J
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38	< 0.38
Vinyl chloride	ug/L	1		< 0.22	< 0.22 J	< 0.22 J	< 0.22 J
Xylenes, Total	ug/L	10000		< 0.44	< 0.44	< 0.44	< 0.44
Laboratory Method SM18 2540 C							
Residues- Filterable (TDS)	mg/L		500	**24**	**220**	**86**	**220**

Notes:

ug/L - micrograms per liter; mg/L - milligrams per liter

MCL - Maximum Contaminant Level; SMCL - Secondary Contaminant Level (FDEP Chapter 62-550)

I - result is qualified because the detection was between method detection limits and practical quantitation limits; J - Approximate value.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Table 3
Summary of Surface Water Analytical Results
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	ClassI WQS	ClassIII WQS	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3
Laboratory Method EPA 1631				July 2013 Sampling Event			September 2013 Resampling		
Mercury	ug/L	0.012	0.012	< 0.001	< 0.001	< 0.001			
Laboratory Method EPA 353.2 (Nitrate (N))									
Nitrate (N)	mg/L	10		**0.019**	**0.074**	**0.092**			
Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))									
Nitrate-Nitrite (N)	mg/L			**0.019 I**	**0.074**	**0.13**			
Laboratory Method EPA 365.4									
Phosphorus- Total	mg/L			**0.079 I**	< 0.041	**0.060 I**			
Laboratory Method EPA 6020									
Antimony	ug/L	14	4300	< 2.3	< 2.3	< 2.3			
Arsenic	ug/L	10	50	< 1.3	< 1.3	**1.9 I**			
Barium	ug/L	1000		**53**	**94**	**42**			
Beryllium	ug/L	0.0077	0.13	< 0.25	**0.63**	< 0.25		**0.62**	
Cadmium	ug/L	Calc	Calc	< 0.095	< 0.095	**1.2**			<0.095
Chromium	ug/L	Calc	Calc	**2.6 I**	< 2.5	< 2.5			
Cobalt	ug/L			**0.56**	**0.20 I**	**0.19 I**			
Copper	ug/L	Calc	Calc	**1.9 I**	< 1.1	**56**			**2.5 I**
Iron	ug/L	1000	1000	**2800**	**1100**	**490**	**3000**	**580**	
Lead	ug/L	Calc	Calc	**2.7**	**0.38 I**	**3.4**	**2.5**		
Nickel	ug/L	Calc	Calc	**2.4 I**	< 2	**7.5**			
Selenium	ug/L	5	5	< 1	< 1	**1.1 I**			
Silver	ug/L	0.07	0.07	< 0.25	< 0.25	< 0.25			
Thallium	ug/L	1.7	6.3	< 0.5	< 0.5	< 0.5			
Vanadium	ug/L			< 3.8	**4.3 I**	**3.9 I**			
Zinc	ug/L	Calc	Calc	**16 I**	< 8.3	< 8.3			
Laboratory Method EPA 8011									
1,2-Dibromo-3-Chloropropane	ug/L			< 0.0057	< 0.0057	< 0.0057			
1,2-Dibromoethane	ug/L			< 0.0061	< 0.0061	< 0.0061			
Laboratory Method EPA 8260									
1,1,1,2-Tetrachloroethane	ug/L			< 0.14	< 0.14	< 0.14			
1,1,1-Trichloroethane	ug/L			< 0.16	< 0.16	< 0.16			
1,1,2,2-Tetrachloroethane	ug/L	0.17	10.8	< 0.11	< 0.11	< 0.11			
1,1,2-Trichloroethane	ug/L			< 0.2	< 0.2	< 0.2			
1,1-Dichloroethane	ug/L			< 0.2	< 0.2	< 0.2			
1,1-Dichloroethene	ug/L	7	3.2	< 0.23	< 0.23	< 0.23			
1,2,3-Trichloropropane	ug/L			< 0.23	< 0.23	< 0.23			
1,2-Dibromo-3-Chloropropane	ug/L			< 0.31	< 0.31	< 0.31			
1,2-Dibromoethane	ug/L			< 0.15	< 0.15	< 0.15			
1,2-Dichlorobenzene	ug/L			< 0.14	< 0.14	< 0.14			
1,2-Dichloroethane	ug/L			< 0.15	< 0.15	< 0.15			
1,2-Dichloropropane	ug/L			< 0.17	< 0.17	< 0.17			
1,4-Dichlorobenzene	ug/L			< 0.2	< 0.2	< 0.2			
2-Butanone	ug/L			< 2.6	< 2.6	< 2.6			
2-Hexanone	ug/L			< 1	< 1	< 1			
4-Methyl-2-pentanone	ug/L			< 1.5	< 1.5	< 1.5			
Acetone	ug/L			< 2.8	< 2.8	< 2.8			
Acrylonitrile	ug/L			< 3	< 3	< 3			
Benzene	ug/L	1.18	71.28	< 0.13	< 0.13	< 0.13			
Bromochloromethane	ug/L			< 0.21	< 0.21	< 0.21			
Bromodichloromethane	ug/L	0.27	22	< 0.17	< 0.17	< 0.17			
Bromoform	ug/L	4.3	360	< 0.18	< 0.18	< 0.18			
Bromomethane	ug/L			< 0.51 J	< 0.51 J	< 0.51 J			
Carbon disulfide	ug/L			< 0.23	< 0.23	< 0.23			
Carbon tetrachloride	ug/L	3	4.42	< 0.18 J	< 0.18 J	< 0.18 J			
Chlorobenzene	ug/L			< 0.13	< 0.13	< 0.13			
Chloroethane	ug/L			< 0.33	< 0.33	< 0.33			
Chloroform	ug/L	5.67	470.8	< 0.12	< 0.12	< 0.12			
Chloromethane	ug/L	5.67	470.8	< 0.18	< 0.18	< 0.18			
cis-1,2-Dichloroethene	ug/L			< 0.21	< 0.21	< 0.21			
cis-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14			

Notes:

ug/l = micrograms per liter; mg/l = milligrams per liter; J = Estimated value; B = Results based on count outside range; I = Reported value between method detection limit and practical quantitation limit

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

Bold values indicate detections above the associated reporting limit

WQS = Water Quality Standard, Class I (potable) and Class III (freshwater) (FDEP Chapter 62-302)

Underlined values indicate a WQS exceedance.

Table 3
Summary of Surface Water Analytical Results
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Unit	ClassI WQS	ClassIII WQS	SW-1	SW-2	SW-3	SW-1	SW-2	SW-3
Laboratory Method EPA 8260									
Dibromochloromethane	ug/L	0.41	34	< 0.15	< 0.15	< 0.15			
Dibromomethane	ug/L			< 0.2	< 0.2	< 0.2			
Ethylbenzene	ug/L			< 0.16	< 0.16	< 0.16			
Iodomethane	ug/L			< 0.13	< 0.13	< 0.13			
Methylene chloride	ug/L	4.65	1580	< 0.21	< 0.21	< 0.21			
Styrene	ug/L			< 0.12	< 0.12	< 0.12			
Tetrachloroethene	ug/L	3	8.85	< 0.19	< 0.19	< 0.19			
Toluene	ug/L			< 0.14	< 0.14	< 0.14			
trans-1,2-Dichloroethene	ug/L			< 0.26	< 0.26	< 0.26			
trans-1,3-Dichloropropene	ug/L			< 0.14	< 0.14	< 0.14			
trans-1,4-Dichloro-2-butene	ug/L			< 0.43	< 0.43	< 0.43			
Trichloroethene	ug/L	3	80.7	< 0.16	< 0.16	< 0.16			
Trichlorofluoromethane	ug/L			< 0.21 J	< 0.21 J	< 0.21 J			
Vinyl acetate	ug/L			< 0.38	< 0.38	< 0.38			
Vinyl chloride	ug/L			< 0.22 J	< 0.22 J	< 0.22 J			
Xylenes, Total	ug/L			< 0.44	< 0.44	< 0.44			
Laboratory Method FDEP DEP-SOP									
Ammonia- Un-ionized (NH3)	ug/L	20	20	< 0.28	< 0.28	**3.0**			
Laboratory Method SM18 10200 H									
Chlorophyll a	ug/L			**1.1**	**0.53**	**6.9**			
Laboratory Method SM18 2340 B									
Hardness- Calculated	mg/L			**19**	**10**	**140**			
Laboratory Method SM18 2540 C									
Residues- Filterable (TDS)	mg/L			**200**	**84**	**250**			
Laboratory Method SM18 2540 D									
Residues- Nonfilterable (TSS)	mg/L			**3.6**	**16**	**22**			
Laboratory Method SM18 4500-P F									
Orthophosphate (P)	mg/L			**0.0035 I**	**0.010**	**0.0096 I**			
Laboratory Method SM18 5210 B									
BOD	mg/L			< 6	< 6	< 6			
Laboratory Method SM18 5220 D									
Chemical Oxygen Demand	mg/L			**150**	**77**	**54**			
Laboratory Method SM18 5310 C									
Carbon- Total Organic	mg/L			**53**	**22**	**17**			
Laboratory Method SM18 9222 D (MF)									
Coliform Fecal	CFU/100 mL	800	800	**520**	**825 B**	**510**		**108**	
Laboratory Method Total Nitrogen									
Nitrogen- Total	mg/L			**1.1**	**0.96**	**1.6**			

Notes:

ug/l = micrograms per liter; mg/l = milligrams per liter; J = Estimated value; B = Results based on count outside range; I = Reported value between method detection limit and practical quantitation limit

Calc. indicates standard calculated based on sample hardness (see Table 5 for calculated values and comparison).

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WQS = Water Quality Standard, Class I (potable) and Class III (freshwater) (FDEP Chapter 62-302)

Underlined values indicate a WQS exceedance.

TABLE 4
Groundwater and Surface Water Field Parameter Summary
Trail Ridge Landfill, Jacksonville, Florida

Well ID	pH (SU)	Dissolved Oxygen (mg/L)	Specific Conductivity (uS/cm)	Temperature (°C)	Turbidity (NTU)	Color (by observation)	Sheen
Drinking Water SMCL:	6.5 to 8.5	--	--	--	--	--	--
Surface Water Class I/III :	Vary 1 Unit[1]	<5.0	1,275 or 50%	--	29 > BG	--	--
Shallow Wells							
MWB-2(S)	4.31	0.8	61	23.9	2.08	None	None
MWB-3(S)	4.78	0.7	67	22.8	0.59	None	None
MWB-7(S)	4.98	0.0	190	26.1	13.6	Brown Tint	None
MWB-11(S)	3.90	0.0	210	23.4	5.57	None	None
MWB-12(S)	5.65	0.5	246	24.4	21.89	Brown Tint	None
MWB-13(S)	5.76	0.6	367	25.4	10.84	Brown Tint	None
MWB-17(S)	5.98	0.0	111	25.7	17.9	Brown Tint	None
MWB-19(S)	4.70	0.0	114	25.2	6.88	Brown Tint	None
MWB-20(S)	4.16	0.0	55	25.7	5.64	Tan Tint	None
MWB-21(S)	5.09	0.0	59	24.7	2.73	None	None
MWB-22(S)	5.86	0.3	247	24.8	3.90	Yellow Tint	None
MWB-27(S)	5.26	0.0	102	23.3	24.97	Brown Tint	None
MWB-29(S)	4.37	0.2	37	25.1	1.88	None	None
MWB-32(S)	5.08	0.3	252	22.5	12.19	Brown Tint	None
MWB-33(S)	5.26	0.2	185	24.4	2.63	None	None
MWB-34(S)	6.06	0.1	736	24.7	2.07	Yellow Tint	None
Intermediate Wells							
MWB-2(I)	4.62	0.5	40	21.8	3.89	None	None
MWB-3(I)	5.18	0.0	40	23.1	1.18	None	None
MWB-7(I)	4.91	0.0	43	24.5	2.74	None	None
MWB-11(IR)	4.54	0.0	38	24.3	4.45	None	None
MWB-12(I)	5.22	0.2	40	25.5	3.24	None	None
MWB-13(I)	5.13	0.2	36	25.4	4.12	None	None
MWB-17(I)	4.88	0.0	33	24.1	1.23	None	None
MWB-19(I)	4.50	0.0	35	25.1	4.29	None	None
MWB-27(I)	5.38	0.1	47	21.5	5.62	None	None
MWB-29(I)	5.08	0.4	34	22.8	8.27	None	None
MWB-32(I)	5.24	0.1	41	21.5	28.99	White Tint	None
MWB-34(I)	5.27	0.1	40	25.4	4.03	None	None
Deep Wells							
MWB-7(D)	6.65	0.0	356	25.2	1.43	None	None
MWB-12(D)	7.01	0.0	380	24.8	4.22	None	None
MWB-17(D)	5.35	0.0	54	24.2	0.67	None	None
MWB-19(D)	6.73	0.0	378	24.4	14.5	Brown Tint	None
MWB-27(D)	5.93	0.1	85	21.7	1.40	None	None
MWB-29(D)	5.46	0.0	60	22.8	1.86	None	None
MWB-31(D)	6.36	0.0	383	21.9	8.52	None	None
MWB-32(D)	5.96	0.2	131	21.6	2.40	None	None
MWB-34(D)	7.08	0.0	361	23.7	2.00	None	None
Surface Water July 2013 Event							
SW-1	4.09	5.3	112	24.2	4.52	Yellow to Brown Tint	None
SW-2	4.14	5.9	73	21.8	13.68	Tan Tint	None
SW-3	6.94	4.8	370	27.7	13.71	Yellow Tint	None
Surface Water September 2013 Resampling Event							
SW-1	3.93	5.4	87	24.5	9.13	Yellow Tint	None
SW-2	3.81	5.3	86	23.5	5.23	Yellow Tint	None
SW-3	7.18	5.0	332	28.3	87.13	Yellow Tint	None

Notes:

SU - standard units; mg/L - milligrams per liter; uS/cm - microSiemens per centimeter ; NTU - nephelometric turbidity unit; BG - background level
SMCL - secondary maximum contaminant level drinking water standard provided in F.A.C. Chapter 62-550
Class I and III surface water quality standards provided in F.A.C. Chapter 62-302
Underlined values indicate a WQS exceedance.
Measurements collected by ProTech in July 2013.

Golder Associates

TABLE 5
Surface Water Quality Standard Calculations
Trail Ridge Landfill, Jacksonville, Florida

Parameter	Units	WQS Class I & Class III	SW-1		SW-2		SW-3		
			19 (25*)		10 (25*)		140		Total Hardness [1]
			3.22		3.22		4.94		lnH [2]
			Result	Standard	Result	Standard	Result	Standard	
Cadmium	ug/L	Measured ≤ $e^{(0.7409[lnH]-4.719)}$	<0.095	0.1	<0.095	0.10	**1.2**	0.3	
Chromium	ug/L	Measured ≤ $e^{(0.819[lnH]+0.6848)}$	**2.6 I**	27.7	<2.5	27.7	<2.5	113.5	
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	**1.9 I**	2.9	<1.1	2.9	**56**	12.4	
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	**2.7**	0.5	**0.38 I**	0.5	**3.4**	4.9	
Nickel	ug/L	Measured ≤ $e^{(0.846[lnH]+0.0584)}$	**2.4 I**	16.1	<2	16.1	**7.5**	69.3	
Zinc	ug/L	Measured ≤ $e^{(0.8473[lnH]+0.884)}$	**16 I**	37.0	<8.3	37.0	<8.3	159.3	

September 2013 Resampling Event*

Parameter	Units	WQS Class I & Class III	SW-1		SW-2		SW-3		
			10 (25*)		--		150		Total Hardness [1]
			3.22		--		5.01		lnH [2]
			Result	Standard	Result	Standard	Result	Standard	
Cadmium	ug/L	Measured ≤ $e^{(0.7409[lnH]-4.719)}$	--	--	--	--	<0.095	0.4	
Copper	ug/L	Measured ≤ $e^{(0.8545[lnH]-1.702)}$	**--**	**--**	--	--	**2.5 I**	13.2	
Lead	ug/L	Measured ≤ $e^{(1.273[lnH]- 4.705)}$	**2.5**	0.5	--	--	--	--	

Notes:

ug/L - micrograms per liter

WQS - Water Quality Standard, Class I (potable), Class III (freshwater) provided in FDEP Chapter 62-302

*- According to FDEP Rule 62-302.530, if H is less than 25 then 25 shall be used in the calculations.

[1] - Total mesured total hardness (H) is reported in milligrams/L of CaCO3 in the Test America laboratory report.

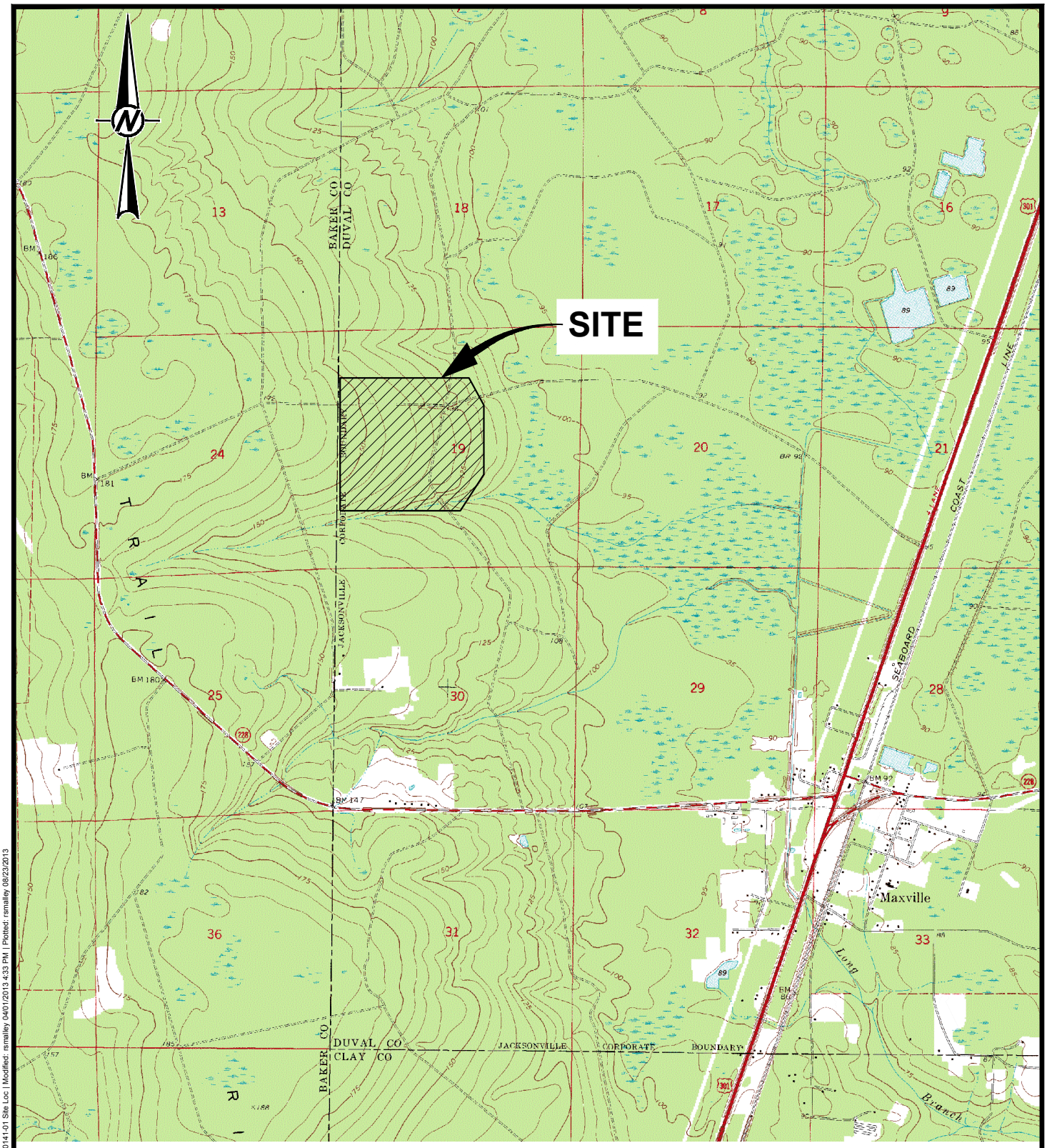
[2] - "ln H" means the natural logarithm of total hardness expressed as milligrams/L of CaCO3.

I - result is qualified because the detection was between method detection limits and practical quantitation limits.

Bold values indicate detections above the laboratory detection limit; Underlined values indicate a WQS exceedance.

Golder Associates

FIGURES



REFERENCES

USGS 7.5 MINUTE QUADRANGLE; MAXVILLE, FL 1970 (PHOTOINSPECTED 1984).

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COA No. 1670

0 1500 3000 4500
SCALE FEET

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW

PROJECT
WASTE MANAGEMENT
TRAIL RIDGE LANDFILL / JACKSONVILLE, FL

TITLE
SITE LOCATION

Golder Associates

PROJECT No.		11390141	FILE No.	11390141-01 Site Loc
DESIGN	-	2013-08-23	SCALE	AS SHOWN
CADD	RJC	2013-08-23	FIGURE	1
CHECK	MJS	2013-08-23		
REVIEW	KSB	2013-08-23		

G:\Waste Management\11390141 Trail Ridge\11390141-01 Site Loc.dwg | Layout: 11390141-01 Site Loc | Modified: rsmalley 04/01/2013 4:33 PM | Plotted: rsmalley 08/23/2013

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E 327,000
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SW-2
MWB-17(S)
MWB-17(I)
MWB-17(D)
MWB-19(S)
MWB-19(I)
MWB-19(D)
MWB-7(S)
MWB-7(I)
MWB-7(D)
RETENTION POND
MWB-20(S)
MWB-3(I)
MWB-3(S)
SW-1
LEACHATE CONTAINMENT AREA
MWB-11(IR)
MWB-11(S)
MWB-21(S)
STORAGE
STORAGE PILE
STORAGE AREA
MWB-12(S)
MWB-12(D)
MWB-12(I)
EXISTING DISPERSION POND
MWB-22(S)
MWB-31(D)
MWB-13(S)
MWB-13(I)
SW-3
MWB-34(S)
MWB-34(I)
MWB-34(D)
MWB-33(S)
EXISTING STORMWATER POND
MWB-32(D)
MWB-32(I)
MWB-32(S)
MWB-27(I)
MWB-27(S)
MWB-27(D)
MWB-29(D)
MWB-29(I)
MWB-29(S)
MWB-2(S)
MWB-2(I)

0 200 400 600
SCALE FEET

LEGEND

——— - - ———	PHASE BOUNDARY
⊕ MWB-2(S)	SHALLOW MONITORING WELL
◒ MWB-2(I)	INTERMEDIATE MONITORING WELL
● MWB-7(D)	DEEP MONITORING WELL
▲ SW-1	SURFACE WATER MONITORING POINT

REFERENCES

1. BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.

2. MONITORING WELLS, SURFACE WATER MONITORING POINTS AND SITE FEATURES FROM GROUNDWATER CONTOUR MAPS BY HDR ENGINEERING, INC., DATED 07/20/10.

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COA No. 1670

PROJECT
WASTE MANAGEMENT
TRAIL RIDGE LANDFILL / JACKSONVILLE, FL

TITLE
SITE LAYOUT AND SAMPLING LOCATIONS

PROJECT No.		11390141	FILE No	11390141-02 Site-Sample Loc
DESIGN	-	2013-08-23	SCALE	AS SHOWN
CADD	RJC	2013-08-23	FIGURE	
CHECK	MJS	2013-08-23		2
REVIEW	KSB	2013-08-23		

Golder Associates

G:\Waste Management\11390141 Trail Ridge\11390141-02 Site-Sample Loc.dwg | Layout: 11390141-02 Site-Sample Locations | Modified: rsmalley 04/01/2013 4:33 PM | Plotted: rsmalley 08/23/2013

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SW-2
SW-1
SW-3

MWB-17(S) 131.89
MWB-19(S) 120.56
MWB-7(S) 115.45
MWB-20(S) 113.53
MWB-3(S) 145.99
MWB-11(S) 109.28
MWB-21(S) 112.22
MWB-12(S) 114.33
MWB-22(S) 115.06
MWB-13(S) 113.63
MWB-34(S) 116.44
MWB-33(S) 115.70
MWB-32(S) 116.56
MWB-27(S) 122.32
MWB-29(S) 130.45
MWB-2(S) 137.84

RETENTION POND
LEACHATE CONTAINMENT AREA
EXISTING DISPERSION POND
EXISTING STORMWATER POND
STORAGE AREA
STORAGE PILE

LEGEND

PHASE BOUNDARY	
MWB-2(S)	SHALLOW MONITORING WELL
SW-1	SURFACE WATER MONITORING POINT
	POTENTIOMETRIC CONTOUR (FT. MSL)
112.22	GROUNDWATER ELEVATION (FT. MSL)

NOTES

1. WATER LEVELS MEASURED BY PROTECH ON JULY 23, 2013.

REFERENCES

1. BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.

2. MONITORING WELLS, SURFACE WATER MONITORING POINTS AND SITE FEATURES FROM GROUNDWATER CONTOUR MAPS BY HDR ENGINEERING, INC., DATED 07/20/10.

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COA No. 1670

0 200 400 600
SCALE FEET

PROJECT
WASTE MANAGEMENT
TRAIL RIDGE LANDFILL / JACKSONVILLE, FL

TITLE
JULY 2013
SHALLOW SURFICIAL AQUIFER
POTENTIOMETRIC MAP

PROJECT No.		11390141	FILE No.	11390141-03 Shallow 2013-07
DESIGN	SSG	2013-08-23	SCALE	AS SHOWN
CADD	RJC	2013-08-23	FIGURE	3
CHECK	MJS	2013-08-23		
REVIEW	KSB	2013-08-23		

G:\Waste Management\11390141 Trail Ridge\Semi-Annual Pot Maps\2013-07\11390141-03 Shallow 2013-07.dwg | Layout: 11390141-03 Shallow 2013-07 | Modified: rsmalley 08/27/2013 11:05 AM | Plotted: rsmalley 08/27/2013

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E 329,000

SW-2

SW-1

SW-3

MWB-17(I)
135.74

MWB-19(I)
121.16

MWB-7(I)
118.53

MWB-3(I)
139.28

MWB-11(IR)
109.93

MWB-12(I)
117.90

MWB-13(I)
109.37

MWB-34(I)
118.01

MWB-32(I)
118.42

MWB-29(I)
132.66

MWB-27(I)
123.66

MWB-2(I)
136.59

135

130

125

120

115

110

110

RETENTION POND

LEACHATE CONTAINMENT AREA

EXISTING DISPERSION POND

EXISTING STORMWATER POND

STORAGE AREA

STORAGE PILE

STORAGE

0 200 400 600
SCALE FEET

LEGEND

PHASE BOUNDARY	
MWB-2(I)	INTERMEDIATE MONITORING WELL
SW-1	SURFACE WATER MONITORING POINT
POTENTIOMETRIC CONTOUR (FT. MSL)	
109.37	GROUNDWATER ELEVATION (FT. MSL)

NOTES

1. WATER LEVELS MEASURED BY PROTECH ON JULY 23, 2013.

REFERENCES

1. BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.

2. MONITORING WELLS, SURFACE WATER MONITORING POINTS AND SITE FEATURES FROM GROUNDWATER CONTOUR MAPS BY HDR ENGINEERING, INC., DATED 07/20/10.

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PROJECT
WASTE MANAGEMENT
TRAIL RIDGE LANDFILL / JACKSONVILLE, FL

TITLE
JULY 2013
INTERMEDIATE SURFICIAL AQUIFER POTENTIOMETRIC MAP

PROJECT No.		11390141	FILE No.	11390141-04 Intermediate 2013-07
DESIGN	SSG	2013-08-23	SCALE	AS SHOWN
CADD	RJC	2013-08-23	FIGURE	4
CHECK	MJS	2013-08-23		
REVIEW	KSB	2013-08-23		

G:\Waste Management\11390141 Trail Ridge\Semi-Annual Pot Maps\2013-07\11390141-04 Intermediate 2013-07.dwg | Layout: 11390141-04 Intermediate 2013-07 | Modified: rsmalley 08/27/2013 11:07 AM | Plotted: rsmalley 08/27/2013

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E 329,000

MWB-17(D)
131.91
MWB-19(D)
121.74
MWB-7(D)
120.87
SW-2
RETENTION POND
LEACHATE CONTAINMENT AREA
SW-1
MWB-12(D)
120.08
EXISTING DISPERSION POND
SW-3
MWB-31(D)
138.95
MWB-34(D)
117.97
EXISTING STORMWATER POND
MWB-32(D)
118.32
MWB-29(D)
132.65
MWB-27(D)
123.53
STORAGE AREA
STORAGE
STORAGE PILE

135
130
125
120

0 200 400 600
SCALE FEET

LEGEND

——— - - - ———	PHASE BOUNDARY
● MWB-7(D)	DEEP MONITORING WELL
▲ SW-1	SURFACE WATER MONITORING POINT
— — — — —	POTENTIOMETRIC CONTOUR (FT. MSL)
117.55	GROUNDWATER ELEVATION (FT. MSL)

NOTES

1. WATER LEVELS MEASURED BY PROTECH ON JULY 23, 2013.

REFERENCES

1. BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.

2. MONITORING WELLS, SURFACE WATER MONITORING POINTS AND SITE FEATURES FROM GROUNDWATER CONTOUR MAPS BY HDR ENGINEERING, INC., DATED 07/20/10.

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COA No. 1670

PROJECT
WASTE MANAGEMENT
TRAIL RIDGE LANDFILL / JACKSONVILLE, FL

TITLE
JULY 2013
DEEP SURFICIAL AQUIFER
POTENTIOMETRIC MAP

PROJECT No.		11390141	FILE No.	11390141-05 Deep 2013-07
DESIGN	SSG	2013-08-23	SCALE	AS SHOWN
CADD	RJC	2013-08-23	FIGURE	
CHECK	MJS	2013-08-23		5
REVIEW	KSB	2013-08-23		

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APPENDIX A
INSTRUMENT CALIBRATION FIELD RECORDS

WELL CONDITION SUMMARY

Site: TRAIL RIDGE Personnel: DAN ARMOUR/BEN RAMJEAWAN

Date: 7-23-13 Page 1 of 4

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MWB2S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB2I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB3OS	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB29S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB29I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB29D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB27S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB27I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB27D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB13S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to site manager and/or Complaince Manager/Engineer

WELL CONDITION SUMMARY

Site: TRAIL RIDGE Personnel: DAN ARMOUR/BEN RAMJEAWAN

Date: 7-23-13 Page 2 of 4

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations*
MWB13I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB17S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB17I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB17D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB35	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB3I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB31D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB34S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB34I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB34D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to site manager and/or Complaince Manager/Engineer

WELL CONDITION SUMMARY

Site: TRAIL RIDGE Personnel: DAN ARMOUR/BEN RAMJEAWAN

Date: 7-23-13 Page 3 of 4

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations*
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MWB7S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB7I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB7D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB19S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB19I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB19D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB32S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB32I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB32D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to site manager and/or Complaince Manager/Engineer

WELL CONDITION SUMMARY

Site: TRAIL RIDGE Personnel: DAN ARMOUR/BEN RAMJEAWAN

Date: 7-23-13 Page 4 of 4

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations*
MWB33S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	CRACK IN CONCRETE PAD
MWB21S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB12S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB12I	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB12D	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB11I (R)	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB11S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MWB22S	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	CRACK IN CONCRETE PAD
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to site manager and/or Complaince Manager/Engineer

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 **INSTRUMENT #** 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A PINE ENVIRONMENTAL 7.01 (STD) EXP: 03/2014
Standard B PINE ENVIRONMENTAL 4.01 (STD) EXP: 03/2014
Standard C PINE ENVIRONMENTAL 10.01 (STD) EXP: 03/2014

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	7.01	AUTO CAL	-	YES	INIT	BA
"	"	B	4.01	"	-	YES	INIT	BA
"	"	C	10.01	"	-	YES	INIT	BA
13/07/24	0600	A	7.01	AUTO CAL	-	YES	CONT	BA
"	"	B	4.01	"	-	YES	CONT	BA
"	"	C	10.01	"	-	YES	CONT	BA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 08103272

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 84 $^{uM}/_{um}$ PINE ENVIRONMENTAL EXP: 10/2013 LOT # 2AJ359

Standard B 1413 $^{uM}/_{um}$ PINE ENVIRONMENTAL EXP: 10/2017 LOT # 5102

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	84	AUTO CAL	-	YES	INIT	BR
"	"	B	1413	"	-	YES	INIT	BR
13/07/24	0600	A	84	AUTO CAL	-	YES	CONT	BR
"	"	B	1413	"	-	YES	CONT	BR

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HI 9828 INSTRUMENT # 08103272

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A SATURATED AIR

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:mi)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/23	0600	A	100% SAT	100%	-	YES	INIT	BK
13/07/24	0600	A	100% SAT	100%	-	YES	CONT	BK

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 2007 10329

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC LOT# 11014 EXP: OCT 2013

Standard B 10.0 NTU HF SCIENTIFIC LOT# 11013 EXP: OCT 2013

Standard C 0.02 NTU HF SCIENTIFIC LOT# 11004 EXP: OCT 2013

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	1000	AUTO CAL	-	YES	INIT	BR
"	"	B	10.0	"	-	YES	INIT	BR
"	"	C	0.02	"	-	YES	INIT	BR
13/07/24	0600	A	1000	AUTO CAL	-	YES	CONT	BR
"	"	B	10.0	"	-	YES	CONT	BR
"	"	C	0.02	"	-	YES	CONT	BR

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 108080

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC LOT# 11014 EXP: OCT 2013
Standard B 10.0 NTU HF SCIENTIFIC LOT# 11013 EXP: OCT 2013
Standard C 0.02 NTU HF SCIENTIFIC LOT# 11004 EXP: OCT 2013

DATE (yy/mm/dd)	TIME (hr:mi)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/07/23	0600	A	1000	AUTOCAL	-	YES	INIT	DA
"	"	B	10.0	"	-	YES	INIT	DA
"	"	C	0.02	"	-	YES	INIT	DA
13/07/24	0600	A	1000	AUTOCAL	-	YES	CONT	DA
"	"	B	10.0	"	-	YES	CONT	DA
"	"	C	0.02	"	-	YES	CONT	DA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 08103272

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A PINE ENVIRONMENTAL 7.01 (STD) EXP: 03/2014

Standard B PINE ENVIRONMENTAL 4.01 (STD) EXP: 03/2014

Standard C PINE ENVIRONMENTAL 10.01 (STD) EXP: 03/2014

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	7.01	AUTO CAL	-	YES	INIT	DA
"	"	B	4.01	"	-	Yes	INIT	DA
"	"	C	10.01	"	-	YES	INIT	DA
13/07/24	0600	A	7.01	AUTO CAL	-	Yes	CONT	DA
|	|	B	4.01	|	-	Yes	CONT	DA
|	|	C	10.01	|	-	YES	CONT	DA

Table FS 2200-2
Dissolved Oxygen Saturation

TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L
deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%
15.0	10.084	2.017	19.0	9.276	1.855	23.0	8.578	1.716	27.0	7.968	1.594
15.1	10.062	2.012	19.1	9.258	1.852	23.1	8.562	1.712	27.1	7.954	1.591
15.2	10.040	2.008	19.2	9.239	1.848	23.2	8.546	1.709	27.2	7.940	1.588
15.3	10.019	2.004	19.3	9.220	1.844	23.3	8.530	1.706	27.3	7.926	1.585
15.4	9.997	1.999	19.4	9.202	1.840	23.4	8.514	1.703	27.4	7.912	1.582
15.5	9.976	1.995	19.5	9.184	1.837	23.5	8.498	1.700	27.5	7.898	1.580
15.6	9.955	1.991	19.6	9.165	1.833	23.6	8.482	1.696	27.6	7.884	1.577
15.7	9.934	1.987	19.7	9.147	1.829	23.7	8.466	1.693	27.7	7.870	1.574
15.8	9.912	1.982	19.8	9.129	1.826	23.8	8.450	1.690	27.8	7.856	1.571
15.9	9.891	1.978	19.9	9.111	1.822	23.9	8.434	1.687	27.9	7.842	1.568
16.0	9.870	1.974	20.0	9.092	1.818	24.0	8.418	1.684	28.0	7.828	1.566
16.1	9.849	1.970	20.1	9.074	1.815	24.1	8.403	1.681	28.1	7.814	1.563
16.2	9.829	1.966	20.2	9.056	1.811	24.2	8.387	1.677	28.2	7.800	1.560
16.3	9.808	1.962	20.3	9.039	1.808	24.3	8.371	1.674	28.3	7.786	1.557
16.4	9.787	1.957	20.4	9.021	1.804	24.4	8.356	1.671	28.4	7.773	1.555
16.5	9.767	1.953	20.5	9.003	1.801	24.5	8.340	1.668	28.5	7.759	1.552
16.6	9.746	1.949	20.6	8.985	1.797	24.6	8.325	1.665	28.6	7.745	1.549
16.7	9.726	1.945	20.7	8.968	1.794	24.7	8.309	1.662	28.7	7.732	1.546
16.8	9.705	1.941	20.8	8.950	1.790	24.8	8.294	1.659	28.8	7.718	1.544
16.9	9.685	1.937	20.9	8.932	1.786	24.9	8.279	1.656	28.9	7.705	1.541
17.0	9.665	1.933	21.0	8.915	1.783	25.0	8.263	1.653	29.0	7.691	1.538
17.1	9.645	1.929	21.1	8.898	1.780	25.1	8.248	1.650	29.1	7.678	1.536
17.2	9.625	1.925	21.2	8.880	1.776	25.2	8.233	1.647	29.2	7.664	1.533
17.3	9.605	1.921	21.3	8.863	1.773	25.3	8.218	1.644	29.3	7.651	1.530
17.4	9.585	1.917	21.4	8.846	1.769	25.4	8.203	1.641	29.4	7.638	1.528
17.5	9.565	1.913	21.5	8.829	1.766	25.5	8.188	1.638	29.5	7.625	1.525
17.6	9.545	1.909	21.6	8.812	1.762	25.6	8.173	1.635	29.6	7.611	1.522
17.7	9.526	1.905	21.7	8.794	1.759	25.7	8.158	1.632	29.7	7.598	1.520
17.8	9.506	1.901	21.8	8.777	1.755	25.8	8.143	1.629	29.8	7.585	1.517
17.9	9.486	1.897	21.9	8.761	1.752	25.9	8.128	1.626	29.9	7.572	1.514
18.0	9.467	1.893	22.0	8.744	1.749	26.0	8.114	1.623	30.0	7.559	1.512
18.1	9.448	1.890	22.1	8.727	1.745	26.1	8.099	1.620	30.1	7.546	1.509
18.2	9.428	1.886	22.2	8.710	1.742	26.2	8.084	1.617	30.2	7.533	1.507
18.3	9.409	1.882	22.3	8.693	1.739	26.3	8.070	1.614	30.3	7.520	1.504
18.4	9.390	1.878	22.4	8.677	1.735	26.4	8.055	1.611	30.4	7.507	1.501
18.5	9.371	1.874	22.5	8.660	1.732	26.5	8.040	1.608	30.5	7.494	1.499
18.6	9.352	1.870	22.6	8.644	1.729	26.6	8.026	1.605	30.6	7.481	1.496
18.7	9.333	1.867	22.7	8.627	1.725	26.7	8.012	1.602	30.7	7.468	1.494
18.8	9.314	1.863	22.8	8.611	1.722	26.8	7.997	1.599	30.8	7.456	1.491
18.9	9.295	1.859	22.9	8.595	1.719	26.9	7.983	1.597	30.9	7.443	1.489

Derived using the formula in Standard Methods for the Examination of Water and Wastewater, Page 4-101, 18th Edition, 1992

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A SATURATED AIR

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	100% SAT	100%	-	YES	INIT	DP
13/07/24	0600	A	100% SAT	100%	-	YES	CONT	DP

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 84 µS/cm PINE ENVIRONMENTAL: EXP - 10/2013 LOT# ZAJ359

Standard B 1413 µS/cm PINE ENVIRONMENTAL: EXP - 10/2017 LOT# 5102

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/07/23	0600	A	84	AUTO CAL	-	YES	INIT	DR
"	"	B	1413	"	-	YES	INIT	DR
13/07/24	0600	A	84	AUTO CAL	-	YES	CONT	DR
"	"	B	1413	"	-	YES	CONT	DR

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A SATURATED AIR

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	100% SAT	100%	-	YES	INIT	DA

Table FS 2200-2
Dissolved Oxygen Saturation

TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L
deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%
15.0	10.084	2.017	19.0	9.276	1.855	23.0	8.578	1.716	27.0	7.968	1.594
15.1	10.062	2.012	19.1	9.258	1.852	23.1	8.562	1.712	27.1	7.954	1.591
15.2	10.040	2.008	19.2	9.239	1.848	23.2	8.546	1.709	27.2	7.940	1.588
15.3	10.019	2.004	19.3	9.220	1.844	23.3	8.530	1.706	27.3	7.926	1.585
15.4	9.997	1.999	19.4	9.202	1.840	23.4	8.514	1.703	27.4	7.912	1.582
15.5	9.976	1.995	19.5	9.184	1.837	23.5	8.498	1.700	27.5	7.898	1.580
15.6	9.955	1.991	19.6	9.165	1.833	23.6	8.482	1.696	27.6	7.884	1.577
15.7	9.934	1.987	19.7	9.147	1.829	23.7	8.466	1.693	27.7	7.870	1.574
15.8	9.912	1.982	19.8	9.129	1.826	23.8	8.450	1.690	27.8	7.856	1.571
15.9	9.891	1.978	19.9	9.111	1.822	23.9	8.434	1.687	27.9	7.842	1.568
16.0	9.870	1.974	20.0	9.092	1.818	24.0	8.418	1.684	28.0	7.828	1.566
16.1	9.849	1.970	20.1	9.074	1.815	24.1	8.403	1.681	28.1	7.814	1.563
16.2	9.829	1.966	20.2	9.056	1.811	24.2	8.387	1.677	28.2	7.800	1.560
16.3	9.808	1.962	20.3	9.039	1.808	24.3	8.371	1.674	28.3	7.786	1.557
16.4	9.787	1.957	20.4	9.021	1.804	24.4	8.356	1.671	28.4	7.773	1.555
16.5	9.767	1.953	20.5	9.003	1.801	24.5	8.340	1.668	28.5	7.759	1.552
16.6	9.746	1.949	20.6	8.985	1.797	24.6	8.325	1.665	28.6	7.745	1.549
16.7	9.726	1.945	20.7	8.968	1.794	24.7	8.309	1.662	28.7	7.732	1.546
16.8	9.705	1.941	20.8	8.950	1.790	24.8	8.294	1.659	28.8	7.718	1.544
16.9	9.685	1.937	20.9	8.932	1.786	24.9	8.279	1.656	28.9	7.705	1.541
17.0	9.665	1.933	21.0	8.915	1.783	25.0	8.263	1.653	29.0	7.691	1.538
17.1	9.645	1.929	21.1	8.898	1.780	25.1	8.248	1.650	29.1	7.678	1.536
17.2	9.625	1.925	21.2	8.880	1.776	25.2	8.233	1.647	29.2	7.664	1.533
17.3	9.605	1.921	21.3	8.863	1.773	25.3	8.218	1.644	29.3	7.651	1.530
17.4	9.585	1.917	21.4	8.846	1.769	25.4	8.203	1.641	29.4	7.638	1.528
17.5	9.565	1.913	21.5	8.829	1.766	25.5	8.188	1.638	29.5	7.625	1.525
17.6	9.545	1.909	21.6	8.812	1.762	25.6	8.173	1.635	29.6	7.611	1.522
17.7	9.526	1.905	21.7	8.794	1.759	25.7	8.158	1.632	29.7	7.598	1.520
17.8	9.506	1.901	21.8	8.777	1.755	25.8	8.143	1.629	29.8	7.585	1.517
17.9	9.486	1.897	21.9	8.761	1.752	25.9	8.128	1.626	29.9	7.572	1.514
18.0	9.467	1.893	22.0	8.744	1.749	26.0	8.114	1.623	30.0	7.559	1.512
18.1	9.448	1.890	22.1	8.727	1.745	26.1	8.099	1.620	30.1	7.546	1.509
18.2	9.428	1.886	22.2	8.710	1.742	26.2	8.084	1.617	30.2	7.533	1.507
18.3	9.409	1.882	22.3	8.693	1.739	26.3	8.070	1.614	30.3	7.520	1.504
18.4	9.390	1.878	22.4	8.677	1.735	26.4	8.055	1.611	30.4	7.507	1.501
18.5	9.371	1.874	22.5	8.660	1.732	26.5	8.040	1.608	30.5	7.494	1.499
18.6	9.352	1.870	22.6	8.644	1.729	26.6	8.026	1.605	30.6	7.481	1.496
18.7	9.333	1.867	22.7	8.627	1.725	26.7	8.012	1.602	30.7	7.468	1.494
18.8	9.314	1.863	22.8	8.611	1.722	26.8	7.997	1.599	30.8	7.456	1.491
18.9	9.295	1.859	22.9	8.595	1.719	26.9	7.983	1.597	30.9	7.443	1.489

Derived using the formula in Standard Methods for the Examination of Water and Wastewater, Page 4-101, 18th Edition, 1992

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 84 mS/cm PINE ENVIRONMENTAL: EXP - 10/2013 LOT# ZAJ359

Standard B 1413 µS/cm PINE ENVIRONMENTAL: EXP - 10/2017 LOT# 5102

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	84	AUTO CAL	-	YES	INIT	DK
"	"	B	1413	"	-	YES	INIT	DK

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 108080

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC LOT# 11014 EXP: OCT 2013
Standard B 10.0 NTU HF SCIENTIFIC LOT# 11013 EXP: OCT 2013
Standard C 0.02 NTU HF SCIENTIFIC LOT# 11004 EXP: OCT 2013

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	1000	AUTO CAL	-	YES	INIT	DA
"	"	B	10.0	"	-	YES	INIT	DA
"	"	C	0.02	"	-	YES	INIT	DA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 **INSTRUMENT #** 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A PINE ENVIRONMENTAL 7.01 (STD) EXP: 03/2014

Standard B PINE ENVIRONMENTAL 4.01 (STD) EXP: 03/2014

Standard C PINE ENVIRONMENTAL 10.01 (STD) EXP: 03/2014

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	7.01	AUTO CAL	-	YES	INIT	DA
"	"	B	4.01	"	-	YES	INIT	DA
"	"	C	10.01	"	-	YES	INIT	DA

PROFESSIONAL TECHNICAL SUPPORT SERVICES, INC.
Atlanta (770) 723-9229
Baton Rouge (504) 293-0136
Jacksonville (904) 693-3177
Houston (208) 441-7606
Pittsburgh (412) 746-8823

FACILITY NAME: TRAIL RIDGE

PTH TO WATER
EASUREMENTS

DATE: 7-23-13

MONITORING LOCATION	DEPTH TO WATER (ft TOC)
MWB2S	8.80
MWB2I	9.14
MWB30S	NOT MEASURED ~~17.22~~
MWB29S	7.57
MWB29I	5.42
MWB29D	5.53
MWB28S	6.61
MWB27S	6.10
MWB27I	4.97
MWB27D	5.35
MWB26S	6.50
MWB25S	7.50
MWB25I	4.80
MWB25D	5.31
MWB24S	7.04
MWB14S	DRY
MWB14I	9.13

MONITORING LOCATION	DEPTH TO WATER (ft TOC)
MWB14D	9.00
MWB23S	14.26
MWB13S	12.42
MWB13I	16.61
MWB22S	11.91
MWB12S	10.30
MWB12I	6.72
MWB12D	4.48
MWB11S	11.53
MWB11I (R)	10.50
MWB20S	7.48
MWB7S	7.84
MWB7I	3.00
MWB7D	0.78
MWB31D	17.20
MWB3S	8.39
MWB3I	12.58

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Pittsburgh (412) 746-8823

FACILITY NAME: TRAIL RIDGE

?TH TO WATER
EASUREMENTS

DATE: 7-23-13

MONITORING LOCATION	DEPTH TO WATER (ft TOC)
MWB16S ~~MWB1~~	5.66
MWB17S	6.42
MWB17I	2.69
MWB17D	6.61
MWB18S	6.48
MWB19S	6.82
MWB19I	6.78
MWB19D	6.49
MWB34S	9.34
MWB34I	7.79
MWB34D	7.95
MWB33S	10.20
MWB32S	8.08
MWB32I	6.37
MWB32D	6.61
MWB21S	10.62

MONITORING LOCATION	DEPTH TO WATER (ft TOC)

APPENDIX B
LABORATORY ANALYTICAL REPORTS, CHAIN-OF-CUSTODY FORMS, AND GROUNDWATER COLLECTION FORMS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-44404-1
Client Project/Site: Trail Ridge Landfill
Sampling Event: Semi-Annual Groundwater
Semi-Annual Surface Water

For:
Golder Associates Inc.
3730 Chamblee Tucker Road
Atlanta, Georgia 30341

Attn: Mr. Mike Smilley

Authorized for release by:
8/13/2013 1:55:42 PM

Amy Marks, Project Manager II
amy.marks@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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
U	Indicates that the compound was analyzed for but not detected.
J	Estimated value; value may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.

General Chemistry

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 640-44404-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-44404-1

Comments
No additional comments.

Receipt
The samples were received on 7/24/2013 at 8:00 AM and 7/25/2013 at 8:00 AM. The samples arrived in good condition, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.6° C, 0.8° C, 0.8° C, 1.0° C, 1.2° C, 2.8° C and 3.0° C.

Except:

The Field Blank collected on 7/24/2013 was indicated for 8260C and 8011 analysis. These analyses were cancelled by Shannon George on 7/26/2013. Results are not included in the attached report.

Dissolved Metals were listed on the Chain of Custody for the following samples; however, no dissolved metals containers were received at the laboratory: MWB-11(1)(R)c (640-44404-13), MWB-11(S)c (640-44404-14), MWB-17(D)c (640-44404-24), MWB-17(I)c (640-44404-25), MWB-17(S)c (640-44404-21), MWB-19(D)c (640-44404-20), MWB-19(I)c (640-44404-19), MWB-19(S)c (640-44404-18), MWB-20(S)c (640-44404-23), MWB-29(I)c (640-44404-12), MWB-7(1)c (640-44404-16), MWB-7(D)c (640-44404-17), MWB-7(S)c (640-44404-15), Field Blank 01 44430 (640-44430-14), MWB-2(I)b (640-44430-12), MWB-2(S)b (640-44430-13), MWB-21(S)c (640-44430-4), MWB-3(I)b (640-44430-6), MWB-3(S)b (640-44430-5), MWB-31(D)b (640-44430-11), MWB-32(D)d (640-44430-8), MWB-32(I)d (640-44430-9), MWB-32(S)d (640-44430-10), MWB-33(S)d (640-44430-7), MWB-34(D)d (640-44430-3), MWB-34(I)d (640-44430-2), and MWB-34(S)d (640-44430-1).

GC/MS VOA
Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) associated with batch 103395 recovered outside control limits for Bromomethane, Carbon Tetrachloride, Trichlorofluoromethane and Vinyl Chloride. The target analytes were biased high in the LCS/LCSD and were not detected in any of the associated samples; therefore, the results have been reported and qualified.

Method 8260C: The matrix spike (MS) and / or matrix spike duplicate (MSD) associated with batch 103395 recovered outside control limits for 1,1,1-Trichloroethane, Carbon Tetrachloride and Trichlorofluoromethane. The target analytes were biased high in the MS/MSD and were not detected in any of the associated samples; therefore, the results have been reported and qualified.

Method 8260C: The laboratory control sample (LCS) or the laboratory control sample duplicate (LCSD) associated with batch 103399 recovered outside control limits for Bromomethane and 1,1-Dichloroethane. These analytes are not indicative of a systematic problem and were within the Marginal Exceedance Limits; therefore, the results have been reported and qualified.

No other analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Metals
Method 6020: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 288061 recovered outside control limits for Nickel. The associated laboratory control sample (LCS) met acceptance criteria; therefore, the results have been reported and qualified.

Method 6020: The matrix spike (MS) associated with batch 286987 recovered outside control limits for Sodium. The associated laboratory control sample (LCS) met acceptance criteria; therefore, the results have been reported and qualified.

Method 1631E: The following samples were diluted due to the nature of the sample matrix: SW-1 (640-44433-9), SW-2 (640-44433-10), SW-3 (640-44433-11). Elevated reporting limits (RLs) are provided.

Method 1631E: Routine preservation and digestion of samples analyzed by EPA 1631E consists of the addition of 0.2 - 0.4mL bromine monochloride (BrCl) solution. Additional BrCl was required to ensure complete sample oxidation for the following samples: SW-1

Job ID: 640-44404-1 (Continued)

Laboratory: TestAmerica Tallahassee (Continued)

(640-44433-9), SW-2 (640-44433-10), SW-3 (640-44433-11). An additional method digestion blank, with like amounts of BrCl, was prepared and analyzed with the samples. The mercury concentration in this additional method blank is less than the reporting limit.

No other analytical or quality issues were noted.

Field Service / Mobile Lab
Field data collected and provided by Professional Technical Services.

General Chemistry
Methods 2540C, 350.1: The Field Blank contained detections for Total Dissolved Solids and Ammonia (as N) above the practical quantitation limit (PQL).

Method 350.1: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 286965 recovered outside control limits for Ammonia (as N). The associated laboratory control sample (LCS) recovery met acceptance criteria; therefore, the results have been reported and qualified.

Method 350.1: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 287092 recovered outside control limits for Ammonia (as N) . The associated laboratory control sample (LCS) recovery met acceptance criteria; therefore, the results have been reported and qualified.

Method 353.2: The sample / sample duplicate precision (%RPD) associated with batch 286994 was outside control limits for Nitrate Nitrite as N. The associated laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) precision met acceptance criteria.

Method 5220D: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 287673 recovered outside control limits for Chemical Oxygen Demand. The associated laboratory control sample (LCS) recovery met acceptance criteria; therefore, the results have been reported and qualified.

No other analytical or quality issues were noted.

Subcontract Work
Method SM 9222D - Fecal Coliform: This method was subcontracted to Diversified Environmental Laboratories. Their report is attached in full as received by TestAmerica.

Method SM10200H - Chlorophyll a: This method was subcontracted to ENCO Laboratories. Their report is attached in full as received by TestAmerica.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(S)c — Lab Sample ID: 640-44404-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.3		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	9.1		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	360		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.11		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	20		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.37				SU	1		Field Sampling	Total/NA
Field Temperature	25.1				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.2				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	37				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.88				NTU	1		Field Sampling	Total/NA
Water Level	130.45				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-12(D)c — Lab Sample ID: 640-44404-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.4		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	130		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	1400		100	33	ug/L	1		6020	Total Recoverable
Sodium	5.2		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.15		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.019	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.019		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	210		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	7.01				SU	1		Field Sampling	Total/NA
Field Temperature	24.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	380				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.22				NTU	1		Field Sampling	Total/NA
Water Level	120.08				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-12(1)c — Lab Sample ID: 640-44404-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	49		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	370		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.0		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.060		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.016	I	0.050	0.010	mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(1)c (Continued) — Lab Sample ID: 640-44404-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.016		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	26		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.22				SU	1		Field Sampling	Total/NA
Field Temperature	25.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.2				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	40				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.24				NTU	1		Field Sampling	Total/NA
Water Level	117.9				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-12(S)c — Lab Sample ID: 640-44404-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.7		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	2.7	I	5.0	1.3	ug/L	1		6020	Total Recoverable
Copper	1.1	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	36	I	100	33	ug/L	1		6020	Total Recoverable
Selenium	15		2.5	1.0	ug/L	1		6020	Total Recoverable
Sodium	5.2		0.50	0.25	mg/L	1		6020	Total Recoverable
Vanadium	62		10	3.8	ug/L	1		6020	Total Recoverable
Nitrate Nitrite as N	1.2		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	1.2		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	190		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Lt Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.65				SU	1		Field Sampling	Total/NA
Field Temperature	24.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.5				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	246				umhos/cm	1		Field Sampling	Total/NA
Turbidity	21.89				NTU	1		Field Sampling	Total/NA
Water Level	114.33				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-22(S)c — Lab Sample ID: 640-44404-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	4.5	I	5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	94	I	100	33	ug/L	1		6020	Total Recoverable
Sodium	8.3		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.19		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	170		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-22(S)c (Continued) — Lab Sample ID: 640-44404-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Color	Sl Yellow Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.86				SU	1		Field Sampling	Total/NA
Field Temperature	24.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.3				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	247				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.9				NTU	1		Field Sampling	Total/NA
Water Level	115.06				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-13(I)c — Lab Sample ID: 640-44404-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	31		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	280		100	33	ug/L	1		6020	Total Recoverable
Sodium	2.9		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.057		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.016	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.016		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	28		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.13				SU	1		Field Sampling	Total/NA
Field Temperature	25.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.2				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	36				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.12				NTU	1		Field Sampling	Total/NA
Water Level	109.37				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-13(S)c — Lab Sample ID: 640-44404-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	4.6	I	5.0	1.3	ug/L	1		6020	Total Recoverable
Copper	2.4	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	150		100	33	ug/L	1		6020	Total Recoverable
Selenium	3.2		2.5	1.0	ug/L	1		6020	Total Recoverable
Sodium	21		0.50	0.25	mg/L	1		6020	Total Recoverable
Vanadium	32		10	3.8	ug/L	1		6020	Total Recoverable
Ammonia (as N)	0.25		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.14		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.14		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	220		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-13(S)c (Continued) — Lab Sample ID: 640-44404-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Color	Lt Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.76				SU	1		Field Sampling	Total/NA
Field Temperature	25.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.6				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	367				umhos/cm	1		Field Sampling	Total/NA
Turbidity	10.84				NTU	1		Field Sampling	Total/NA
Water Level	113.64				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-27(D)c — Lab Sample ID: 640-44404-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.7		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	52		5.0	1.3	ug/L	1		6020	Total Recoverable
Copper	1.1	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	570		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.2		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.078		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.038	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.038		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	66		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.93				SU	1		Field Sampling	Total/NA
Field Temperature	21.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	85				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.4				NTU	1		Field Sampling	Total/NA
Water Level	123.53				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-27(I)c — Lab Sample ID: 640-44404-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.0		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	48		5.0	1.3	ug/L	1		6020	Total Recoverable
Copper	3.0	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	440		100	33	ug/L	1		6020	Total Recoverable
Nickel	110		5.0	2.0	ug/L	1		6020	Total Recoverable
Sodium	3.4		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.070		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.014	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.014		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	52		5.0	5.0	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-27(I)c (Continued) — Lab Sample ID: 640-44404-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA
Field Temperature	21.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	47				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.62				NTU	1		Field Sampling	Total/NA
Water Level	123.66				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-27(S)c — Lab Sample ID: 640-44404-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		1.0	0.50	mg/L	2		300.0	Total/NA
Arsenic	1.5	I	2.5	1.3	ug/L	1		6020	Total Recoverable
Barium	14		5.0	1.3	ug/L	1		6020	Total Recoverable
Chromium	3.5	I	5.0	2.5	ug/L	1		6020	Total Recoverable
Cobalt	0.16	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	1.6	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	110		100	33	ug/L	1		6020	Total Recoverable
Lead	0.31	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	13		0.50	0.25	mg/L	1		6020	Total Recoverable
Vanadium	6.6	I	10	3.8	ug/L	1		6020	Total Recoverable
Ammonia (as N)	0.091		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.017	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.017		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	88		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Sl Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.26				SU	1		Field Sampling	Total/NA
Field Temperature	23.3				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	102				umhos/cm	1		Field Sampling	Total/NA
Turbidity	24.92				NTU	1		Field Sampling	Total/NA
Water Level	122.32				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-29(D)c — Lab Sample ID: 640-44404-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.3		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	55		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	660		100	33	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(D)c (Continued) — Lab Sample ID: 640-44404-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	4.0		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.098		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.061		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.061		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	24		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.46				SU	1		Field Sampling	Total/NA
Field Temperature	22.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	60				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.86				NTU	1		Field Sampling	Total/NA
Water Level	132.65				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-29(I)c — Lab Sample ID: 640-44404-12

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.9		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	44		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	410		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.9		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.052		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	14		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.08				SU	1		Field Sampling	Total/NA
Field Temperature	22.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.4				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	34				umhos/cm	1		Field Sampling	Total/NA
Turbidity	8.27				NTU	1		Field Sampling	Total/NA
Water Level	132.66				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-11(1)(R)c — Lab Sample ID: 640-44404-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.4		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	42		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	400		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.4		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.061		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	30		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.54				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-11(1)(R)c (Continued) — Lab Sample ID: 640-44404-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	24.3				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	38				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.45				NTU	1		Field Sampling	Total/NA
Water Level	109.93				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-11(S)c — Lab Sample ID: 640-44404-14

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	87		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.64		0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	1500		100	33	ug/L	1		6020	Total Recoverable
Sodium	16		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.11		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	100		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	3.9				SU	1		Field Sampling	Total/NA
Field Temperature	23.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	210				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.57				NTU	1		Field Sampling	Total/NA
Water Level	109.28				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-7(S)c — Lab Sample ID: 640-44404-15

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	5.2		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	170		100	33	ug/L	1		6020	Total Recoverable
Lead	0.22	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	16		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.34		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.099		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.099		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	120		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	4.98				SU	1		Field Sampling	Total/NA
Field Temperature	26.1				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(S)c (Continued) — Lab Sample ID: 640-44404-15

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	190				umhos/cm	1		Field Sampling	Total/NA
Turbidity	13.6				NTU	1		Field Sampling	Total/NA
Water Level	115.45				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-7(1)c — Lab Sample ID: 640-44404-16

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.3		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	48		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	340		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.5		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.044	I	0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.053		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.053		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	26		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.91				SU	1		Field Sampling	Total/NA
Field Temperature	24.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	43				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.74				NTU	1		Field Sampling	Total/NA
Water Level	118.53				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-7(D)c — Lab Sample ID: 640-44404-17

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.4		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	89		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	290		100	33	ug/L	1		6020	Total Recoverable
Sodium	4.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.15		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	180		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	6.65				SU	1		Field Sampling	Total/NA
Field Temperature	25.2				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	356				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.43				NTU	1		Field Sampling	Total/NA
Water Level	120.87				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(S)c — Lab Sample ID: 640-44404-18

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	59		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.25	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	1100		100	33	ug/L	1		6020	Total Recoverable
Sodium	9.7		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.37		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	54		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Brownish Tint				PCU	1		Field Sampling	Total/NA
Field pH	4.7				SU	1		Field Sampling	Total/NA
Field Temperature	25.2				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	114				umhos/cm	1		Field Sampling	Total/NA
Turbidity	6.88				NTU	1		Field Sampling	Total/NA
Water Level	120.56				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-19(I)c — Lab Sample ID: 640-44404-19

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	49		5.0	1.3	ug/L	1		6020	Total Recoverable
Cadmium	0.095	I	0.50	0.095	ug/L	1		6020	Total Recoverable
Cobalt	0.18	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	420		100	33	ug/L	1		6020	Total Recoverable
Lead	0.20	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	3.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Zinc	8.4	I	20	8.3	ug/L	1		6020	Total Recoverable
Ammonia (as N)	0.045	I	0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.014	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.014		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	14		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.5				SU	1		Field Sampling	Total/NA
Field Temperature	25.1				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	35				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.29				NTU	1		Field Sampling	Total/NA
Water Level	121.16				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-19(D)c — Lab Sample ID: 640-44404-20

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(D)c (Continued) — Lab Sample ID: 640-44404-20

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.6		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	100		5.0	1.3	ug/L	1		6020	Total Recoverable
Cadmium	0.16	I	0.50	0.095	ug/L	1		6020	Total Recoverable
Iron	610		100	33	ug/L	1		6020	Total Recoverable
Lead	0.23	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	4.9		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.10		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.027	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.027		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	170		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Brownish Tint				PCU	1		Field Sampling	Total/NA
Field pH	6.73				SU	1		Field Sampling	Total/NA
Field Temperature	24.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	378				umhos/cm	1		Field Sampling	Total/NA
Turbidity	14.5				NTU	1		Field Sampling	Total/NA
Water Level	121.74				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-17(S)c — Lab Sample ID: 640-44404-21

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.7		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	2.8	I	5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	140		100	33	ug/L	1		6020	Total Recoverable
Sodium	5.3		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.21		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.012	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.012		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	80		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Brownish Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.98				SU	1		Field Sampling	Total/NA
Field Temperature	25.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	111				umhos/cm	1		Field Sampling	Total/NA
Turbidity	17.9				NTU	1		Field Sampling	Total/NA
Water Level	131.89				ft	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank 01 44404 — Lab Sample ID: 640-44404-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-20(S)c — Lab Sample ID: 640-44404-23

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.4		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	10		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	130		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.1		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.16		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.033	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.033		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	52		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Lt Tan Tint				PCU	1		Field Sampling	Total/NA
Field pH	4.16				SU	1		Field Sampling	Total/NA
Field Temperature	25.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	55				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.64				NTU	1		Field Sampling	Total/NA
Water Level	113.53				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-17(D)c — Lab Sample ID: 640-44404-24

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	31		5.0	1.3	ug/L	1		6020	Total Recoverable
Beryllium	0.26	I	0.50	0.25	ug/L	1		6020	Total Recoverable
Copper	2.2	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	340		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.5		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.14		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	44		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.35				SU	1		Field Sampling	Total/NA
Field Temperature	24.2				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	54				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.67				NTU	1		Field Sampling	Total/NA
Water Level	131.91				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-17(I)c — Lab Sample ID: 640-44404-25

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.8		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	35		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	330		100	33	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-17(I)c (Continued)

Lab Sample ID: 640-44404-25

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	3.4		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.037	I	0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	26		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.88				SU	1		Field Sampling	Total/NA
Field Temperature	24.1				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	33				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.23				NTU	1		Field Sampling	Total/NA
Water Level	135.74				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-34(S)d

Lab Sample ID: 640-44430-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	48		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	5.0		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.51		0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	1.7	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	240		100	33	ug/L	1		6020	Total Recoverable
Nickel	4.7	I	5.0	2.0	ug/L	1		6020	Total Recoverable
Sodium	57		0.50	0.25	mg/L	1		6020	Total Recoverable
Vanadium	7.5	I	10	3.8	ug/L	1		6020	Total Recoverable
Zinc	36		20	8.3	ug/L	1		6020	Total Recoverable
Ammonia (as N)	2.7		0.10	0.052	mg/L	2		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	440		10	10	mg/L	1		SM 2540C	Total/NA
Color	Sl Yellow Tint				PCU	1		Field Sampling	Total/NA
Field pH	6.06				SU	1		Field Sampling	Total/NA
Field Temperature	24.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	736				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.07				NTU	1		Field Sampling	Total/NA
Water Level	116.44				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-34(I)d

Lab Sample ID: 640-44430-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.5		0.50	0.25	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-34(I)d (Continued) — Lab Sample ID: 640-44430-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	430		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.066		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	30		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.27				SU	1		Field Sampling	Total/NA
Field Temperature	25.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	40				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.03				NTU	1		Field Sampling	Total/NA
Water Level	118.01				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-34(D)d — Lab Sample ID: 640-44430-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.51	I	1.0	0.13	ug/L	1		8260C	Total/NA
Toluene	0.95	I	1.0	0.14	ug/L	1		8260C	Total/NA
Chloride	5.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	91		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	470		100	33	ug/L	1		6020	Total Recoverable
Sodium	5.8		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.33		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	7.08				SU	1		Field Sampling	Total/NA
Field Temperature	23.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	361				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.0				NTU	1		Field Sampling	Total/NA
Water Level	117.97				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-21(S)c — Lab Sample ID: 640-44430-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.8		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	20		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	600		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.39		0.050	0.026	mg/L	1		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-21(S)c (Continued) — Lab Sample ID: 640-44430-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	52		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.09				SU	1		Field Sampling	Total/NA
Field Temperature	24.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	59				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.73				NTU	1		Field Sampling	Total/NA
Water Level	112.22				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-3(S)b — Lab Sample ID: 640-44430-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	16		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	550		100	33	ug/L	1		6020	Total Recoverable
Sodium	5.6		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.090		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	26		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.78				SU	1		Field Sampling	Total/NA
Field Temperature	22.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.7				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	67				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.59				NTU	1		Field Sampling	Total/NA
Water Level	145.99				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-3(I)b — Lab Sample ID: 640-44430-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.0		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	28		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	830		100	33	ug/L	1		6020	Total Recoverable
Sodium	3.8		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.12		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.014	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.014		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	24		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.18				SU	1		Field Sampling	Total/NA
Field Temperature	23.1				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-3(I)b (Continued) — Lab Sample ID: 640-44430-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	40				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.18				NTU	1		Field Sampling	Total/NA
Water Level	139.28				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-33(S)d — Lab Sample ID: 640-44430-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	I	1.0	0.13	ug/L	1		8260C	Total/NA
Chloride	9.8		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	15		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	210		100	33	ug/L	1		6020	Total Recoverable
Sodium	8.1		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	1.2		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.014	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.014		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	120		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.26				SU	1		Field Sampling	Total/NA
Field Temperature	24.4				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.2				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	185				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.63				NTU	1		Field Sampling	Total/NA
Water Level	115.69				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-32(D)d — Lab Sample ID: 640-44430-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.5		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	51		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	630		100	33	ug/L	1		6020	Total Recoverable
Sodium	4.5		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.22		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.017	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.017		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	86		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	5.96				SU	1		Field Sampling	Total/NA
Field Temperature	21.6				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.2				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	131				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.4				NTU	1		Field Sampling	Total/NA
Water Level	118.31				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(I)d — Lab Sample ID: 640-44430-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.3		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	36		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	330		100	33	ug/L	1		6020	Total Recoverable
Lead	0.69	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	3.3		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.18		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	36		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Sl Whitish Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.24				SU	1		Field Sampling	Total/NA
Field Temperature	21.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	41				umhos/cm	1		Field Sampling	Total/NA
Turbidity	28.99				NTU	1		Field Sampling	Total/NA
Water Level	118.44				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-32(S)d — Lab Sample ID: 640-44430-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36		1.0	0.50	mg/L	2		300.0	Total/NA
Barium	53		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.57		0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	1.2	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	1300		100	33	ug/L	1		6020	Total Recoverable
Lead	0.89	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	25		0.50	0.25	mg/L	1		6020	Total Recoverable
Vanadium	5.0	I	10	3.8	ug/L	1		6020	Total Recoverable
Ammonia (as N)	0.63		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.041	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.041		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	140		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	5.08				SU	1		Field Sampling	Total/NA
Field Temperature	22.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.3				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	252				umhos/cm	1		Field Sampling	Total/NA
Turbidity	12.19				NTU	1		Field Sampling	Total/NA
Water Level	116.59				ft	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-31(D)b — Lab Sample ID: 640-44430-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.5		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	94		5.0	1.3	ug/L	1		6020	Total Recoverable
Iron	710		100	33	ug/L	1		6020	Total Recoverable
Lead	0.35	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Sodium	6.5		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.28		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	6.36				SU	1		Field Sampling	Total/NA
Field Temperature	21.9				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	383				umhos/cm	1		Field Sampling	Total/NA
Turbidity	8.52				NTU	1		Field Sampling	Total/NA
Water Level	138.93				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-2(I)b — Lab Sample ID: 640-44430-12

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	22		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.17	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	370		100	33	ug/L	1		6020	Total Recoverable
Sodium	4.5		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.091		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	18		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.62				SU	1		Field Sampling	Total/NA
Field Temperature	21.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.5				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	40				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.89				NTU	1		Field Sampling	Total/NA
Water Level	136.61				ft	1		Field Sampling	Total/NA

Client Sample ID: MWB-2(S)b — Lab Sample ID: 640-44430-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.6		0.50	0.25	mg/L	1		300.0	Total/NA
Barium	11		5.0	1.3	ug/L	1		6020	Total Recoverable
Cobalt	0.15	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	170		100	33	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-2(S)b (Continued) — Lab Sample ID: 640-44430-13

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	4.8		0.50	0.25	mg/L	1		6020	Total Recoverable
Ammonia (as N)	0.083		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.057		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.057		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	38		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Color	None				PCU	1		Field Sampling	Total/NA
Field pH	4.31				SU	1		Field Sampling	Total/NA
Field Temperature	23.9				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.8				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	61				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.08				NTU	1		Field Sampling	Total/NA
Water Level	137.83				ft	1		Field Sampling	Total/NA

Client Sample ID: Field Blank 01 44430 — Lab Sample ID: 640-44430-14

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia (as N)	0.075		0.050	0.026	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.015	I	0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.015		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	10		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Trip Blank 01 44430 — Lab Sample ID: 640-44430-15

No Detections.

Client Sample ID: SW-1 — Lab Sample ID: 640-44433-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	53		5.0	1.3	ug/L	1		6020	Total Recoverable
Chromium	2.6	I	5.0	2.5	ug/L	1		6020	Total Recoverable
Cobalt	0.56		0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	1.9	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	2800		100	33	ug/L	1		6020	Total Recoverable
Lead	2.7		1.5	0.20	ug/L	1		6020	Total Recoverable
Nickel	2.4	I	5.0	2.0	ug/L	1		6020	Total Recoverable
Zinc	16	I	20	8.3	ug/L	1		6020	Total Recoverable
Hardness as calcium carbonate	19		3.3	3.3	mg/L	1		SM 2340B	Total/NA
Nitrate Nitrite as N	0.019	I	0.050	0.010	mg/L	1		353.2	Total/NA
Phosphorus	0.079	I	0.10	0.041	mg/L	1		365.4	Total/NA
Orthophosphate as P	0.0035	I	0.010	0.0014	mg/L	1		4500 P F	Total/NA
Nitrate as N	0.019		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	200		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	3.6		1.0	1.0	mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-1 (Continued) — Lab Sample ID: 640-44433-9

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	150		20	6.3	mg/L	1		SM 5220D	Total/NA
Total Organic Carbon	53		5.0	1.8	mg/L	5		SM 5310C	Total/NA
Nitrogen, Total	1.1		0.25	0.25	mg/L	1		Total Nitrogen	Total/NA
Color	Yellow/Brown Tint				PCU	1		Field Sampling	Total/NA
Field pH	4.09				SU	1		Field Sampling	Total/NA
Field Temperature	24.2				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.3				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	112				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.52				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-2 — Lab Sample ID: 640-44433-10

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	94		5.0	1.3	ug/L	1		6020	Total Recoverable
Beryllium	0.63		0.50	0.25	ug/L	1		6020	Total Recoverable
Cobalt	0.20	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Iron	1100		100	33	ug/L	1		6020	Total Recoverable
Lead	0.38	I	1.5	0.20	ug/L	1		6020	Total Recoverable
Vanadium	4.3	I	10	3.8	ug/L	1		6020	Total Recoverable
Hardness as calcium carbonate	10		3.3	3.3	mg/L	1		SM 2340B	Total/NA
Nitrate Nitrite as N	0.074		0.050	0.010	mg/L	1		353.2	Total/NA
Orthophosphate as P	0.010		0.010	0.0014	mg/L	1		4500 P F	Total/NA
Nitrate as N	0.074		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	84		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	16		1.0	1.0	mg/L	1		SM 2540D	Total/NA
Chemical Oxygen Demand	77		20	6.3	mg/L	1		SM 5220D	Total/NA
Total Organic Carbon	22		1.0	0.35	mg/L	1		SM 5310C	Total/NA
Nitrogen, Total	0.96		0.25	0.25	mg/L	1		Total Nitrogen	Total/NA
Color	Lt Tan Tint				PCU	1		Field Sampling	Total/NA
Field pH	4.14				SU	1		Field Sampling	Total/NA
Field Temperature	21.8				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.9				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	73				umhos/cm	1		Field Sampling	Total/NA
Turbidity	13.68				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-3 — Lab Sample ID: 640-44433-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.9	I	2.5	1.3	ug/L	1		6020	Total Recoverable
Barium	42		5.0	1.3	ug/L	1		6020	Total Recoverable
Cadmium	1.2		0.50	0.095	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-3 (Continued)

Lab Sample ID: 640-44433-11

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.19	I	0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	56		5.0	1.1	ug/L	1		6020	Total Recoverable
Iron	490		100	33	ug/L	1		6020	Total Recoverable
Lead	3.4		1.5	0.20	ug/L	1		6020	Total Recoverable
Nickel	7.5		5.0	2.0	ug/L	1		6020	Total Recoverable
Selenium	1.1	I	2.5	1.0	ug/L	1		6020	Total Recoverable
Vanadium	3.9	I	10	3.8	ug/L	1		6020	Total Recoverable
Hardness as calcium carbonate	140		3.3	3.3	mg/L	1		SM 2340B	Total/NA
Nitrate Nitrite as N	0.13		0.050	0.010	mg/L	1		353.2	Total/NA
Phosphorus	0.060	I	0.10	0.041	mg/L	1		365.4	Total/NA
Orthophosphate as P	0.0096	I	0.010	0.0014	mg/L	1		4500 P F	Total/NA
Nitrate as N	0.092		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	250		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	22		1.0	1.0	mg/L	1		SM 2540D	Total/NA
Chemical Oxygen Demand	54		20	6.3	mg/L	1		SM 5220D	Total/NA
Total Organic Carbon	17		4.0	1.4	mg/L	4		SM 5310C	Total/NA
Nitrogen, Total	1.6		0.25	0.25	mg/L	1		Total Nitrogen	Total/NA
Unionized Ammonia	0.0030		0.00028	0.00028	mg/L	1		UnionizedNH3	Total/NA
Color	Sl Yellow Tint				PCU	1		Field Sampling	Total/NA
Field pH	6.94				SU	1		Field Sampling	Total/NA
Field Temperature	27.7				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	4.8				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	370				umhos/cm	1		Field Sampling	Total/NA
Turbidity	13.71				NTU	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank 04 44433

Lab Sample ID: 640-44433-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MWB-29(S)c
Date Collected: 07/23/13 13:19
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-1
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 16:20	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 16:20	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 16:20	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 16:20	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 16:20	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 16:20	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 16:20	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 16:20	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 16:20	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 16:20	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 16:20	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 16:20	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 16:20	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 16:20	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 16:20	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 16:20	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 16:20	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:20	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 16:20	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 16:20	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 16:20	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:20	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 16:20	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 16:20	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 16:20	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 16:20	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 16:20	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 16:20	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 16:20	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 16:20	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 16:20	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 16:20	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 16:20	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 16:20	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 16:20	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 16:20	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 16:20	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 16:20	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 16:20	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 16:20	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:20	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 16:20	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 16:20	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 16:20	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 16:20	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 16:20	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 16:20	1

Client Sample ID: MWB-29(S)c
Date Collected: 07/23/13 13:19
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*87 - 114*		*07/26/13 16:20*	*1*
Dibromofluoromethane	*98*		*81 - 113*		*07/26/13 16:20*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/26/13 16:20*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	07/31/13 16:06	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	07/31/13 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*128*		*56 - 144*	*07/25/13 13:27*	*07/31/13 16:06*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.3**		0.50	0.25	mg/L			08/03/13 20:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 06:25	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 06:25	1
Barium	**9.1**		5.0	1.3	ug/L		07/26/13 14:22	08/02/13 06:25	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 06:25	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 06:25	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 06:25	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 06:25	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 06:25	1
Iron	**360**		100	33	ug/L		07/26/13 14:22	08/02/13 06:25	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 06:25	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 06:25	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 06:25	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 06:25	1
Sodium	**3.6**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 06:25	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 06:25	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 06:25	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 06:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:06	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.11**		0.050	0.026	mg/L			07/31/13 16:02	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 11:34	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**20**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 13:18	1
Field pH	**4.37**				SU			07/23/13 13:18	1
Field Temperature	**25.1**				Degrees C			07/23/13 13:18	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(S)c
Date Collected: 07/23/13 13:19
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-1
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.2				mg/L			07/23/13 13:18	1
Sheen	None				NONE			07/23/13 13:18	1
Specific Conductance	37				umhos/cm			07/23/13 13:18	1
Turbidity	1.88				NTU			07/23/13 13:18	1
Water Level	130.45				ft			07/23/13 13:18	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(D)c
Date Collected: 07/23/13 07:27
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-2
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 16:44	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 16:44	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 16:44	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 16:44	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 16:44	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 16:44	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 16:44	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 16:44	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 16:44	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 16:44	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 16:44	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 16:44	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 16:44	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 16:44	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 16:44	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 16:44	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 16:44	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:44	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 16:44	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 16:44	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 16:44	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:44	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 16:44	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 16:44	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 16:44	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 16:44	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 16:44	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 16:44	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 16:44	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 16:44	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 16:44	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 16:44	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 16:44	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 16:44	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 16:44	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 16:44	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 16:44	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 16:44	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 16:44	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 16:44	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 16:44	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 16:44	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 16:44	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 16:44	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 16:44	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 16:44	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 16:44	1

Client Sample ID: MWB-12(D)c
Date Collected: 07/23/13 07:27
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*87 - 114*		*07/26/13 16:44*	*1*
Dibromofluoromethane	*96*		*81 - 113*		*07/26/13 16:44*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/26/13 16:44*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 11:53	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:27	08/01/13 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*129*		*56 - 144*	*07/25/13 13:27*	*08/01/13 11:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.4**		0.50	0.25	mg/L			08/03/13 20:36	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 06:32	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 06:32	1
Barium	**130**		5.0	1.3	ug/L		07/26/13 14:22	08/02/13 06:32	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 06:32	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 06:32	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 06:32	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 06:32	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 06:32	1
Iron	**1400**		100	33	ug/L		07/26/13 14:22	08/02/13 06:32	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 06:32	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 06:32	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 06:32	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 06:32	1
Sodium	**5.2**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 06:32	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 06:32	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 06:32	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 06:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:14	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.15**		0.050	0.026	mg/L			07/31/13 15:43	1
Nitrate Nitrite as N	**0.019**	**I**	0.050	0.010	mg/L			07/31/13 11:24	1
Nitrate as N	**0.019**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**210**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 07:26	1
Field pH	**7.01**				SU			07/23/13 07:26	1
Field Temperature	**24.8**				Degrees C			07/23/13 07:26	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(D)c
Date Collected: 07/23/13 07:27
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-2
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 07:26	1
Sheen	None				NONE			07/23/13 07:26	1
Specific Conductance	380				umhos/cm			07/23/13 07:26	1
Turbidity	4.22				NTU			07/23/13 07:26	1
Water Level	120.08				ft			07/23/13 07:26	1

Client Sample ID: MWB-12(1)c
Date Collected: 07/23/13 08:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 17:07	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 17:07	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:07	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 17:07	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 17:07	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 17:07	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 17:07	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 17:07	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:07	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:07	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:07	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 17:07	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 17:07	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 17:07	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 17:07	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:07	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 17:07	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:07	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 17:07	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 17:07	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 17:07	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:07	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:07	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 17:07	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 17:07	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 17:07	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 17:07	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 17:07	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 17:07	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 17:07	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 17:07	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 17:07	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 17:07	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 17:07	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 17:07	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 17:07	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 17:07	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 17:07	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:07	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 17:07	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:07	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 17:07	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:07	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 17:07	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 17:07	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 17:07	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 17:07	1

Client Sample ID: MWB-12(1)c

Date Collected: 07/23/13 08:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*87 - 114*		*07/26/13 17:07*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/26/13 17:07*	*1*
Toluene-d8 (Surr)	*98*		*87 - 112*		*07/26/13 17:07*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 12:07	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*125*		*56 - 144*	*07/25/13 13:27*	*08/01/13 12:07*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		0.50	0.25	mg/L			08/03/13 20:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 06:52	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 06:52	1
Barium	**49**		5.0	1.3	ug/L		07/26/13 14:22	08/02/13 06:52	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 06:52	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 06:52	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 06:52	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 06:52	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 06:52	1
Iron	**370**		100	33	ug/L		07/26/13 14:22	08/02/13 06:52	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 06:52	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 06:52	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 06:52	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 06:52	1
Sodium	**3.0**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 06:52	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 06:52	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 06:52	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 06:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.060**		0.050	0.026	mg/L			07/31/13 16:02	1
Nitrate Nitrite as N	**0.016**	**I**	0.050	0.010	mg/L			07/31/13 11:32	1
Nitrate as N	**0.016**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**26**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 07:59	1
Field pH	**5.22**				SU			07/23/13 07:59	1
Field Temperature	**25.5**				Degrees C			07/23/13 07:59	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(1)c
Date Collected: 07/23/13 08:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-3
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.2				mg/L			07/23/13 07:59	1
Sheen	None				NONE			07/23/13 07:59	1
Specific Conductance	40				umhos/cm			07/23/13 07:59	1
Turbidity	3.24				NTU			07/23/13 07:59	1
Water Level	117.9				ft			07/23/13 07:59	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(S)c
Date Collected: 07/23/13 08:29
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-4
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 17:30	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 17:30	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:30	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 17:30	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 17:30	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 17:30	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 17:30	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 17:30	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:30	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:30	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:30	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 17:30	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 17:30	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 17:30	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 17:30	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:30	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 17:30	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:30	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 17:30	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 17:30	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 17:30	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:30	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:30	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 17:30	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 17:30	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 17:30	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 17:30	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 17:30	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 17:30	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 17:30	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 17:30	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 17:30	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 17:30	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 17:30	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 17:30	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 17:30	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 17:30	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 17:30	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:30	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 17:30	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:30	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 17:30	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:30	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 17:30	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 17:30	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 17:30	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 17:30	1

Client Sample ID: MWB-12(S)c

Date Collected: 07/23/13 08:29
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*87 - 114*		*07/26/13 17:30*	*1*
Dibromofluoromethane	*96*		*81 - 113*		*07/26/13 17:30*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/26/13 17:30*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	07/31/13 16:47	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	07/31/13 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*126*		*56 - 144*	*07/25/13 13:27*	*07/31/13 16:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.7**		0.50	0.25	mg/L			08/03/13 21:01	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 06:59	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 06:59	1
Barium	**2.7**	**I**	5.0	1.3	ug/L		07/26/13 14:22	08/02/13 06:59	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 06:59	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 06:59	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 06:59	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 06:59	1
Copper	**1.1**	**I**	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 06:59	1
Iron	**36**	**I**	100	33	ug/L		07/26/13 14:22	08/02/13 06:59	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 06:59	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 06:59	1
Selenium	**15**		2.5	1.0	ug/L		07/26/13 14:22	08/02/13 06:59	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 06:59	1
Sodium	**5.2**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 06:59	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 06:59	1
Vanadium	**62**		10	3.8	ug/L		07/26/13 14:22	08/02/13 06:59	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 06:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:19	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.026	U	0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**1.2**		0.050	0.010	mg/L			07/31/13 11:25	1
Nitrate as N	**1.2**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**190**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Lt Brown Tint**				PCU			07/23/13 08:28	1
Field pH	**5.65**				SU			07/23/13 08:28	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-12(S)c
Date Collected: 07/23/13 08:29
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-4
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	24.4				Degrees C			07/23/13 08:28	1
Oxygen, Dissolved	0.5				mg/L			07/23/13 08:28	1
Sheen	None				NONE			07/23/13 08:28	1
Specific Conductance	246				umhos/cm			07/23/13 08:28	1
Turbidity	21.89				NTU			07/23/13 08:28	1
Water Level	114.33				ft			07/23/13 08:28	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-22(S)c
Date Collected: 07/23/13 09:01
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-5
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 17:53	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 17:53	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:53	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 17:53	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 17:53	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 17:53	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 17:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 17:53	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 17:53	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:53	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:53	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 17:53	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 17:53	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 17:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 17:53	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:53	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 17:53	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:53	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 17:53	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 17:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 17:53	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:53	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 17:53	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 17:53	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 17:53	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 17:53	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 17:53	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 17:53	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 17:53	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 17:53	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 17:53	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 17:53	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 17:53	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 17:53	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 17:53	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 17:53	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 17:53	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 17:53	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 17:53	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 17:53	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 17:53	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 17:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 17:53	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 17:53	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 17:53	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 17:53	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 17:53	1

Client Sample ID: MWB-22(S)c
Date Collected: 07/23/13 09:01
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/26/13 17:53*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/26/13 17:53*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/26/13 17:53*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	07/31/13 17:01	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	07/31/13 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*134*		*56 - 144*	*07/25/13 13:27*	*07/31/13 17:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12**		0.50	0.25	mg/L			08/03/13 21:14	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 07:05	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 07:05	1
Barium	**4.5**	**I**	5.0	1.3	ug/L		07/26/13 14:22	08/02/13 07:05	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 07:05	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 07:05	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 07:05	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 07:05	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 07:05	1
Iron	**94**	**I**	100	33	ug/L		07/26/13 14:22	08/02/13 07:05	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 07:05	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 07:05	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 07:05	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 07:05	1
Sodium	**8.3**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 07:05	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 07:05	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 07:05	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 07:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:22	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.19**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 11:26	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**170**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Sl Yellow Tint**				PCU			07/23/13 09:00	1
Field pH	**5.86**				SU			07/23/13 09:00	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-22(S)c
Date Collected: 07/23/13 09:01
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-5
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	24.8				Degrees C			07/23/13 09:00	1
Oxygen, Dissolved	0.3				mg/L			07/23/13 09:00	1
Sheen	None				NONE			07/23/13 09:00	1
Specific Conductance	247				umhos/cm			07/23/13 09:00	1
Turbidity	3.9				NTU			07/23/13 09:00	1
Water Level	115.06				ft			07/23/13 09:00	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-13(I)c
Date Collected: 07/23/13 09:33
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-6
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 18:16	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 18:16	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 18:16	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 18:16	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 18:16	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 18:16	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 18:16	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 18:16	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 18:16	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 18:16	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 18:16	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 18:16	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 18:16	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 18:16	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 18:16	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 18:16	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 18:16	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:16	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 18:16	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 18:16	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 18:16	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:16	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 18:16	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 18:16	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 18:16	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 18:16	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 18:16	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 18:16	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 18:16	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 18:16	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 18:16	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 18:16	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 18:16	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 18:16	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 18:16	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 18:16	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 18:16	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 18:16	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 18:16	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 18:16	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:16	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 18:16	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 18:16	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 18:16	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 18:16	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 18:16	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 18:16	1

Client Sample ID: MWB-13(I)c
Date Collected: 07/23/13 09:33
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/26/13 18:16*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/26/13 18:16*	*1*
Toluene-d8 (Surr)	*97*		*87 - 112*		*07/26/13 18:16*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.018	0.0056	ug/L		07/25/13 13:27	07/31/13 17:15	1
EDB	0.0060	U	0.018	0.0060	ug/L		07/25/13 13:27	07/31/13 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*124*		*56 - 144*	*07/25/13 13:27*	*07/31/13 17:15*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		0.50	0.25	mg/L			08/03/13 21:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 07:12	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 07:12	1
Barium	**31**		5.0	1.3	ug/L		07/26/13 14:22	08/02/13 07:12	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 07:12	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 07:12	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 07:12	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 07:12	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 07:12	1
Iron	**280**		100	33	ug/L		07/26/13 14:22	08/02/13 07:12	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 07:12	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 07:12	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 07:12	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 07:12	1
Sodium	**2.9**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 07:12	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 07:12	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 07:12	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 07:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:25	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.057**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.016**	**I**	0.050	0.010	mg/L			07/31/13 16:26	1
Nitrate as N	**0.016**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**28**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 09:32	1
Field pH	**5.13**				SU			07/23/13 09:32	1
Field Temperature	**25.4**				Degrees C			07/23/13 09:32	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-13(I)c
Date Collected: 07/23/13 09:33
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-6
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.2				mg/L			07/23/13 09:32	1
Sheen	None				NONE			07/23/13 09:32	1
Specific Conductance	36				umhos/cm			07/23/13 09:32	1
Turbidity	4.12				NTU			07/23/13 09:32	1
Water Level	109.37				ft			07/23/13 09:32	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-13(S)c
Date Collected: 07/23/13 10:03
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-7
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 18:39	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 18:39	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 18:39	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 18:39	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 18:39	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 18:39	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 18:39	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 18:39	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 18:39	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 18:39	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 18:39	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 18:39	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 18:39	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 18:39	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 18:39	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 18:39	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 18:39	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:39	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 18:39	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 18:39	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 18:39	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:39	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 18:39	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 18:39	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 18:39	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 18:39	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 18:39	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 18:39	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 18:39	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 18:39	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 18:39	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 18:39	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 18:39	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 18:39	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 18:39	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 18:39	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 18:39	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 18:39	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 18:39	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 18:39	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 18:39	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 18:39	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 18:39	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 18:39	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 18:39	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 18:39	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 18:39	1

Client Sample ID: MWB-13(S)c
Date Collected: 07/23/13 10:03
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/26/13 18:39*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/26/13 18:39*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/26/13 18:39*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/25/13 13:27	08/01/13 11:12	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:27	08/01/13 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*128*		*56 - 144*	*07/25/13 13:27*	*08/01/13 11:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40**		0.50	0.25	mg/L			08/03/13 21:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 07:19	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 07:19	1
Barium	**4.6**	**I**	5.0	1.3	ug/L		07/26/13 14:22	08/02/13 07:19	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 07:19	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 07:19	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 07:19	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 07:19	1
Copper	**2.4**	**I**	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 07:19	1
Iron	**150**		100	33	ug/L		07/26/13 14:22	08/02/13 07:19	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 07:19	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 07:19	1
Selenium	**3.2**		2.5	1.0	ug/L		07/26/13 14:22	08/02/13 07:19	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 07:19	1
Sodium	**21**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 07:19	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 07:19	1
Vanadium	**32**		10	3.8	ug/L		07/26/13 14:22	08/02/13 07:19	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 07:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:32	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.25**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.14**		0.050	0.010	mg/L			07/31/13 16:28	1
Nitrate as N	**0.14**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**220**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Lt Brown Tint**				PCU			07/23/13 10:02	1
Field pH	**5.76**				SU			07/23/13 10:02	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-13(S)c
Date Collected: 07/23/13 10:03
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-7
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	25.4				Degrees C			07/23/13 10:02	1
Oxygen, Dissolved	0.6				mg/L			07/23/13 10:02	1
Sheen	None				NONE			07/23/13 10:02	1
Specific Conductance	367				umhos/cm			07/23/13 10:02	1
Turbidity	10.84				NTU			07/23/13 10:02	1
Water Level	113.64				ft			07/23/13 10:02	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(D)c
Date Collected: 07/23/13 10:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-8
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 19:02	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 19:02	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:02	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 19:02	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 19:02	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 19:02	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 19:02	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 19:02	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:02	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:02	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:02	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 19:02	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 19:02	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 19:02	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 19:02	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:02	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 19:02	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:02	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 19:02	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 19:02	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 19:02	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:02	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:02	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 19:02	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 19:02	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 19:02	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 19:02	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 19:02	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 19:02	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 19:02	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 19:02	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 19:02	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 19:02	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 19:02	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 19:02	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 19:02	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 19:02	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 19:02	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:02	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 19:02	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:02	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 19:02	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:02	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 19:02	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 19:02	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 19:02	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 19:02	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(D)c
Date Collected: 07/23/13 10:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*87 - 114*		*07/26/13 19:02*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/26/13 19:02*	*1*
Toluene-d8 (Surr)	*97*		*87 - 112*		*07/26/13 19:02*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/25/13 13:27	08/01/13 11:26	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:27	08/01/13 11:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	*127*		*56 - 144*	*07/25/13 13:27*	*08/01/13 11:26*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.7**		0.50	0.25	mg/L			08/03/13 22:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 07:25	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 07:25	1
Barium	**52**		5.0	1.3	ug/L		07/26/13 14:22	08/02/13 07:25	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 07:25	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 07:25	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 07:25	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 07:25	1
Copper	**1.1**	**I**	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 07:25	1
Iron	**570**		100	33	ug/L		07/26/13 14:22	08/02/13 07:25	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 07:25	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 07:25	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 07:25	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 07:25	1
Sodium	**3.2**		0.50	0.25	mg/L		07/26/13 14:22	08/02/13 07:25	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 07:25	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 07:25	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 07:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:35	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.078**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.038**	**I**	0.050	0.010	mg/L			07/31/13 16:29	1
Nitrate as N	**0.038**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**66**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 10:37	1
Field pH	**5.93**				SU			07/23/13 10:37	1
Field Temperature	**21.7**				Degrees C			07/23/13 10:37	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(D)c
Date Collected: 07/23/13 10:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-8
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.1				mg/L			07/23/13 10:37	1
Sheen	None				NONE			07/23/13 10:37	1
Specific Conductance	85				umhos/cm			07/23/13 10:37	1
Turbidity	1.4				NTU			07/23/13 10:37	1
Water Level	123.53				ft			07/23/13 10:37	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(I)c
Date Collected: 07/23/13 11:10
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-9
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 19:25	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 19:25	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:25	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 19:25	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 19:25	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 19:25	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 19:25	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 19:25	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:25	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:25	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:25	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 19:25	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 19:25	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 19:25	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 19:25	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:25	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 19:25	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:25	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 19:25	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 19:25	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 19:25	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:25	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:25	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 19:25	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 19:25	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 19:25	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 19:25	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 19:25	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 19:25	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 19:25	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 19:25	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 19:25	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 19:25	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 19:25	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 19:25	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 19:25	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 19:25	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 19:25	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:25	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 19:25	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:25	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 19:25	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:25	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 19:25	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 19:25	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 19:25	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 19:25	1

Client Sample ID: MWB-27(I)c
Date Collected: 07/23/13 11:10
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-9
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*87 - 114*		*07/26/13 19:25*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/26/13 19:25*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/26/13 19:25*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 11:39	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*130*		*56 - 144*	*07/25/13 13:27*	*08/01/13 11:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.0**		0.50	0.25	mg/L			08/03/13 22:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 13:54	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 13:54	1
Barium	**48**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 13:54	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 13:54	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 13:54	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 13:54	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 13:54	1
Copper	**3.0**	**I**	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 13:54	1
Iron	**440**		100	33	ug/L		07/26/13 14:48	08/06/13 13:54	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 13:54	1
Nickel	**110**		5.0	2.0	ug/L		07/26/13 14:48	08/06/13 13:54	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 13:54	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 13:54	1
Sodium	**3.4**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 13:54	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 13:54	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 13:54	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 13:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:38	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.070**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.014**	**I**	0.050	0.010	mg/L			08/03/13 10:21	1
Nitrate as N	**0.014**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**52**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 11:09	1
Field pH	**5.38**				SU			07/23/13 11:09	1
Field Temperature	**21.5**				Degrees C			07/23/13 11:09	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(I)c
Date Collected: 07/23/13 11:10
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-9
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.1				mg/L			07/23/13 11:09	1
Sheen	None				NONE			07/23/13 11:09	1
Specific Conductance	47				umhos/cm			07/23/13 11:09	1
Turbidity	5.62				NTU			07/23/13 11:09	1
Water Level	123.66				ft			07/23/13 11:09	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(S)c
Date Collected: 07/23/13 11:41
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-10
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 19:48	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 19:48	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:48	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 19:48	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 19:48	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 19:48	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 19:48	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 19:48	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 19:48	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:48	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:48	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 19:48	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 19:48	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 19:48	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 19:48	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:48	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 19:48	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:48	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 19:48	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 19:48	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 19:48	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:48	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 19:48	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 19:48	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 19:48	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 19:48	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 19:48	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 19:48	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 19:48	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 19:48	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 19:48	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 19:48	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 19:48	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 19:48	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 19:48	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 19:48	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 19:48	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 19:48	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 19:48	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 19:48	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 19:48	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 19:48	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 19:48	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 19:48	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 19:48	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 19:48	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 19:48	1

Client Sample ID: MWB-27(S)c

Date Collected: 07/23/13 11:41
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-10

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*87 - 114*		*07/26/13 19:48*	*1*
Dibromofluoromethane	*97*		*81 - 113*		*07/26/13 19:48*	*1*
Toluene-d8 (Surr)	*97*		*87 - 112*		*07/26/13 19:48*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/25/13 13:27	08/01/13 12:21	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:27	08/01/13 12:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	*130*		*56 - 144*	*07/25/13 13:27*	*08/01/13 12:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		1.0	0.50	mg/L			08/03/13 22:40	2

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 14:27	1
Arsenic	**1.5**	**I**	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 14:27	1
Barium	**14**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 14:27	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 14:27	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 14:27	1
Chromium	**3.5**	**I**	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 14:27	1
Cobalt	**0.16**	**I**	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 14:27	1
Copper	**1.6**	**I**	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 14:27	1
Iron	**110**		100	33	ug/L		07/26/13 14:48	08/06/13 14:27	1
Lead	**0.31**	**I**	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 14:27	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 14:27	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 14:27	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 14:27	1
Sodium	**13**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 14:27	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 14:27	1
Vanadium	**6.6**	**I**	10	3.8	ug/L		07/26/13 14:48	08/06/13 14:27	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 14:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:40	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.091**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.017**	**I**	0.050	0.010	mg/L			07/31/13 11:35	1
Nitrate as N	**0.017**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**88**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**SI Brown Tint**				PCU			07/23/13 11:40	1
Field pH	**5.26**				SU			07/23/13 11:40	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-27(S)c
Date Collected: 07/23/13 11:41
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-10
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	23.3				Degrees C			07/23/13 11:40	1
Oxygen, Dissolved	0.0				mg/L			07/23/13 11:40	1
Sheen	None				NONE			07/23/13 11:40	1
Specific Conductance	102				umhos/cm			07/23/13 11:40	1
Turbidity	24.92				NTU			07/23/13 11:40	1
Water Level	122.32				ft			07/23/13 11:40	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(D)c
Date Collected: 07/23/13 12:18
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-11
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 20:11	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 20:11	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:11	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 20:11	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 20:11	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 20:11	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 20:11	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 20:11	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:11	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:11	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:11	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 20:11	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 20:11	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 20:11	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 20:11	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:11	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 20:11	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:11	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 20:11	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 20:11	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 20:11	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:11	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:11	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 20:11	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 20:11	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 20:11	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 20:11	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 20:11	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 20:11	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 20:11	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 20:11	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 20:11	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 20:11	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 20:11	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 20:11	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 20:11	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 20:11	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 20:11	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:11	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 20:11	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:11	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 20:11	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:11	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 20:11	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 20:11	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 20:11	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 20:11	1

Client Sample ID: MWB-29(D)c
Date Collected: 07/23/13 12:18
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-11
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*87 - 114*		*07/26/13 20:11*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/26/13 20:11*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/26/13 20:11*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 12:34	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:27	08/01/13 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*127*		*56 - 144*	*07/25/13 13:27*	*08/01/13 12:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.3**		0.50	0.25	mg/L			08/03/13 22:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 14:34	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 14:34	1
Barium	**55**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 14:34	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 14:34	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 14:34	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 14:34	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 14:34	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 14:34	1
Iron	**660**		100	33	ug/L		07/26/13 14:48	08/06/13 14:34	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 14:34	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 14:34	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 14:34	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 14:34	1
Sodium	**4.0**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 14:34	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 14:34	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 14:34	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 14:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:43	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.098**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.061**		0.050	0.010	mg/L			07/31/13 10:58	1
Nitrate as N	**0.061**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**24**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 12:17	1
Field pH	**5.46**				SU			07/23/13 12:17	1
Field Temperature	**22.8**				Degrees C			07/23/13 12:17	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(D)c
Date Collected: 07/23/13 12:18
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-11
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 12:17	1
Sheen	None				NONE			07/23/13 12:17	1
Specific Conductance	60				umhos/cm			07/23/13 12:17	1
Turbidity	1.86				NTU			07/23/13 12:17	1
Water Level	132.65				ft			07/23/13 12:17	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(I)c
Date Collected: 07/23/13 12:49
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-12
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 20:34	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 20:34	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:34	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 20:34	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 20:34	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 20:34	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 20:34	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 20:34	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:34	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:34	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:34	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 20:34	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 20:34	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 20:34	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 20:34	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:34	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 20:34	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:34	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 20:34	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 20:34	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 20:34	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:34	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:34	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 20:34	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 20:34	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 20:34	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 20:34	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 20:34	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 20:34	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 20:34	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 20:34	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 20:34	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 20:34	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 20:34	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 20:34	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 20:34	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 20:34	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 20:34	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:34	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 20:34	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:34	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 20:34	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:34	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 20:34	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 20:34	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 20:34	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 20:34	1

Client Sample ID: MWB-29(I)c
Date Collected: 07/23/13 12:49
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/26/13 20:34*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/26/13 20:34*	*1*
Toluene-d8 (Surr)	*98*		*87 - 112*		*07/26/13 20:34*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 12:48	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*129*		*56 - 144*	*07/25/13 13:27*	*08/01/13 12:48*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.9**		0.50	0.25	mg/L			08/03/13 23:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 14:41	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 14:41	1
Barium	**44**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 14:41	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 14:41	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 14:41	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 14:41	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 14:41	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 14:41	1
Iron	**410**		100	33	ug/L		07/26/13 14:48	08/06/13 14:41	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 14:41	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 14:41	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 14:41	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 14:41	1
Sodium	**3.9**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 14:41	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 14:41	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 14:41	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 14:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:51	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.052**		0.050	0.026	mg/L			07/31/13 16:12	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 11:38	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**14**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 12:48	1
Field pH	**5.08**				SU			07/23/13 12:48	1
Field Temperature	**22.8**				Degrees C			07/23/13 12:48	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(I)c
Date Collected: 07/23/13 12:49
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-12
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.4				mg/L			07/23/13 12:48	1
Sheen	None				NONE			07/23/13 12:48	1
Specific Conductance	34				umhos/cm			07/23/13 12:48	1
Turbidity	8.27				NTU			07/23/13 12:48	1
Water Level	132.66				ft			07/23/13 12:48	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-11(1)(R)c
Date Collected: 07/23/13 08:20
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-13
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 20:57	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 20:57	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:57	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 20:57	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 20:57	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 20:57	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 20:57	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 20:57	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 20:57	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:57	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:57	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 20:57	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 20:57	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 20:57	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 20:57	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:57	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 20:57	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:57	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 20:57	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 20:57	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 20:57	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:57	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 20:57	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 20:57	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 20:57	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 20:57	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 20:57	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 20:57	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 20:57	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 20:57	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 20:57	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 20:57	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 20:57	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 20:57	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 20:57	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 20:57	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 20:57	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 20:57	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 20:57	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 20:57	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 20:57	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 20:57	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 20:57	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 20:57	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 20:57	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 20:57	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 20:57	1

Client Sample ID: MWB-11(1)(R)c
Date Collected: 07/23/13 08:20
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-13
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*87 - 114*		*07/26/13 20:57*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/26/13 20:57*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/26/13 20:57*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 13:01	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*126*		*56 - 144*	*07/25/13 13:27*	*08/01/13 13:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.4**		0.50	0.25	mg/L			08/03/13 23:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:01	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:01	1
Barium	**42**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:01	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:01	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:01	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:01	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:01	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:01	1
Iron	**400**		100	33	ug/L		07/26/13 14:48	08/06/13 15:01	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:01	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:01	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:01	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:01	1
Sodium	**3.4**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:01	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:01	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:01	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:53	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.061**		0.050	0.026	mg/L			07/31/13 16:28	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:32	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**30**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 08:19	1
Field pH	**4.54**				SU			07/23/13 08:19	1
Field Temperature	**24.3**				Degrees C			07/23/13 08:19	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-11(1)(R)c
Date Collected: 07/23/13 08:20
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-13
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 08:19	1
Sheen	None				NONE			07/23/13 08:19	1
Specific Conductance	38				umhos/cm			07/23/13 08:19	1
Turbidity	4.45				NTU			07/23/13 08:19	1
Water Level	109.93				ft			07/23/13 08:19	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-11(S)c
Date Collected: 07/23/13 07:40
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-14
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 19:05	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 19:05	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:05	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 19:05	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 19:05	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 19:05	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 19:05	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 19:05	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:05	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:05	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:05	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 19:05	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 19:05	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 19:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 19:05	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:05	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 19:05	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:05	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 19:05	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 19:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 19:05	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 19:05	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 19:05	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 19:05	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 19:05	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 19:05	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 19:05	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 19:05	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 19:05	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 19:05	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 19:05	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 19:05	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 19:05	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 19:05	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 19:05	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 19:05	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 19:05	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:05	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 19:05	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:05	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 19:05	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:05	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 19:05	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 19:05	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 19:05	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 19:05	1

Client Sample ID: MWB-11(S)c

Date Collected: 07/23/13 07:40
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-14

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/27/13 19:05*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/27/13 19:05*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/27/13 19:05*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 13:15	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*127*		*56 - 144*	*07/25/13 13:27*	*08/01/13 13:15*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**		0.50	0.25	mg/L			08/03/13 23:43	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:14	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:14	1
Barium	**87**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:14	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:14	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:14	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:14	1
Cobalt	**0.64**		0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:14	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:14	1
Iron	**1500**		100	33	ug/L		07/26/13 14:48	08/06/13 15:14	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:14	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:14	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:14	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:14	1
Sodium	**16**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:14	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:14	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:14	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:56	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.11**		0.050	0.026	mg/L			07/31/13 16:28	1
Nitrate Nitrite as N	**0.015**	I	0.050	0.010	mg/L			07/31/13 11:31	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**100**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 07:39	1
Field pH	**3.9**				SU			07/23/13 07:39	1
Field Temperature	**23.4**				Degrees C			07/23/13 07:39	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-11(S)c
Date Collected: 07/23/13 07:40
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-14
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 07:39	1
Sheen	None				NONE			07/23/13 07:39	1
Specific Conductance	210				umhos/cm			07/23/13 07:39	1
Turbidity	5.57				NTU			07/23/13 07:39	1
Water Level	109.28				ft			07/23/13 07:39	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(S)c
Date Collected: 07/23/13 08:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-15
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 19:27	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 19:27	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:27	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 19:27	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 19:27	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 19:27	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 19:27	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 19:27	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:27	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:27	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:27	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 19:27	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 19:27	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 19:27	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 19:27	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:27	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 19:27	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:27	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 19:27	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 19:27	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 19:27	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 19:27	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:27	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 19:27	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 19:27	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 19:27	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 19:27	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 19:27	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 19:27	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 19:27	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 19:27	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 19:27	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 19:27	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 19:27	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 19:27	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 19:27	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 19:27	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 19:27	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:27	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 19:27	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:27	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 19:27	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:27	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 19:27	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 19:27	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 19:27	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 19:27	1

Client Sample ID: MWB-7(S)c
Date Collected: 07/23/13 08:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-15
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/27/13 19:27*	*1*
Dibromofluoromethane	*96*		*81 - 113*		*07/27/13 19:27*	*1*
Toluene-d8 (Surr)	*97*		*87 - 112*		*07/27/13 19:27*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 14:12	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*95*		*56 - 144*	*07/25/13 13:27*	*08/01/13 14:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18**		0.50	0.25	mg/L			08/03/13 23:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:21	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:21	1
Barium	**5.2**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:21	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:21	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:21	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:21	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:21	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:21	1
Iron	**170**		100	33	ug/L		07/26/13 14:48	08/06/13 15:21	1
Lead	**0.22**	**I**	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:21	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:21	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:21	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:21	1
Sodium	**16**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:21	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:21	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:21	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:04	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.34**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.099**		0.050	0.010	mg/L			07/31/13 11:41	1
Nitrate as N	**0.099**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**120**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brown Tint**				PCU			07/23/13 08:52	1
Field pH	**4.98**				SU			07/23/13 08:52	1
Field Temperature	**26.1**				Degrees C			07/23/13 08:52	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(S)c
Date Collected: 07/23/13 08:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-15
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 08:52	1
Sheen	None				NONE			07/23/13 08:52	1
Specific Conductance	190				umhos/cm			07/23/13 08:52	1
Turbidity	13.6				NTU			07/23/13 08:52	1
Water Level	115.45				ft			07/23/13 08:52	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(1)c
Date Collected: 07/23/13 09:35
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-16
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 19:50	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 19:50	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:50	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 19:50	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 19:50	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 19:50	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 19:50	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 19:50	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 19:50	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:50	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:50	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 19:50	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 19:50	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 19:50	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 19:50	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:50	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 19:50	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:50	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 19:50	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 19:50	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 19:50	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 19:50	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 19:50	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 19:50	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 19:50	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 19:50	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 19:50	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 19:50	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 19:50	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 19:50	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 19:50	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 19:50	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 19:50	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 19:50	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 19:50	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 19:50	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 19:50	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 19:50	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 19:50	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 19:50	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 19:50	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 19:50	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 19:50	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 19:50	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 19:50	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 19:50	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 19:50	1

Client Sample ID: MWB-7(1)c
Date Collected: 07/23/13 09:35
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-16
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*87 - 114*		*07/27/13 19:50*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/27/13 19:50*	*1*
Toluene-d8 (Surr)	*98*		*87 - 112*		*07/27/13 19:50*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:27	08/01/13 13:58	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	08/01/13 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*129*		*56 - 144*	*07/25/13 13:27*	*08/01/13 13:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		0.50	0.25	mg/L			08/04/13 00:07	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:28	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:28	1
Barium	**48**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:28	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:28	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:28	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:28	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:28	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:28	1
Iron	**340**		100	33	ug/L		07/26/13 14:48	08/06/13 15:28	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:28	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:28	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:28	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:28	1
Sodium	**3.5**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:28	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:28	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:28	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:06	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.044**	**I**	0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.053**		0.050	0.010	mg/L			07/31/13 11:58	1
Nitrate as N	**0.053**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**26**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 09:34	1
Field pH	**4.91**				SU			07/23/13 09:34	1
Field Temperature	**24.5**				Degrees C			07/23/13 09:34	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(1)c
Date Collected: 07/23/13 09:35
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-16
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 09:34	1
Sheen	None				NONE			07/23/13 09:34	1
Specific Conductance	43				umhos/cm			07/23/13 09:34	1
Turbidity	2.74				NTU			07/23/13 09:34	1
Water Level	118.53				ft			07/23/13 09:34	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(D)c
Date Collected: 07/23/13 10:13
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-17
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 20:13	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 20:13	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:13	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 20:13	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 20:13	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 20:13	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 20:13	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 20:13	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:13	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:13	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:13	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 20:13	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 20:13	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 20:13	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 20:13	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:13	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 20:13	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:13	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 20:13	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 20:13	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 20:13	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 20:13	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:13	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 20:13	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 20:13	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 20:13	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 20:13	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 20:13	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 20:13	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 20:13	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 20:13	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 20:13	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 20:13	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 20:13	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 20:13	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 20:13	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 20:13	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 20:13	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:13	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 20:13	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:13	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 20:13	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:13	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 20:13	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 20:13	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 20:13	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 20:13	1

Client Sample ID: MWB-7(D)c
Date Collected: 07/23/13 10:13
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-17
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*87 - 114*		*07/27/13 20:13*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/27/13 20:13*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 20:13*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 17:48	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*121*		*56 - 144*	*07/25/13 13:17*	*07/30/13 17:48*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.4**		0.50	0.25	mg/L			08/04/13 00:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:34	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:34	1
Barium	**89**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:34	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:34	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:34	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:34	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:34	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:34	1
Iron	**290**		100	33	ug/L		07/26/13 14:48	08/06/13 15:34	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:34	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:34	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:34	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:34	1
Sodium	**4.6**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:34	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:34	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:34	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:09	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.15**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 11:28	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**180**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 10:12	1
Field pH	**6.65**				SU			07/23/13 10:12	1
Field Temperature	**25.2**				Degrees C			07/23/13 10:12	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(D)c
Date Collected: 07/23/13 10:13
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-17
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 10:12	1
Sheen	None				NONE			07/23/13 10:12	1
Specific Conductance	356				umhos/cm			07/23/13 10:12	1
Turbidity	1.43				NTU			07/23/13 10:12	1
Water Level	120.87				ft			07/23/13 10:12	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(S)c
Date Collected: 07/23/13 10:56
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-18
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 20:36	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 20:36	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:36	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 20:36	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 20:36	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 20:36	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 20:36	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 20:36	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:36	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:36	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:36	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 20:36	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 20:36	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 20:36	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 20:36	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:36	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 20:36	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:36	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 20:36	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 20:36	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 20:36	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 20:36	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:36	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 20:36	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 20:36	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 20:36	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 20:36	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 20:36	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 20:36	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 20:36	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 20:36	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 20:36	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 20:36	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 20:36	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 20:36	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 20:36	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 20:36	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 20:36	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:36	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 20:36	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:36	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 20:36	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:36	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 20:36	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 20:36	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 20:36	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 20:36	1

Client Sample ID: MWB-19(S)c
Date Collected: 07/23/13 10:56
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-18
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/27/13 20:36*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/27/13 20:36*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 20:36*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 18:01	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*125*		*56 - 144*	*07/25/13 13:17*	*07/30/13 18:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12**		0.50	0.25	mg/L			08/04/13 00:57	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:41	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:41	1
Barium	**59**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:41	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:41	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:41	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:41	1
Cobalt	**0.25**	**I**	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:41	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:41	1
Iron	**1100**		100	33	ug/L		07/26/13 14:48	08/06/13 15:41	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:41	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:41	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:41	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:41	1
Sodium	**9.7**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:41	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:41	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:41	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:41	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:12	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.37**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 11:40	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**54**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brownish Tint**				PCU			07/23/13 10:55	1
Field pH	**4.7**				SU			07/23/13 10:55	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(S)c
Date Collected: 07/23/13 10:56
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-18
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	25.2				Degrees C			07/23/13 10:55	1
Oxygen, Dissolved	0.0				mg/L			07/23/13 10:55	1
Sheen	None				NONE			07/23/13 10:55	1
Specific Conductance	114				umhos/cm			07/23/13 10:55	1
Turbidity	6.88				NTU			07/23/13 10:55	1
Water Level	120.56				ft			07/23/13 10:55	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(I)c
Date Collected: 07/23/13 11:25
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-19
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 20:59	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 20:59	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:59	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 20:59	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 20:59	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 20:59	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 20:59	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 20:59	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 20:59	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:59	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:59	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 20:59	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 20:59	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 20:59	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 20:59	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:59	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 20:59	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:59	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 20:59	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 20:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 20:59	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 20:59	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 20:59	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 20:59	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 20:59	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 20:59	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 20:59	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 20:59	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 20:59	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 20:59	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 20:59	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 20:59	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 20:59	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 20:59	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 20:59	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 20:59	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 20:59	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 20:59	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 20:59	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 20:59	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 20:59	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 20:59	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 20:59	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 20:59	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 20:59	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 20:59	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 20:59	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(I)c
Date Collected: 07/23/13 11:25
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-19
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/27/13 20:59*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/27/13 20:59*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 20:59*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/25/13 13:17	07/30/13 18:15	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:17	07/30/13 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*124*		*56 - 144*	*07/25/13 13:17*	*07/30/13 18:15*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		0.50	0.25	mg/L			08/04/13 01:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:48	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:48	1
Barium	**49**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:48	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:48	1
Cadmium	**0.095**	**I**	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:48	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:48	1
Cobalt	**0.18**	**I**	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:48	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:48	1
Iron	**420**		100	33	ug/L		07/26/13 14:48	08/06/13 15:48	1
Lead	**0.20**	**I**	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:48	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:48	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:48	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:48	1
Sodium	**3.6**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:48	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:48	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:48	1
Zinc	**8.4**	**I**	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:14	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.045**	**I**	0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.014**	**I**	0.050	0.010	mg/L			07/31/13 11:29	1
Nitrate as N	**0.014**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**14**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 11:24	1
Field pH	**4.5**				SU			07/23/13 11:24	1
Field Temperature	**25.1**				Degrees C			07/23/13 11:24	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(l)c
Date Collected: 07/23/13 11:25
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-19
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 11:24	1
Sheen	None				NONE			07/23/13 11:24	1
Specific Conductance	35				umhos/cm			07/23/13 11:24	1
Turbidity	4.29				NTU			07/23/13 11:24	1
Water Level	121.16				ft			07/23/13 11:24	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(D)c
Date Collected: 07/23/13 12:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-20
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 21:22	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 21:22	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 21:22	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 21:22	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 21:22	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 21:22	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 21:22	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 21:22	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 21:22	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 21:22	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 21:22	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 21:22	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 21:22	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 21:22	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 21:22	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 21:22	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 21:22	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 21:22	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 21:22	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 21:22	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 21:22	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 21:22	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 21:22	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 21:22	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 21:22	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 21:22	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 21:22	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 21:22	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 21:22	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 21:22	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 21:22	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 21:22	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 21:22	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 21:22	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 21:22	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 21:22	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 21:22	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 21:22	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 21:22	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 21:22	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 21:22	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 21:22	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 21:22	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 21:22	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 21:22	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 21:22	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 21:22	1

Client Sample ID: MWB-19(D)c
Date Collected: 07/23/13 12:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-20
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*87 - 114*		*07/27/13 21:22*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/27/13 21:22*	*1*
Toluene-d8 (Surr)	*98*		*87 - 112*		*07/27/13 21:22*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 18:29	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:17	07/30/13 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*120*		*56 - 144*	*07/25/13 13:17*	*07/30/13 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.6**		0.50	0.25	mg/L			08/04/13 02:11	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 15:54	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 15:54	1
Barium	**100**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 15:54	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 15:54	1
Cadmium	**0.16**	**I**	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 15:54	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 15:54	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 15:54	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 15:54	1
Iron	**610**		100	33	ug/L		07/26/13 14:48	08/06/13 15:54	1
Lead	**0.23**	**I**	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 15:54	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 15:54	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 15:54	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 15:54	1
Sodium	**4.9**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 15:54	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 15:54	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 15:54	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 15:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.10**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.027**	**I**	0.050	0.010	mg/L			07/31/13 11:42	1
Nitrate as N	**0.027**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**170**		5.0	5.0	mg/L			07/30/13 14:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brownish Tint**				PCU			07/23/13 11:59	1
Field pH	**6.73**				SU			07/23/13 11:59	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-19(D)c
Date Collected: 07/23/13 12:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-20
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	24.4				Degrees C			07/23/13 11:59	1
Oxygen, Dissolved	0.0				mg/L			07/23/13 11:59	1
Sheen	None				NONE			07/23/13 11:59	1
Specific Conductance	378				umhos/cm			07/23/13 11:59	1
Turbidity	14.5				NTU			07/23/13 11:59	1
Water Level	121.74				ft			07/23/13 11:59	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(S)c
Date Collected: 07/23/13 12:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-21
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 21:45	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 21:45	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 21:45	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 21:45	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 21:45	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 21:45	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 21:45	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 21:45	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 21:45	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 21:45	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 21:45	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 21:45	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 21:45	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 21:45	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 21:45	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 21:45	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 21:45	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 21:45	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 21:45	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 21:45	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 21:45	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 21:45	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 21:45	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 21:45	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 21:45	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 21:45	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 21:45	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 21:45	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 21:45	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 21:45	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 21:45	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 21:45	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 21:45	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 21:45	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 21:45	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 21:45	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 21:45	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 21:45	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 21:45	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 21:45	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 21:45	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 21:45	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 21:45	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 21:45	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 21:45	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 21:45	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 21:45	1

Client Sample ID: MWB-17(S)c

Date Collected: 07/23/13 12:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-21

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/27/13 21:45*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/27/13 21:45*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 21:45*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 18:43	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*119*		*56 - 144*	*07/25/13 13:17*	*07/30/13 18:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		0.50	0.25	mg/L			08/04/13 02:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 16:01	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 16:01	1
Barium	**2.8**	**I**	5.0	1.3	ug/L		07/26/13 14:48	08/06/13 16:01	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 16:01	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 16:01	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 16:01	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 16:01	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 16:01	1
Iron	**140**		100	33	ug/L		07/26/13 14:48	08/06/13 16:01	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 16:01	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 16:01	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 16:01	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 16:01	1
Sodium	**5.3**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 16:01	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 16:01	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 16:01	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 16:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:25	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.21**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.012**	**I**	0.050	0.010	mg/L			07/31/13 16:34	1
Nitrate as N	**0.012**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**80**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brownish Tint**				PCU			07/23/13 12:37	1
Field pH	**5.98**				SU			07/23/13 12:37	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(S)c
Date Collected: 07/23/13 12:38
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-21
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	25.7				Degrees C			07/23/13 12:37	1
Oxygen, Dissolved	0.0				mg/L			07/23/13 12:37	1
Sheen	None				NONE			07/23/13 12:37	1
Specific Conductance	111				umhos/cm			07/23/13 12:37	1
Turbidity	17.9				NTU			07/23/13 12:37	1
Water Level	131.89				ft			07/23/13 12:37	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 01 44404
Date Collected: 07/23/13 00:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-22
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 22:07	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 22:07	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:07	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 22:07	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 22:07	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 22:07	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 22:07	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 22:07	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:07	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:07	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:07	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 22:07	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 22:07	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 22:07	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 22:07	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:07	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 22:07	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:07	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 22:07	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 22:07	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 22:07	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 22:07	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:07	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 22:07	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 22:07	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 22:07	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 22:07	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 22:07	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 22:07	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 22:07	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 22:07	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 22:07	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 22:07	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 22:07	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 22:07	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 22:07	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 22:07	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 22:07	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:07	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 22:07	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:07	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 22:07	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:07	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 22:07	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 22:07	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 22:07	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 22:07	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 01 44404
Date Collected: 07/23/13 00:00
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-22
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		87 - 114		07/27/13 22:07	1
Dibromofluoromethane	96		81 - 113		07/27/13 22:07	1
Toluene-d8 (Surr)	98		87 - 112		07/27/13 22:07	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-20(S)c
Date Collected: 07/23/13 13:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-23
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 22:30	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 22:30	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:30	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 22:30	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 22:30	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 22:30	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 22:30	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 22:30	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:30	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:30	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:30	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 22:30	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 22:30	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 22:30	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 22:30	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:30	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 22:30	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:30	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 22:30	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 22:30	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 22:30	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 22:30	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:30	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 22:30	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 22:30	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 22:30	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 22:30	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 22:30	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 22:30	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 22:30	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 22:30	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 22:30	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 22:30	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 22:30	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 22:30	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 22:30	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 22:30	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 22:30	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:30	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 22:30	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:30	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 22:30	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:30	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 22:30	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 22:30	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 22:30	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 22:30	1

Client Sample ID: MWB-20(S)c
Date Collected: 07/23/13 13:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-23
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/27/13 22:30*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/27/13 22:30*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 22:30*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 18:56	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*121*		*56 - 144*	*07/25/13 13:17*	*07/30/13 18:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.4**		0.50	0.25	mg/L			08/04/13 03:01	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 16:21	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 16:21	1
Barium	**10**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 16:21	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 16:21	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 16:21	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 16:21	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 16:21	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 16:21	1
Iron	**130**		100	33	ug/L		07/26/13 14:48	08/06/13 16:21	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 16:21	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 16:21	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 16:21	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 16:21	1
Sodium	**3.1**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 16:21	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 16:21	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 16:21	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 16:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:27	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.16**		0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.033**	**I**	0.050	0.010	mg/L			07/31/13 16:35	1
Nitrate as N	**0.033**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**52**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Lt Tan Tint**				PCU			07/23/13 13:52	1
Field pH	**4.16**				SU			07/23/13 13:52	1
Field Temperature	**25.7**				Degrees C			07/23/13 13:52	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-20(S)c
Date Collected: 07/23/13 13:53
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-23
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 13:52	1
Sheen	None				NONE			07/23/13 13:52	1
Specific Conductance	55				umhos/cm			07/23/13 13:52	1
Turbidity	5.64				NTU			07/23/13 13:52	1
Water Level	113.53				ft			07/23/13 13:52	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(D)c
Date Collected: 07/23/13 13:54
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-24
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 22:53	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 22:53	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:53	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 22:53	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 22:53	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 22:53	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 22:53	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 22:53	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 22:53	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:53	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:53	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 22:53	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 22:53	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 22:53	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 22:53	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:53	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 22:53	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:53	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 22:53	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 22:53	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 22:53	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 22:53	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 22:53	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 22:53	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 22:53	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 22:53	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 22:53	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 22:53	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 22:53	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 22:53	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 22:53	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 22:53	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 22:53	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 22:53	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 22:53	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 22:53	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 22:53	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 22:53	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 22:53	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 22:53	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 22:53	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 22:53	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 22:53	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 22:53	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 22:53	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 22:53	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 22:53	1

Client Sample ID: MWB-17(D)c
Date Collected: 07/23/13 13:54
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-24
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*87 - 114*		*07/27/13 22:53*	*1*
Dibromofluoromethane	*97*		*81 - 113*		*07/27/13 22:53*	*1*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/27/13 22:53*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/25/13 13:17	07/30/13 19:10	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:17	07/30/13 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*122*		*56 - 144*	*07/25/13 13:17*	*07/30/13 19:10*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.2**		0.50	0.25	mg/L			08/04/13 03:13	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 16:28	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 16:28	1
Barium	**31**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 16:28	1
Beryllium	**0.26**	**I**	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 16:28	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 16:28	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 16:28	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 16:28	1
Copper	**2.2**	**I**	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 16:28	1
Iron	**340**		100	33	ug/L		07/26/13 14:48	08/06/13 16:28	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 16:28	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 16:28	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 16:28	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 16:28	1
Sodium	**3.5**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 16:28	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 16:28	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 16:28	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 16:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:35	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.14**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:37	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**44**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 13:53	1
Field pH	**5.35**				SU			07/23/13 13:53	1
Field Temperature	**24.2**				Degrees C			07/23/13 13:53	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(D)c
Date Collected: 07/23/13 13:54
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-24
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 13:53	1
Sheen	None				NONE			07/23/13 13:53	1
Specific Conductance	54				umhos/cm			07/23/13 13:53	1
Turbidity	0.67				NTU			07/23/13 13:53	1
Water Level	131.91				ft			07/23/13 13:53	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(I)c
Date Collected: 07/23/13 13:15
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-25
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 23:16	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 23:16	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 23:16	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 23:16	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/27/13 23:16	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 23:16	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 23:16	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 23:16	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 23:16	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 23:16	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 23:16	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 23:16	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 23:16	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 23:16	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 23:16	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 23:16	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 23:16	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 23:16	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 23:16	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 23:16	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 23:16	1
1,1-Dichloroethane	0.20	J U	1.0	0.20	ug/L			07/27/13 23:16	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 23:16	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 23:16	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 23:16	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 23:16	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 23:16	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 23:16	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 23:16	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 23:16	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 23:16	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 23:16	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 23:16	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 23:16	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 23:16	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 23:16	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 23:16	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 23:16	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 23:16	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 23:16	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 23:16	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 23:16	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 23:16	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 23:16	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 23:16	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 23:16	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 23:16	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(I)c
Date Collected: 07/23/13 13:15
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-25
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*87 - 114*		*07/27/13 23:16*	*1*
Dibromofluoromethane	*97*		*81 - 113*		*07/27/13 23:16*	*1*
Toluene-d8 (Surr)	*98*		*87 - 112*		*07/27/13 23:16*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 19:24	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:17	07/30/13 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*119*		*56 - 144*	*07/25/13 13:17*	*07/30/13 19:24*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.8**		0.50	0.25	mg/L			08/04/13 03:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 16:35	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 16:35	1
Barium	**35**		5.0	1.3	ug/L		07/26/13 14:48	08/06/13 16:35	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 16:35	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 16:35	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 16:35	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 16:35	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 16:35	1
Iron	**330**		100	33	ug/L		07/26/13 14:48	08/06/13 16:35	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 16:35	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 16:35	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 16:35	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 16:35	1
Sodium	**3.4**		0.50	0.25	mg/L		07/26/13 14:48	08/06/13 16:35	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 16:35	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 16:35	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 16:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:38	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.037**	**I**	0.050	0.026	mg/L			07/31/13 15:53	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 16:36	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**26**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 13:14	1
Field pH	**4.88**				SU			07/23/13 13:14	1
Field Temperature	**24.1**				Degrees C			07/23/13 13:14	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-17(I)c
Date Collected: 07/23/13 13:15
Date Received: 07/24/13 08:00

Lab Sample ID: 640-44404-25
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 13:14	1
Sheen	None				NONE			07/23/13 13:14	1
Specific Conductance	33				umhos/cm			07/23/13 13:14	1
Turbidity	1.23				NTU			07/23/13 13:14	1
Water Level	135.74				ft			07/23/13 13:14	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(S)d
Date Collected: 07/23/13 16:37
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-1
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 14:05	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 14:05	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 14:05	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 14:05	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 14:05	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 14:05	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 14:05	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 14:05	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 14:05	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 14:05	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:05	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 14:05	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 14:05	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 14:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 14:05	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:05	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 14:05	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:05	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 14:05	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 14:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 14:05	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:05	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 14:05	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 14:05	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 14:05	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 14:05	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 14:05	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 14:05	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 14:05	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 14:05	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 14:05	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 14:05	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 14:05	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 14:05	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 14:05	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 14:05	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 14:05	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:05	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 14:05	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:05	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 14:05	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 14:05	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 14:05	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 14:05	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 14:05	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 14:05	1

Client Sample ID: MWB-34(S)d
Date Collected: 07/23/13 16:37
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 14:05*	*1*
Dibromofluoromethane	*91*		*81 - 113*		*07/28/13 14:05*	*1*
Toluene-d8 (Surr)	*106*		*87 - 112*		*07/28/13 14:05*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 15:47	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*107*		*56 - 144*	*07/26/13 12:40*	*07/29/13 15:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48**		0.50	0.25	mg/L			08/04/13 03:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 00:39	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 00:39	1
Barium	**5.0**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 00:39	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 00:39	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 00:39	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 00:39	1
Cobalt	**0.51**		0.50	0.15	ug/L		07/26/13 22:16	07/31/13 00:39	1
Copper	**1.7**	**I**	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 00:39	1
Iron	**240**		100	33	ug/L		07/26/13 22:16	07/31/13 00:39	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 00:39	1
Nickel	**4.7**	**I**	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 00:39	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 00:39	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 00:39	1
Sodium	**57**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 00:39	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 00:39	1
Vanadium	**7.5**	**I**	10	3.8	ug/L		07/26/13 22:16	07/31/13 00:39	1
Zinc	**36**		20	8.3	ug/L		07/26/13 22:16	07/31/13 00:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:38	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**2.7**		0.10	0.052	mg/L			07/31/13 09:48	2
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 16:12	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**440**		10	10	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Sl Yellow Tint**				PCU			07/23/13 16:36	1
Field pH	**6.06**				SU			07/23/13 16:36	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(S)d
Date Collected: 07/23/13 16:37
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-1
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	24.7				Degrees C			07/23/13 16:36	1
Oxygen, Dissolved	0.1				mg/L			07/23/13 16:36	1
Sheen	None				NONE			07/23/13 16:36	1
Specific Conductance	736				umhos/cm			07/23/13 16:36	1
Turbidity	2.07				NTU			07/23/13 16:36	1
Water Level	116.44				ft			07/23/13 16:36	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(I)d
Date Collected: 07/23/13 16:05
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-2
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 14:27	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 14:27	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 14:27	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 14:27	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 14:27	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 14:27	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 14:27	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 14:27	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 14:27	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 14:27	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:27	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 14:27	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 14:27	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 14:27	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 14:27	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:27	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 14:27	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:27	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 14:27	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 14:27	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 14:27	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:27	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:27	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 14:27	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 14:27	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 14:27	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 14:27	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 14:27	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 14:27	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 14:27	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 14:27	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 14:27	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 14:27	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 14:27	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 14:27	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 14:27	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 14:27	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 14:27	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:27	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 14:27	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:27	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 14:27	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 14:27	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 14:27	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 14:27	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 14:27	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 14:27	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(I)d
Date Collected: 07/23/13 16:05
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*87 - 114*		*07/28/13 14:27*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/28/13 14:27*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 14:27*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 17:09	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/26/13 12:40	07/29/13 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*119*		*56 - 144*	*07/26/13 12:40*	*07/29/13 17:09*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.5**		0.50	0.25	mg/L			08/04/13 03:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:12	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:12	1
Barium	**48**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:12	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:12	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:12	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:12	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:12	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:12	1
Iron	**430**		100	33	ug/L		07/26/13 22:16	07/31/13 01:12	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:12	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:12	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:12	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:12	1
Sodium	**3.6**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:12	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:12	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:12	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:25	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.066**		0.050	0.026	mg/L			07/30/13 17:34	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 16:11	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**30**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 16:04	1
Field pH	**5.27**				SU			07/23/13 16:04	1
Field Temperature	**25.4**				Degrees C			07/23/13 16:04	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(I)d
Date Collected: 07/23/13 16:05
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-2
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.1				mg/L			07/23/13 16:04	1
Sheen	None				NONE			07/23/13 16:04	1
Specific Conductance	40				umhos/cm			07/23/13 16:04	1
Turbidity	4.03				NTU			07/23/13 16:04	1
Water Level	118.01				ft			07/23/13 16:04	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(D)d
Date Collected: 07/23/13 15:33
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 14:49	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 14:49	1
Benzene	**0.51**	**I**	1.0	0.13	ug/L			07/28/13 14:49	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 14:49	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 14:49	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 14:49	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 14:49	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 14:49	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 14:49	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 14:49	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:49	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 14:49	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 14:49	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 14:49	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 14:49	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:49	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 14:49	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:49	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 14:49	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 14:49	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 14:49	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:49	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 14:49	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 14:49	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 14:49	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 14:49	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 14:49	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 14:49	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 14:49	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 14:49	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 14:49	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 14:49	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 14:49	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 14:49	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 14:49	1
Toluene	**0.95**	**I**	1.0	0.14	ug/L			07/28/13 14:49	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 14:49	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 14:49	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 14:49	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 14:49	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 14:49	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 14:49	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 14:49	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 14:49	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 14:49	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 14:49	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 14:49	1

Client Sample ID: MWB-34(D)d
Date Collected: 07/23/13 15:33
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 14:49*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 14:49*	*1*
Toluene-d8 (Surr)	*107*		*87 - 112*		*07/28/13 14:49*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/26/13 12:40	07/29/13 17:22	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*66*		*56 - 144*	*07/26/13 12:40*	*07/29/13 17:22*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		0.50	0.25	mg/L			08/04/13 04:03	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:19	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:19	1
Barium	**91**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:19	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:19	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:19	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:19	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:19	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:19	1
Iron	**470**		100	33	ug/L		07/26/13 22:16	07/31/13 01:19	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:19	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:19	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:19	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:19	1
Sodium	**5.8**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:19	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:19	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:19	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:41	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.33**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:19	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**220**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 15:32	1
Field pH	**7.08**				SU			07/23/13 15:32	1
Field Temperature	**23.7**				Degrees C			07/23/13 15:32	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-34(D)d
Date Collected: 07/23/13 15:33
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-3
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 15:32	1
Sheen	None				NONE			07/23/13 15:32	1
Specific Conductance	361				umhos/cm			07/23/13 15:32	1
Turbidity	2.0				NTU			07/23/13 15:32	1
Water Level	117.97				ft			07/23/13 15:32	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-21(S)c
Date Collected: 07/23/13 15:01
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-4
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 15:11	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 15:11	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:11	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 15:11	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 15:11	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 15:11	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 15:11	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 15:11	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:11	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 15:11	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:11	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 15:11	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 15:11	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 15:11	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 15:11	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:11	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 15:11	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:11	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 15:11	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 15:11	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 15:11	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:11	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:11	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 15:11	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 15:11	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 15:11	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 15:11	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 15:11	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 15:11	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 15:11	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 15:11	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 15:11	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 15:11	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 15:11	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 15:11	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 15:11	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 15:11	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 15:11	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:11	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 15:11	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:11	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 15:11	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 15:11	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 15:11	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 15:11	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 15:11	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 15:11	1

Client Sample ID: MWB-21(S)c

Date Collected: 07/23/13 15:01
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*87 - 114*		*07/28/13 15:11*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 15:11*	*1*
Toluene-d8 (Surr)	*103*		*87 - 112*		*07/28/13 15:11*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.018	0.0056	ug/L		07/26/13 12:40	07/29/13 17:36	1
EDB	0.0060	U	0.018	0.0060	ug/L		07/26/13 12:40	07/29/13 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*111*		*56 - 144*	*07/26/13 12:40*	*07/29/13 17:36*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		0.50	0.25	mg/L			08/05/13 10:40	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:26	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:26	1
Barium	**20**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:26	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:26	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:26	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:26	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:26	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:26	1
Iron	**600**		100	33	ug/L		07/26/13 22:16	07/31/13 01:26	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:26	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:26	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:26	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:26	1
Sodium	**3.6**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:26	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:26	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:26	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:43	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.39**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 16:20	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**52**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 15:00	1
Field pH	**5.09**				SU			07/23/13 15:00	1
Field Temperature	**24.7**				Degrees C			07/23/13 15:00	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-21(S)c
Date Collected: 07/23/13 15:01
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-4
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 15:00	1
Sheen	None				NONE			07/23/13 15:00	1
Specific Conductance	59				umhos/cm			07/23/13 15:00	1
Turbidity	2.73				NTU			07/23/13 15:00	1
Water Level	112.22				ft			07/23/13 15:00	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-3(S)b
Date Collected: 07/23/13 15:58
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-5
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 15:32	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 15:32	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:32	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 15:32	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 15:32	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 15:32	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 15:32	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 15:32	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:32	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 15:32	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:32	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 15:32	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 15:32	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 15:32	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 15:32	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:32	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 15:32	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:32	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 15:32	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 15:32	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 15:32	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:32	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:32	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 15:32	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 15:32	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 15:32	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 15:32	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 15:32	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 15:32	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 15:32	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 15:32	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 15:32	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 15:32	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 15:32	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 15:32	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 15:32	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 15:32	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 15:32	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:32	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 15:32	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:32	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 15:32	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 15:32	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 15:32	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 15:32	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 15:32	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 15:32	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-3(S)b
Date Collected: 07/23/13 15:58
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/28/13 15:32*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 15:32*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 15:32*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/26/13 12:40	07/29/13 17:50	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*108*		*56 - 144*	*07/26/13 12:40*	*07/29/13 17:50*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		0.50	0.25	mg/L			08/05/13 11:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:46	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:46	1
Barium	**16**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:46	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:46	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:46	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:46	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:46	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:46	1
Iron	**550**		100	33	ug/L		07/26/13 22:16	07/31/13 01:46	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:46	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:46	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:46	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:46	1
Sodium	**5.6**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:46	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:46	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:46	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:46	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.090**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:21	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**26**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 15:57	1
Field pH	**4.78**				SU			07/23/13 15:57	1
Field Temperature	**22.8**				Degrees C			07/23/13 15:57	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-3(S)b
Date Collected: 07/23/13 15:58
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-5
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.7				mg/L			07/23/13 15:57	1
Sheen	None				NONE			07/23/13 15:57	1
Specific Conductance	67				umhos/cm			07/23/13 15:57	1
Turbidity	0.59				NTU			07/23/13 15:57	1
Water Level	145.99				ft			07/23/13 15:57	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-3(I)b
Date Collected: 07/23/13 15:22
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-6
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 15:54	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 15:54	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:54	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 15:54	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 15:54	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 15:54	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 15:54	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 15:54	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 15:54	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 15:54	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:54	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 15:54	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 15:54	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 15:54	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 15:54	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:54	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 15:54	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:54	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 15:54	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 15:54	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 15:54	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:54	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 15:54	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 15:54	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 15:54	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 15:54	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 15:54	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 15:54	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 15:54	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 15:54	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 15:54	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 15:54	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 15:54	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 15:54	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 15:54	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 15:54	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 15:54	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 15:54	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 15:54	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 15:54	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 15:54	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 15:54	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 15:54	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 15:54	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 15:54	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 15:54	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 15:54	1

Client Sample ID: MWB-3(I)b
Date Collected: 07/23/13 15:22
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-6
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/28/13 15:54*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 15:54*	*1*
Toluene-d8 (Surr)	*104*		*87 - 112*		*07/28/13 15:54*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 18:17	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*99*		*56 - 144*	*07/26/13 12:40*	*07/29/13 18:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.0**		0.50	0.25	mg/L			08/05/13 11:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:53	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:53	1
Barium	**28**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:53	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:53	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:53	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:53	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:53	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:53	1
Iron	**830**		100	33	ug/L		07/26/13 22:16	07/31/13 01:53	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:53	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:53	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:53	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:53	1
Sodium	**3.8**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:53	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:53	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:53	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:49	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.12**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.014**	**I**	0.050	0.010	mg/L			07/31/13 16:25	1
Nitrate as N	**0.014**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**24**		5.0	5.0	mg/L			07/30/13 16:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/23/13 15:21	1
Field pH	**5.18**				SU			07/23/13 15:21	1
Field Temperature	**23.1**				Degrees C			07/23/13 15:21	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-3(I)b
Date Collected: 07/23/13 15:22
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-6
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/23/13 15:21	1
Sheen	None				NONE			07/23/13 15:21	1
Specific Conductance	40				umhos/cm			07/23/13 15:21	1
Turbidity	1.18				NTU			07/23/13 15:21	1
Water Level	139.28				ft			07/23/13 15:21	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-33(S)d
Date Collected: 07/24/13 07:12
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-7
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 16:16	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 16:16	1
Benzene	**0.27**	**I**	1.0	0.13	ug/L			07/28/13 16:16	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 16:16	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 16:16	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 16:16	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 16:16	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 16:16	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 16:16	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 16:16	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:16	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 16:16	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 16:16	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 16:16	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 16:16	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:16	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 16:16	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:16	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 16:16	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 16:16	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 16:16	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:16	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:16	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 16:16	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 16:16	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 16:16	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 16:16	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 16:16	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 16:16	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 16:16	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 16:16	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 16:16	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 16:16	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 16:16	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 16:16	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 16:16	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 16:16	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 16:16	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:16	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 16:16	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:16	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 16:16	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 16:16	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 16:16	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 16:16	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 16:16	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 16:16	1

Client Sample ID: MWB-33(S)d
Date Collected: 07/24/13 07:12
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 16:16*	*1*
Dibromofluoromethane	*94*		*81 - 113*		*07/28/13 16:16*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 16:16*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/26/13 12:40	07/29/13 18:31	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*99*		*56 - 144*	*07/26/13 12:40*	*07/29/13 18:31*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.8**		0.50	0.25	mg/L			08/05/13 11:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 01:59	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 01:59	1
Barium	**15**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 01:59	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 01:59	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 01:59	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 01:59	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 01:59	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 01:59	1
Iron	**210**		100	33	ug/L		07/26/13 22:16	07/31/13 01:59	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 01:59	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 01:59	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 01:59	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 01:59	1
Sodium	**8.1**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 01:59	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 01:59	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 01:59	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 01:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:51	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1.2**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.014**	**I**	0.050	0.010	mg/L			07/31/13 16:13	1
Nitrate as N	**0.014**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**120**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/24/13 07:11	1
Field pH	**5.26**				SU			07/24/13 07:11	1
Field Temperature	**24.4**				Degrees C			07/24/13 07:11	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-33(S)d
Date Collected: 07/24/13 07:12
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-7
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.2				mg/L			07/24/13 07:11	1
Sheen	None				NONE			07/24/13 07:11	1
Specific Conductance	185				umhos/cm			07/24/13 07:11	1
Turbidity	2.63				NTU			07/24/13 07:11	1
Water Level	115.69				ft			07/24/13 07:11	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(D)d
Date Collected: 07/24/13 07:46
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-8
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 16:38	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 16:38	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 16:38	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 16:38	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 16:38	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 16:38	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 16:38	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 16:38	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 16:38	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 16:38	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:38	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 16:38	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 16:38	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 16:38	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 16:38	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:38	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 16:38	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:38	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 16:38	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 16:38	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 16:38	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:38	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:38	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 16:38	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 16:38	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 16:38	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 16:38	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 16:38	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 16:38	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 16:38	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 16:38	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 16:38	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 16:38	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 16:38	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 16:38	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 16:38	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 16:38	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 16:38	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:38	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 16:38	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:38	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 16:38	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 16:38	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 16:38	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 16:38	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 16:38	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 16:38	1

Client Sample ID: MWB-32(D)d
Date Collected: 07/24/13 07:46
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 16:38*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/28/13 16:38*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 16:38*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 18:45	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/26/13 12:40	07/29/13 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*107*		*56 - 144*	*07/26/13 12:40*	*07/29/13 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.5**		0.50	0.25	mg/L			08/05/13 11:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:06	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:06	1
Barium	**51**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:06	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:06	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:06	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:06	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:06	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:06	1
Iron	**630**		100	33	ug/L		07/26/13 22:16	07/31/13 02:06	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:06	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:06	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:06	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:06	1
Sodium	**4.5**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:06	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:06	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:06	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:54	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.22**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.017**	**I**	0.050	0.010	mg/L			07/31/13 16:06	1
Nitrate as N	**0.017**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**86**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/24/13 07:45	1
Field pH	**5.96**				SU			07/24/13 07:45	1
Field Temperature	**21.6**				Degrees C			07/24/13 07:45	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(D)d
Date Collected: 07/24/13 07:46
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-8
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.2				mg/L			07/24/13 07:45	1
Sheen	None				NONE			07/24/13 07:45	1
Specific Conductance	131				umhos/cm			07/24/13 07:45	1
Turbidity	2.4				NTU			07/24/13 07:45	1
Water Level	118.31				ft			07/24/13 07:45	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(I)d
Date Collected: 07/24/13 08:18
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-9
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 16:59	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 16:59	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 16:59	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 16:59	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 16:59	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 16:59	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 16:59	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 16:59	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 16:59	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 16:59	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:59	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 16:59	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 16:59	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 16:59	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 16:59	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:59	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 16:59	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:59	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 16:59	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 16:59	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 16:59	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:59	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 16:59	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 16:59	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 16:59	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 16:59	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 16:59	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 16:59	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 16:59	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 16:59	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 16:59	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 16:59	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 16:59	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 16:59	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 16:59	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 16:59	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 16:59	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 16:59	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 16:59	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 16:59	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 16:59	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 16:59	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 16:59	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 16:59	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 16:59	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 16:59	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 16:59	1

Client Sample ID: MWB-32(I)d
Date Collected: 07/24/13 08:18
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-9
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/28/13 16:59*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 16:59*	*1*
Toluene-d8 (Surr)	*103*		*87 - 112*		*07/28/13 16:59*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 18:58	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/26/13 12:40	07/29/13 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*105*		*56 - 144*	*07/26/13 12:40*	*07/29/13 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		0.50	0.25	mg/L			08/05/13 12:07	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:13	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:13	1
Barium	**36**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:13	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:13	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:13	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:13	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:13	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:13	1
Iron	**330**		100	33	ug/L		07/26/13 22:16	07/31/13 02:13	1
Lead	**0.69**	**I**	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:13	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:13	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:13	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:13	1
Sodium	**3.3**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:13	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:13	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:13	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:56	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.18**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/31/13 16:14	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**36**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Sl Whitish Tint**				PCU			07/24/13 08:17	1
Field pH	**5.24**				SU			07/24/13 08:17	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(I)d
Date Collected: 07/24/13 08:18
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-9
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Temperature	21.5				Degrees C			07/24/13 08:17	1
Oxygen, Dissolved	0.1				mg/L			07/24/13 08:17	1
Sheen	None				NONE			07/24/13 08:17	1
Specific Conductance	41				umhos/cm			07/24/13 08:17	1
Turbidity	28.99				NTU			07/24/13 08:17	1
Water Level	118.44				ft			07/24/13 08:17	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(S)d
Date Collected: 07/24/13 08:48
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-10
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 17:21	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 17:21	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 17:21	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 17:21	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 17:21	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 17:21	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 17:21	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 17:21	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 17:21	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 17:21	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 17:21	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 17:21	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 17:21	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 17:21	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 17:21	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 17:21	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 17:21	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:21	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 17:21	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 17:21	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 17:21	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:21	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 17:21	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 17:21	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 17:21	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 17:21	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 17:21	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 17:21	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 17:21	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 17:21	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 17:21	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 17:21	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 17:21	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 17:21	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 17:21	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 17:21	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 17:21	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 17:21	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 17:21	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 17:21	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:21	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 17:21	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 17:21	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 17:21	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 17:21	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 17:21	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 17:21	1

Client Sample ID: MWB-32(S)d
Date Collected: 07/24/13 08:48
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-10
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 17:21*	*1*
Dibromofluoromethane	*90*		*81 - 113*		*07/28/13 17:21*	*1*
Toluene-d8 (Surr)	*107*		*87 - 112*		*07/28/13 17:21*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 19:12	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/26/13 12:40	07/29/13 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*106*		*56 - 144*	*07/26/13 12:40*	*07/29/13 19:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		1.0	0.50	mg/L			08/05/13 12:20	2

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:19	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:19	1
Barium	**53**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:19	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:19	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:19	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:19	1
Cobalt	**0.57**		0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:19	1
Copper	**1.2**	**I**	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:19	1
Iron	**1300**		100	33	ug/L		07/26/13 22:16	07/31/13 02:19	1
Lead	**0.89**	**I**	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:19	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:19	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:19	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:19	1
Sodium	**25**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:19	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:19	1
Vanadium	**5.0**	**I**	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:19	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:59	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.63**		0.050	0.026	mg/L			07/31/13 09:31	1
Nitrate Nitrite as N	**0.041**	**I**	0.050	0.010	mg/L			07/27/13 11:47	1
Nitrate as N	**0.041**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**140**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brown Tint**				PCU			07/24/13 08:47	1
Field pH	**5.08**				SU			07/24/13 08:47	1
Field Temperature	**22.5**				Degrees C			07/24/13 08:47	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-32(S)d
Date Collected: 07/24/13 08:48
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-10
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.3				mg/L			07/24/13 08:47	1
Sheen	None				NONE			07/24/13 08:47	1
Specific Conductance	252				umhos/cm			07/24/13 08:47	1
Turbidity	12.19				NTU			07/24/13 08:47	1
Water Level	116.59				ft			07/24/13 08:47	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-31(D)b
Date Collected: 07/24/13 07:41
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-11
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 17:43	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 17:43	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 17:43	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 17:43	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 17:43	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 17:43	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 17:43	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 17:43	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 17:43	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 17:43	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 17:43	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 17:43	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 17:43	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 17:43	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 17:43	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 17:43	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 17:43	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:43	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 17:43	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 17:43	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 17:43	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:43	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 17:43	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 17:43	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 17:43	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 17:43	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 17:43	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 17:43	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 17:43	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 17:43	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 17:43	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 17:43	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 17:43	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 17:43	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 17:43	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 17:43	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 17:43	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 17:43	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 17:43	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 17:43	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 17:43	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 17:43	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 17:43	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 17:43	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 17:43	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 17:43	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 17:43	1

Client Sample ID: MWB-31(D)b
Date Collected: 07/24/13 07:41
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-11
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*87 - 114*		*07/28/13 17:43*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/28/13 17:43*	*1*
Toluene-d8 (Surr)	*106*		*87 - 112*		*07/28/13 17:43*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 19:25	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*109*		*56 - 144*	*07/26/13 12:40*	*07/29/13 19:25*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.5**		0.50	0.25	mg/L			08/05/13 12:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:26	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:26	1
Barium	**94**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:26	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:26	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:26	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:26	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:26	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:26	1
Iron	**710**		100	33	ug/L		07/26/13 22:16	07/31/13 02:26	1
Lead	**0.35**	**I**	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:26	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:26	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:26	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:26	1
Sodium	**6.5**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:26	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:26	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:26	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 20:02	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.28**		0.050	0.026	mg/L			07/31/13 09:40	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:18	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**220**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/24/13 07:40	1
Field pH	**6.36**				SU			07/24/13 07:40	1
Field Temperature	**21.9**				Degrees C			07/24/13 07:40	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-31(D)b
Date Collected: 07/24/13 07:41
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-11
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.0				mg/L			07/24/13 07:40	1
Sheen	None				NONE			07/24/13 07:40	1
Specific Conductance	383				umhos/cm			07/24/13 07:40	1
Turbidity	8.52				NTU			07/24/13 07:40	1
Water Level	138.93				ft			07/24/13 07:40	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-2(I)b
Date Collected: 07/24/13 08:11
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-12
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 18:05	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 18:05	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 18:05	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 18:05	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 18:05	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 18:05	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 18:05	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 18:05	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 18:05	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 18:05	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 18:05	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 18:05	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 18:05	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 18:05	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 18:05	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 18:05	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 18:05	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:05	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 18:05	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 18:05	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 18:05	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:05	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 18:05	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 18:05	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 18:05	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 18:05	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 18:05	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 18:05	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 18:05	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 18:05	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 18:05	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 18:05	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 18:05	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 18:05	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 18:05	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 18:05	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 18:05	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 18:05	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 18:05	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 18:05	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:05	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 18:05	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 18:05	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 18:05	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 18:05	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 18:05	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 18:05	1

Client Sample ID: MWB-2(I)b
Date Collected: 07/24/13 08:11
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-12
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/28/13 18:05*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/28/13 18:05*	*1*
Toluene-d8 (Surr)	*106*		*87 - 112*		*07/28/13 18:05*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0056	U	0.019	0.0056	ug/L		07/26/13 12:40	07/29/13 19:39	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*107*		*56 - 144*	*07/26/13 12:40*	*07/29/13 19:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.2**		0.50	0.25	mg/L			08/05/13 13:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:33	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:33	1
Barium	**22**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:33	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:33	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:33	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:33	1
Cobalt	**0.17**	**I**	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:33	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:33	1
Iron	**370**		100	33	ug/L		07/26/13 22:16	07/31/13 02:33	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:33	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:33	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:33	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:33	1
Sodium	**4.5**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:33	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:33	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:33	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:33	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 20:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.091**		0.050	0.026	mg/L			07/31/13 09:40	1
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/27/13 11:49	1
Nitrate as N	0.0054	U	0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**18**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/24/13 08:10	1
Field pH	**4.62**				SU			07/24/13 08:10	1
Field Temperature	**21.8**				Degrees C			07/24/13 08:10	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-2(I)b
Date Collected: 07/24/13 08:11
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-12
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.5				mg/L			07/24/13 08:10	1
Sheen	None				NONE			07/24/13 08:10	1
Specific Conductance	40				umhos/cm			07/24/13 08:10	1
Turbidity	3.89				NTU			07/24/13 08:10	1
Water Level	136.61				ft			07/24/13 08:10	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-2(S)b
Date Collected: 07/24/13 08:43
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-13
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 18:26	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 18:26	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 18:26	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 18:26	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 18:26	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 18:26	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 18:26	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 18:26	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 18:26	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 18:26	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 18:26	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 18:26	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 18:26	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 18:26	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 18:26	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 18:26	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 18:26	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:26	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 18:26	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 18:26	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 18:26	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:26	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 18:26	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 18:26	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 18:26	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 18:26	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 18:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 18:26	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 18:26	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 18:26	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 18:26	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 18:26	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 18:26	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 18:26	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 18:26	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 18:26	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 18:26	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 18:26	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 18:26	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 18:26	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 18:26	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 18:26	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 18:26	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 18:26	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 18:26	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 18:26	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 18:26	1

Client Sample ID: MWB-2(S)b
Date Collected: 07/24/13 08:43
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-13
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*87 - 114*		*07/28/13 18:26*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/28/13 18:26*	*1*
Toluene-d8 (Surr)	*107*		*87 - 112*		*07/28/13 18:26*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/26/13 12:40	07/29/13 19:53	1
EDB	0.0060	U	0.019	0.0060	ug/L		07/26/13 12:40	07/29/13 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*106*		*56 - 144*	*07/26/13 12:40*	*07/29/13 19:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.6**		0.50	0.25	mg/L			08/05/13 13:22	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:39	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:39	1
Barium	**11**		5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:39	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:39	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:39	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:39	1
Cobalt	**0.15**	**I**	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:39	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:39	1
Iron	**170**		100	33	ug/L		07/26/13 22:16	07/31/13 02:39	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:39	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:39	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:39	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:39	1
Sodium	**4.8**		0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:39	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:39	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:39	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 20:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.083**		0.050	0.026	mg/L			07/31/13 09:40	1
Nitrate Nitrite as N	**0.057**		0.050	0.010	mg/L			07/27/13 11:50	1
Nitrate as N	**0.057**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**38**		5.0	5.0	mg/L			07/30/13 17:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**None**				PCU			07/24/13 08:42	1
Field pH	**4.31**				SU			07/24/13 08:42	1
Field Temperature	**23.9**				Degrees C			07/24/13 08:42	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-2(S)b
Date Collected: 07/24/13 08:43
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-13
Matrix: Water

Method: Field Sampling - Field Sampling (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved	0.8				mg/L			07/24/13 08:42	1
Sheen	None				NONE			07/24/13 08:42	1
Specific Conductance	61				umhos/cm			07/24/13 08:42	1
Turbidity	2.08				NTU			07/24/13 08:42	1
Water Level	137.83				ft			07/24/13 08:42	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Field Blank 01 44430
Date Collected: 07/24/13 09:40
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-14
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			08/05/13 13:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 02:46	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 02:46	1
Barium	1.3	U	5.0	1.3	ug/L		07/26/13 22:16	07/31/13 02:46	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 02:46	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 02:46	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 02:46	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 02:46	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 02:46	1
Iron	33	U	100	33	ug/L		07/26/13 22:16	07/31/13 02:46	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 02:46	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 02:46	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 02:46	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 02:46	1
Sodium	0.25	U	0.50	0.25	mg/L		07/26/13 22:16	07/31/13 02:46	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 02:46	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 02:46	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 02:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 20:20	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**0.075**		0.050	0.026	mg/L			07/31/13 09:40	1
Nitrate Nitrite as N	**0.015**	**I**	0.050	0.010	mg/L			07/27/13 12:48	1
Nitrate as N	**0.015**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**10**		5.0	5.0	mg/L			07/30/13 17:33	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 01 44430
Date Collected: 07/24/13 00:00
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-15
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 13:22	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 13:22	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 13:22	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 13:22	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 13:22	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 13:22	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 13:22	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 13:22	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 13:22	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 13:22	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 13:22	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 13:22	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 13:22	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 13:22	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 13:22	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 13:22	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 13:22	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:22	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 13:22	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 13:22	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 13:22	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:22	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 13:22	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 13:22	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 13:22	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 13:22	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 13:22	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 13:22	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 13:22	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 13:22	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 13:22	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 13:22	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 13:22	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 13:22	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 13:22	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 13:22	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 13:22	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 13:22	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 13:22	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 13:22	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:22	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 13:22	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 13:22	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 13:22	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 13:22	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 13:22	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 13:22	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 01 44430
Date Collected: 07/24/13 00:00
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44430-15
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		87 - 114		07/28/13 13:22	1
Dibromofluoromethane	93		81 - 113		07/28/13 13:22	1
Toluene-d8 (Surr)	104		87 - 112		07/28/13 13:22	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-1
Date Collected: 07/24/13 12:20
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-9
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 12:17	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 12:17	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 12:17	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 12:17	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 12:17	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 12:17	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 12:17	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 12:17	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 12:17	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 12:17	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 12:17	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 12:17	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 12:17	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 12:17	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 12:17	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 12:17	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 12:17	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:17	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 12:17	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 12:17	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 12:17	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:17	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 12:17	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 12:17	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 12:17	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 12:17	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 12:17	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 12:17	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 12:17	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 12:17	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 12:17	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 12:17	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 12:17	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 12:17	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 12:17	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 12:17	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 12:17	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 12:17	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 12:17	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 12:17	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:17	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 12:17	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 12:17	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 12:17	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 12:17	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 12:17	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 12:17	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-1
Date Collected: 07/24/13 12:20
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-9
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/28/13 12:17*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/28/13 12:17*	*1*
Toluene-d8 (Surr)	*104*		*87 - 112*		*07/28/13 12:17*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 16:39	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*122*		*56 - 144*	*07/25/13 13:17*	*07/30/13 16:39*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0010	U	0.0025	0.0010	ug/L		07/26/13 17:25	07/31/13 10:54	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/29/13 16:04	07/31/13 11:15	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/29/13 16:04	07/31/13 11:15	1
Barium	**53**		5.0	1.3	ug/L		07/29/13 16:04	07/31/13 11:15	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/29/13 16:04	07/31/13 11:15	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/29/13 16:04	07/31/13 11:15	1
Chromium	**2.6**	**I**	5.0	2.5	ug/L		07/29/13 16:04	07/31/13 11:15	1
Cobalt	**0.56**		0.50	0.15	ug/L		07/29/13 16:04	07/31/13 11:15	1
Copper	**1.9**	**I**	5.0	1.1	ug/L		07/29/13 16:04	07/31/13 11:15	1
Iron	**2800**		100	33	ug/L		07/29/13 16:04	07/31/13 11:15	1
Lead	**2.7**		1.5	0.20	ug/L		07/29/13 16:04	07/31/13 11:15	1
Nickel	**2.4**	**I**	5.0	2.0	ug/L		07/29/13 16:04	07/31/13 11:15	1
Selenium	1.0	U	2.5	1.0	ug/L		07/29/13 16:04	07/31/13 11:15	1
Silver	0.25	U	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 11:15	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 11:15	1
Vanadium	3.8	U	10	3.8	ug/L		07/29/13 16:04	07/31/13 11:15	1
Zinc	**16**	**I**	20	8.3	ug/L		07/29/13 16:04	07/31/13 11:15	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**19**		3.3	3.3	mg/L			07/31/13 11:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.019**	**I**	0.050	0.010	mg/L			07/27/13 11:45	1
Phosphorus	**0.079**	**I**	0.10	0.041	mg/L		07/30/13 17:00	07/31/13 11:20	1
Orthophosphate as P	**0.0035**	**I**	0.010	0.0014	mg/L			07/25/13 19:46	1
Nitrate as N	**0.019**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**200**		5.0	5.0	mg/L			07/30/13 17:33	1
Total Suspended Solids	**3.6**		1.0	1.0	mg/L			07/30/13 12:52	1
Biochemical Oxygen Demand	6.0	U	6.0	6.0	mg/L			07/26/13 06:08	1
Chemical Oxygen Demand	**150**		20	6.3	mg/L			08/04/13 14:10	1
Total Organic Carbon	**53**		5.0	1.8	mg/L			07/25/13 18:11	5
Nitrogen, Total	**1.1**		0.25	0.25	mg/L			08/02/13 15:43	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-1
Date Collected: 07/24/13 12:20
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Unionized Ammonia	0.00028	U	0.00028	0.00028	mg/L			08/06/13 13:24	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	Yellow/Brown Tint				PCU			07/24/13 12:20	1
Field pH	4.09				SU			07/24/13 12:20	1
Field Temperature	24.2				Degrees C			07/24/13 12:20	1
Oxygen, Dissolved	5.3				mg/L			07/24/13 12:20	1
Sheen	None				NONE			07/24/13 12:20	1
Specific Conductance	112				umhos/cm			07/24/13 12:20	1
Turbidity	4.52				NTU			07/24/13 12:20	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-2
Date Collected: 07/24/13 11:25
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-10
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 12:39	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 12:39	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 12:39	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 12:39	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 12:39	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 12:39	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 12:39	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 12:39	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 12:39	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 12:39	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 12:39	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 12:39	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 12:39	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 12:39	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 12:39	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 12:39	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 12:39	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:39	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 12:39	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 12:39	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 12:39	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:39	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 12:39	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 12:39	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 12:39	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 12:39	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 12:39	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 12:39	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 12:39	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 12:39	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 12:39	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 12:39	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 12:39	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 12:39	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 12:39	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 12:39	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 12:39	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 12:39	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 12:39	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 12:39	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 12:39	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 12:39	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 12:39	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 12:39	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 12:39	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 12:39	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 12:39	1

Client Sample ID: SW-2

Date Collected: 07/24/13 11:25
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*87 - 114*		*07/28/13 12:39*	*1*
Dibromofluoromethane	*96*		*81 - 113*		*07/28/13 12:39*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 12:39*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 16:53	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*121*		*56 - 144*	*07/25/13 13:17*	*07/30/13 16:53*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0010	U	0.0025	0.0010	ug/L		07/26/13 17:25	07/31/13 11:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/29/13 16:04	07/31/13 11:50	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/29/13 16:04	07/31/13 11:50	1
Barium	**94**		5.0	1.3	ug/L		07/29/13 16:04	07/31/13 11:50	1
Beryllium	**0.63**		0.50	0.25	ug/L		07/29/13 16:04	07/31/13 11:50	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/29/13 16:04	07/31/13 11:50	1
Chromium	2.5	U	5.0	2.5	ug/L		07/29/13 16:04	07/31/13 11:50	1
Cobalt	**0.20**	**I**	0.50	0.15	ug/L		07/29/13 16:04	07/31/13 11:50	1
Copper	1.1	U	5.0	1.1	ug/L		07/29/13 16:04	07/31/13 11:50	1
Iron	**1100**		100	33	ug/L		07/29/13 16:04	07/31/13 11:50	1
Lead	**0.38**	**I**	1.5	0.20	ug/L		07/29/13 16:04	07/31/13 11:50	1
Nickel	2.0	U	5.0	2.0	ug/L		07/29/13 16:04	07/31/13 11:50	1
Selenium	1.0	U	2.5	1.0	ug/L		07/29/13 16:04	07/31/13 11:50	1
Silver	0.25	U	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 11:50	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 11:50	1
Vanadium	**4.3**	**I**	10	3.8	ug/L		07/29/13 16:04	07/31/13 11:50	1
Zinc	8.3	U	20	8.3	ug/L		07/29/13 16:04	07/31/13 11:50	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**10**		3.3	3.3	mg/L			07/31/13 11:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.074**		0.050	0.010	mg/L			07/27/13 11:44	1
Phosphorus	0.041	U	0.10	0.041	mg/L		07/30/13 17:00	07/31/13 11:18	1
Orthophosphate as P	**0.010**		0.010	0.0014	mg/L			07/25/13 19:47	1
Nitrate as N	**0.074**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**84**		5.0	5.0	mg/L			07/30/13 17:33	1
Total Suspended Solids	**16**		1.0	1.0	mg/L			07/30/13 08:02	1
Biochemical Oxygen Demand	6.0	U	6.0	6.0	mg/L			07/26/13 06:08	1
Chemical Oxygen Demand	**77**		20	6.3	mg/L			08/04/13 14:10	1
Total Organic Carbon	**22**		1.0	0.35	mg/L			07/25/13 18:27	1
Nitrogen, Total	**0.96**		0.25	0.25	mg/L			08/02/13 15:43	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-2
Date Collected: 07/24/13 11:25
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-10
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Unionized Ammonia	0.00028	U	0.00028	0.00028	mg/L			08/06/13 13:24	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Lt Tan Tint**				PCU			07/24/13 11:25	1
Field pH	**4.14**				SU			07/24/13 11:25	1
Field Temperature	**21.8**				Degrees C			07/24/13 11:25	1
Oxygen, Dissolved	**5.9**				mg/L			07/24/13 11:25	1
Sheen	**None**				NONE			07/24/13 11:25	1
Specific Conductance	**73**				umhos/cm			07/24/13 11:25	1
Turbidity	**13.68**				NTU			07/24/13 11:25	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-3
Date Collected: 07/24/13 11:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-11
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 13:00	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 13:00	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 13:00	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 13:00	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 13:00	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 13:00	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 13:00	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 13:00	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 13:00	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 13:00	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 13:00	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 13:00	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 13:00	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 13:00	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 13:00	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 13:00	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 13:00	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:00	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 13:00	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 13:00	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 13:00	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:00	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 13:00	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 13:00	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 13:00	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 13:00	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 13:00	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 13:00	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 13:00	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 13:00	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 13:00	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 13:00	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 13:00	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 13:00	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 13:00	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 13:00	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 13:00	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 13:00	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 13:00	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 13:00	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 13:00	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 13:00	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 13:00	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 13:00	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 13:00	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 13:00	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 13:00	1

Client Sample ID: SW-3

Date Collected: 07/24/13 11:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*87 - 114*		*07/28/13 13:00*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/28/13 13:00*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/28/13 13:00*	*1*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 17:06	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	*121*		*56 - 144*	*07/25/13 13:17*	*07/30/13 17:06*	*1*

Method: 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0010	U	0.0025	0.0010	ug/L		07/26/13 17:25	07/31/13 11:10	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/29/13 16:04	07/31/13 11:57	1
Arsenic	**1.9**	**I**	2.5	1.3	ug/L		07/29/13 16:04	07/31/13 11:57	1
Barium	**42**		5.0	1.3	ug/L		07/29/13 16:04	07/31/13 11:57	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/29/13 16:04	07/31/13 11:57	1
Cadmium	**1.2**		0.50	0.095	ug/L		07/29/13 16:04	07/31/13 11:57	1
Chromium	2.5	U	5.0	2.5	ug/L		07/29/13 16:04	07/31/13 11:57	1
Cobalt	**0.19**	**I**	0.50	0.15	ug/L		07/29/13 16:04	07/31/13 11:57	1
Copper	**56**		5.0	1.1	ug/L		07/29/13 16:04	07/31/13 11:57	1
Iron	**490**		100	33	ug/L		07/29/13 16:04	07/31/13 11:57	1
Lead	**3.4**		1.5	0.20	ug/L		07/29/13 16:04	07/31/13 11:57	1
Nickel	**7.5**		5.0	2.0	ug/L		07/29/13 16:04	07/31/13 11:57	1
Selenium	**1.1**	**I**	2.5	1.0	ug/L		07/29/13 16:04	07/31/13 11:57	1
Silver	0.25	U	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 11:57	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 11:57	1
Vanadium	**3.9**	**I**	10	3.8	ug/L		07/29/13 16:04	07/31/13 11:57	1
Zinc	8.3	U	20	8.3	ug/L		07/29/13 16:04	07/31/13 11:57	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**140**		3.3	3.3	mg/L			07/31/13 11:57	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.13**		0.050	0.010	mg/L			07/27/13 11:43	1
Phosphorus	**0.060**	**I**	0.10	0.041	mg/L		07/30/13 17:00	07/31/13 11:15	1
Orthophosphate as P	**0.0096**	**I**	0.010	0.0014	mg/L			07/25/13 19:49	1
Nitrate as N	**0.092**		0.010	0.0054	mg/L			08/05/13 08:00	1
Total Dissolved Solids	**250**		5.0	5.0	mg/L			07/30/13 17:33	1
Total Suspended Solids	**22**		1.0	1.0	mg/L			07/30/13 08:02	1
Biochemical Oxygen Demand	6.0	U	6.0	6.0	mg/L			07/26/13 06:08	1
Chemical Oxygen Demand	**54**		20	6.3	mg/L			08/04/13 14:10	1
Total Organic Carbon	**17**		4.0	1.4	mg/L			07/25/13 18:41	4
Nitrogen, Total	**1.6**		0.25	0.25	mg/L			08/02/13 15:43	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-3
Date Collected: 07/24/13 11:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-11
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Unionized Ammonia	0.0030		0.00028	0.00028	mg/L			08/06/13 13:24	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	Sl Yellow Tint				PCU			07/24/13 11:55	1
Field pH	6.94				SU			07/24/13 11:55	1
Field Temperature	27.7				Degrees C			07/24/13 11:55	1
Oxygen, Dissolved	4.8				mg/L			07/24/13 11:55	1
Sheen	None				NONE			07/24/13 11:55	1
Specific Conductance	370				umhos/cm			07/24/13 11:55	1
Turbidity	13.71				NTU			07/24/13 11:55	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 04 44433
Date Collected: 07/24/13 00:00
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-12
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 11:55	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 11:55	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 11:55	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 11:55	1
Bromomethane	0.51	J U	1.0	0.51	ug/L			07/28/13 11:55	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 11:55	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 11:55	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/28/13 11:55	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 11:55	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 11:55	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 11:55	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 11:55	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 11:55	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 11:55	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 11:55	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 11:55	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 11:55	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:55	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 11:55	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 11:55	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 11:55	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:55	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 11:55	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 11:55	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 11:55	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 11:55	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 11:55	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 11:55	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 11:55	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 11:55	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 11:55	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 11:55	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 11:55	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 11:55	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 11:55	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 11:55	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 11:55	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 11:55	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 11:55	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 11:55	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:55	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 11:55	1
Trichlorofluoromethane	0.21	J U	1.0	0.21	ug/L			07/28/13 11:55	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 11:55	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 11:55	1
Vinyl chloride	0.22	J U	1.0	0.22	ug/L			07/28/13 11:55	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 11:55	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 04 44433
Date Collected: 07/24/13 00:00
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-12
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		87 - 114		07/28/13 11:55	1
Dibromofluoromethane	93		81 - 113		07/28/13 11:55	1
Toluene-d8 (Surr)	103		87 - 112		07/28/13 11:55	1

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	DBFM	TOL						
Lab Sample ID	Client Sample ID	(87-114)	(81-113)	(87-112)						
640-44404-1	MWB-29(S)c	101	98	100						
640-44404-2	MWB-12(D)c	101	96	99						
640-44404-3	MWB-12(1)c	100	95	98						
640-44404-4	MWB-12(S)c	100	96	100						
640-44404-5	MWB-22(S)c	96	94	99						
640-44404-6	MWB-13(I)c	98	95	97						
640-44404-7	MWB-13(S)c	96	94	99						
640-44404-8	MWB-27(D)c	99	94	97						
640-44404-9	MWB-27(I)c	99	95	99						
640-44404-10	MWB-27(S)c	99	97	97						
640-44404-11	MWB-29(D)c	99	94	100						
640-44404-12	MWB-29(I)c	98	92	98						
640-44404-13	MWB-11(1)(R)c	100	94	99						
640-44404-14	MWB-11(S)c	94	95	99						
640-44404-15	MWB-7(S)c	98	96	97						
640-44404-16	MWB-7(1)c	99	94	98						
640-44404-17	MWB-7(D)c	97	93	100						
640-44404-18	MWB-19(S)c	95	94	100						
640-44404-19	MWB-19(I)c	94	94	100						
640-44404-20	MWB-19(D)c	97	92	98						
640-44404-21	MWB-17(S)c	98	95	100						
640-44404-22	Trip Blank 01 44404	97	96	98						
640-44404-23	MWB-20(S)c	98	93	100						
640-44404-24	MWB-17(D)c	97	97	100						
640-44404-25	MWB-17(I)c	99	97	98						
640-44430-1	MWB-34(S)d	95	91	106						
640-44430-1 MS	MWB-34(S)d	106	93	108						
640-44430-1 MSD	MWB-34(S)d	102	94	106						
640-44430-2	MWB-34(I)d	98	92	105						
640-44430-3	MWB-34(D)d	95	93	107						
640-44430-4	MWB-21(S)c	93	93	103						
640-44430-5	MWB-3(S)b	96	93	105						
640-44430-6	MWB-3(I)b	94	93	104						
640-44430-7	MWB-33(S)d	95	94	105						
640-44430-8	MWB-32(D)d	95	92	105						
640-44430-9	MWB-32(I)d	94	93	103						
640-44430-10	MWB-32(S)d	95	90	107						
640-44430-11	MWB-31(D)b	97	92	106						
640-44430-12	MWB-2(I)b	96	95	106						
640-44430-13	MWB-2(S)b	92	93	107						
640-44430-15	Trip Blank 01 44430	95	93	104						
640-44433-9	SW-1	96	92	104						
640-44433-10	SW-2	95	96	105						
640-44433-11	SW-3	99	92	105						
640-44433-12	Trip Blank 04 44433	95	93	103						
LCS 640-103395/2	Lab Control Sample	107	95	106						
LCS 640-103397/3	Lab Control Sample	101	97	102						
LCS 640-103399/3	Lab Control Sample	103	94	99						
LCSD 640-103395/4	Lab Control Sample Dup	106	95	106						

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(87-114)	(81-113)	(87-112)
LCSD 640-103397/4	Lab Control Sample Dup	101	96	100
LCSD 640-103399/4	Lab Control Sample Dup	99	97	101
MB 640-103395/5	Method Blank	98	92	104
MB 640-103397/5	Method Blank	101	95	99
MB 640-103399/6	Method Blank	96	95	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

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)
		TCEA1
Lab Sample ID	Client Sample ID	(56-144)
640-44404-1	MWB-29(S)c	128
640-44404-1 MS	MWB-29(S)c	105
640-44404-1 MSD	MWB-29(S)c	93
640-44404-2	MWB-12(D)c	129
640-44404-3	MWB-12(1)c	125
640-44404-4	MWB-12(S)c	126
640-44404-5	MWB-22(S)c	134
640-44404-6	MWB-13(I)c	124
640-44404-7	MWB-13(S)c	128
640-44404-8	MWB-27(D)c	127
640-44404-9	MWB-27(I)c	130
640-44404-10	MWB-27(S)c	130
640-44404-11	MWB-29(D)c	127
640-44404-12	MWB-29(I)c	129
640-44404-13	MWB-11(1)(R)c	126
640-44404-14	MWB-11(S)c	127
640-44404-15	MWB-7(S)c	95
640-44404-16	MWB-7(1)c	129
640-44404-17	MWB-7(D)c	121
640-44404-18	MWB-19(S)c	125
640-44404-19	MWB-19(I)c	124
640-44404-20	MWB-19(D)c	120
640-44404-21	MWB-17(S)c	119
640-44404-23	MWB-20(S)c	121
640-44404-24	MWB-17(D)c	122
640-44404-25	MWB-17(I)c	119
640-44430-1	MWB-34(S)d	107
640-44430-1 MS	MWB-34(S)d	84
640-44430-1 MSD	MWB-34(S)d	82
640-44430-2	MWB-34(I)d	119
640-44430-3	MWB-34(D)d	66
640-44430-4	MWB-21(S)c	111

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	TCEA1 (56-144)						
640-44430-5	MWB-3(S)b	108						
640-44430-6	MWB-3(I)b	99						
640-44430-7	MWB-33(S)d	99						
640-44430-8	MWB-32(D)d	107						
640-44430-9	MWB-32(I)d	105						
640-44430-10	MWB-32(S)d	106						
640-44430-11	MWB-31(D)b	109						
640-44430-12	MWB-2(I)b	107						
640-44430-13	MWB-2(S)b	106						
640-44433-9	SW-1	122						
640-44433-10	SW-2	121						
640-44433-11	SW-3	121						
LCS 640-103338/4-A	Lab Control Sample	105						
LCS 640-103339/4-A	Lab Control Sample	109						
LCS 640-103362/11-A	Lab Control Sample	98						
LCSD 640-103338/5-A	Lab Control Sample Dup	102						
LCSD 640-103339/5-A	Lab Control Sample Dup	97						
LCSD 640-103362/12-A	Lab Control Sample Dup	104						
MB 640-103338/3-A	Method Blank	102						
MB 640-103339/3-A	Method Blank	116						
MB 640-103362/10-A	Method Blank	102						

Surrogate Legend

TCEA = 1,1,1,2-Tetrachloroethane

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

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

Lab Sample ID: MB 640-103395/5
Matrix: Water
Analysis Batch: 103395

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/28/13 11:12	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/28/13 11:12	1
Benzene	0.13	U	1.0	0.13	ug/L			07/28/13 11:12	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/28/13 11:12	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/28/13 11:12	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/28/13 11:12	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/28/13 11:12	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/28/13 11:12	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/28/13 11:12	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/28/13 11:12	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/28/13 11:12	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/28/13 11:12	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/28/13 11:12	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/28/13 11:12	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/28/13 11:12	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 11:12	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/28/13 11:12	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:12	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/28/13 11:12	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/28/13 11:12	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/28/13 11:12	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:12	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/28/13 11:12	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/28/13 11:12	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/28/13 11:12	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/28/13 11:12	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/28/13 11:12	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/28/13 11:12	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/28/13 11:12	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/28/13 11:12	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/28/13 11:12	1
Styrene	0.12	U	1.0	0.12	ug/L			07/28/13 11:12	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/28/13 11:12	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/28/13 11:12	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/28/13 11:12	1
Toluene	0.14	U	1.0	0.14	ug/L			07/28/13 11:12	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/28/13 11:12	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/28/13 11:12	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/28/13 11:12	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/28/13 11:12	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/28/13 11:12	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/28/13 11:12	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/28/13 11:12	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/28/13 11:12	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/28/13 11:12	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/28/13 11:12	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/28/13 11:12	1

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

Lab Sample ID: MB 640-103395/5
Matrix: Water
Analysis Batch: 103395

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		87 - 114		07/28/13 11:12	1
Dibromofluoromethane	92		81 - 113		07/28/13 11:12	1
Toluene-d8 (Surr)	104		87 - 112		07/28/13 11:12	1

Lab Sample ID: LCS 640-103395/2
Matrix: Water
Analysis Batch: 103395

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	256		ug/L		85	64 - 132
Acrylonitrile	600	518		ug/L		86	72 - 124
Benzene	30.0	29.7		ug/L		99	80 - 120
Bromoform	30.0	30.3		ug/L		101	64 - 132
Bromomethane	30.0	42.2		ug/L		141	37 - 146
2-Butanone (MEK)	300	284		ug/L		95	66 - 132
Carbon disulfide	30.0	37.2		ug/L		124	72 - 132
Carbon tetrachloride	30.0	39.6	J	ug/L		132	79 - 126
Chlorobenzene	30.0	26.1		ug/L		87	82 - 116
Chlorobromomethane	30.0	28.9		ug/L		96	72 - 124
Chlorodibromomethane	30.0	28.1		ug/L		94	73 - 125
Chloroethane	30.0	41.9		ug/L		140	47 - 160
Chloroform	30.0	31.0		ug/L		103	81 - 120
Chloromethane	30.0	36.0		ug/L		120	61 - 136
cis-1,2-Dichloroethene	30.0	30.0		ug/L		100	75 - 128
cis-1,3-Dichloropropene	30.0	32.1		ug/L		107	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	25.5		ug/L		85	57 - 128
Dibromomethane	30.0	29.4		ug/L		98	80 - 119
1,2-Dichlorobenzene	30.0	25.4		ug/L		85	83 - 122
1,4-Dichlorobenzene	30.0	25.4		ug/L		85	82 - 119
Dichlorobromomethane	30.0	31.4		ug/L		105	82 - 120
1,1-Dichloroethane	30.0	29.5		ug/L		98	78 - 124
1,2-Dichloroethane	30.0	31.2		ug/L		104	82 - 123
1,1-Dichloroethene	30.0	33.9		ug/L		113	72 - 133
1,2-Dichloropropane	30.0	28.2		ug/L		94	78 - 121
Ethylbenzene	30.0	29.0		ug/L		97	85 - 119
Ethylene Dibromide	30.0	30.4		ug/L		101	78 - 120
2-Hexanone	300	267		ug/L		89	54 - 132
Iodomethane	30.0	27.2		ug/L		91	32 - 169
Methylene Chloride	30.0	29.4		ug/L		98	75 - 125
4-Methyl-2-pentanone (MIBK)	300	280		ug/L		93	67 - 134
Styrene	30.0	30.4		ug/L		101	86 - 121
1,1,1,2-Tetrachloroethane	30.0	27.9		ug/L		93	80 - 118
1,1,2,2-Tetrachloroethane	30.0	24.5		ug/L		82	78 - 118
Tetrachloroethene	30.0	29.2		ug/L		97	81 - 126
Toluene	30.0	31.0		ug/L		103	82 - 122
trans-1,4-Dichloro-2-butene	60.0	56.0		ug/L		93	76 - 128
trans-1,2-Dichloroethene	30.0	30.4		ug/L		101	77 - 128
trans-1,3-Dichloropropene	30.0	32.7		ug/L		109	76 - 122

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

Lab Sample ID: LCS 640-103395/2
Matrix: Water
Analysis Batch: 103395

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-Trichloroethane	30.0	35.9		ug/L		120	85 - 122
1,1,2-Trichloroethane	30.0	28.1		ug/L		94	76 - 122
Trichloroethene	30.0	31.2		ug/L		104	82 - 121
Trichlorofluoromethane	30.0	47.6	J	ug/L		159	84 - 139
1,2,3-Trichloropropane	30.0	26.2		ug/L		87	79 - 128
Vinyl acetate	60.0	57.1		ug/L		95	39 - 185
Vinyl chloride	30.0	41.8		ug/L		139	70 - 139
Xylenes, Total	90.0	89.5		ug/L		99	86 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*87 - 114*
Dibromofluoromethane	*95*		*81 - 113*
Toluene-d8 (Surr)	*106*		*87 - 112*

Lab Sample ID: LCSD 640-103395/4
Matrix: Water
Analysis Batch: 103395

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
Acetone	300	250		ug/L		83	64 - 132	2	28
Acrylonitrile	600	520		ug/L		87	72 - 124	0	40
Benzene	30.0	30.1		ug/L		100	80 - 120	1	20
Bromoform	30.0	29.2		ug/L		97	64 - 132	4	20
Bromomethane	30.0	46.8	J	ug/L		156	37 - 146	10	38
2-Butanone (MEK)	300	284		ug/L		95	66 - 132	0	28
Carbon disulfide	30.0	37.5		ug/L		125	72 - 132	1	23
Carbon tetrachloride	30.0	39.4	J	ug/L		131	79 - 126	1	20
Chlorobenzene	30.0	26.3		ug/L		88	82 - 116	1	20
Chlorobromomethane	30.0	29.0		ug/L		97	72 - 124	0	20
Chlorodibromomethane	30.0	28.0		ug/L		93	73 - 125	0	20
Chloroethane	30.0	43.7		ug/L		146	47 - 160	4	35
Chloroform	30.0	30.7		ug/L		102	81 - 120	1	20
Chloromethane	30.0	38.5		ug/L		128	61 - 136	7	20
cis-1,2-Dichloroethene	30.0	30.3		ug/L		101	75 - 128	1	20
cis-1,3-Dichloropropene	30.0	31.9		ug/L		106	79 - 120	1	20
1,2-Dibromo-3-Chloropropane	30.0	26.1		ug/L		87	57 - 128	2	25
Dibromomethane	30.0	29.6		ug/L		99	80 - 119	1	20
1,2-Dichlorobenzene	30.0	26.5		ug/L		88	83 - 122	4	20
1,4-Dichlorobenzene	30.0	25.5		ug/L		85	82 - 119	1	20
Dichlorobromomethane	30.0	30.9		ug/L		103	82 - 120	2	20
1,1-Dichloroethane	30.0	29.7		ug/L		99	78 - 124	1	20
1,2-Dichloroethane	30.0	31.7		ug/L		106	82 - 123	2	20
1,1-Dichloroethene	30.0	33.9		ug/L		113	72 - 133	0	24
1,2-Dichloropropane	30.0	28.1		ug/L		94	78 - 121	0	20
Ethylbenzene	30.0	28.7		ug/L		96	85 - 119	1	20
Ethylene Dibromide	30.0	30.1		ug/L		100	78 - 120	1	20
2-Hexanone	300	261		ug/L		87	54 - 132	2	32
Iodomethane	30.0	28.9		ug/L		96	32 - 169	6	40

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

Lab Sample ID: LCSD 640-103395/4
Matrix: Water
Analysis Batch: 103395

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
Methylene Chloride			30.0	30.1		ug/L		100	75 - 125	2	22
4-Methyl-2-pentanone (MIBK)			300	278		ug/L		93	67 - 134	1	20
Styrene			30.0	30.0		ug/L		100	86 - 121	2	20
1,1,1,2-Tetrachloroethane			30.0	28.0		ug/L		93	80 - 118	0	20
1,1,2,2-Tetrachloroethane			30.0	24.3		ug/L		81	78 - 118	1	20
Tetrachloroethene			30.0	28.9		ug/L		96	81 - 126	1	20
Toluene			30.0	31.1		ug/L		104	82 - 122	0	20
trans-1,4-Dichloro-2-butene			60.0	54.8		ug/L		91	76 - 128	2	26
trans-1,2-Dichloroethene			30.0	30.5		ug/L		102	77 - 128	0	22
trans-1,3-Dichloropropene			30.0	33.0		ug/L		110	76 - 122	1	20
1,1,1-Trichloroethane			30.0	36.3		ug/L		121	85 - 122	1	20
1,1,2-Trichloroethane			30.0	27.6		ug/L		92	76 - 122	2	20
Trichloroethene			30.0	31.3		ug/L		104	82 - 121	0	20
Trichlorofluoromethane			30.0	49.9	J	ug/L		166	84 - 139	5	20
1,2,3-Trichloropropane			30.0	26.9		ug/L		90	79 - 128	3	20
Vinyl acetate			60.0	56.5		ug/L		94	39 - 185	1	27
Vinyl chloride			30.0	43.4	J	ug/L		145	70 - 139	4	20
Xylenes, Total			90.0	88.2		ug/L		98	86 - 123	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*87 - 114*
Dibromofluoromethane	*95*		*81 - 113*
Toluene-d8 (Surr)	*106*		*87 - 112*

Lab Sample ID: 640-44430-1 MS
Matrix: Water
Analysis Batch: 103395

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	2.8	U	400	335		ug/L		84	61 - 131
Acrylonitrile	3.0	U	800	700		ug/L		88	72 - 123
Benzene	0.13	U	40.0	43.6		ug/L		109	74 - 125
Bromoform	0.18	U	40.0	39.4		ug/L		98	52 - 134
Bromomethane	0.51	J U	40.0	62.0		ug/L		155	10 - 182
2-Butanone (MEK)	2.6	U	400	402		ug/L		100	68 - 120
Carbon disulfide	0.23	U	40.0	49.1		ug/L		123	52 - 170
Carbon tetrachloride	0.18	J U	40.0	57.3	J	ug/L		143	73 - 131
Chlorobenzene	0.13	U	40.0	36.6		ug/L		92	80 - 118
Chlorobromomethane	0.21	U	40.0	40.2		ug/L		101	63 - 129
Chlorodibromomethane	0.15	U	40.0	38.2		ug/L		95	64 - 125
Chloroethane	0.33	U	40.0	58.1		ug/L		145	29 - 148
Chloroform	0.12	U	40.0	42.0		ug/L		105	78 - 123
Chloromethane	0.18	U	40.0	50.1		ug/L		125	51 - 142
cis-1,2-Dichloroethene	0.21	U	40.0	40.6		ug/L		102	64 - 134
cis-1,3-Dichloropropene	0.14	U	40.0	41.1		ug/L		103	67 - 112
1,2-Dibromo-3-Chloropropane	0.31	U	40.0	33.2		ug/L		83	52 - 135
Dibromomethane	0.20	U	40.0	41.4		ug/L		103	78 - 118
1,2-Dichlorobenzene	0.14	U	40.0	34.7		ug/L		87	72 - 130

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

Lab Sample ID: 640-44430-1 MS
Matrix: Water
Analysis Batch: 103395

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.20	U	40.0	33.8		ug/L		85	76 - 122
Dichlorobromomethane	0.17	U	40.0	44.2		ug/L		110	76 - 119
1,1-Dichloroethane	0.20	U	40.0	39.3		ug/L		98	71 - 135
1,2-Dichloroethane	0.15	U	40.0	45.3		ug/L		113	78 - 127
1,1-Dichloroethene	0.23	U	40.0	44.6		ug/L		112	60 - 151
1,2-Dichloropropane	0.17	U	40.0	38.7		ug/L		97	76 - 118
Ethylbenzene	0.16	U	40.0	38.1		ug/L		95	60 - 132
Ethylene Dibromide	0.15	U	40.0	41.1		ug/L		103	74 - 116
2-Hexanone	1.0	U	400	361		ug/L		90	52 - 127
Iodomethane	0.13	U	40.0	30.9		ug/L		77	10 - 165
Methylene Chloride	0.21	U	40.0	39.7		ug/L		99	71 - 130
4-Methyl-2-pentanone (MIBK)	1.5	U	400	371		ug/L		93	67 - 131
Styrene	0.12	U	40.0	39.6		ug/L		99	74 - 124
1,1,1,2-Tetrachloroethane	0.14	U	40.0	38.2		ug/L		95	70 - 119
1,1,2,2-Tetrachloroethane	0.11	U	40.0	32.7		ug/L		82	74 - 124
Tetrachloroethene	0.19	U	40.0	39.1		ug/L		98	71 - 133
Toluene	0.14	U	40.0	43.9		ug/L		110	49 - 146
trans-1,4-Dichloro-2-butene	0.43	U	80.0	63.9		ug/L		80	61 - 125
trans-1,2-Dichloroethene	0.26	U	40.0	42.8		ug/L		107	72 - 135
trans-1,3-Dichloropropene	0.14	U	40.0	41.1		ug/L		103	64 - 110
1,1,1-Trichloroethane	0.16	U	40.0	50.9	J	ug/L		127	85 - 123
1,1,2-Trichloroethane	0.20	U	40.0	39.7		ug/L		99	72 - 120
Trichloroethene	0.16	U	40.0	43.4		ug/L		108	75 - 122
Trichlorofluoromethane	0.21	J U	40.0	71.7	J	ug/L		179	83 - 147
1,2,3-Trichloropropane	0.23	U	40.0	36.8		ug/L		92	78 - 128
Vinyl acetate	0.38	U	80.0	72.8		ug/L		91	12 - 189
Vinyl chloride	0.22	J U	40.0	57.5		ug/L		144	61 - 148
Xylenes, Total	0.44	U	120	119		ug/L		99	61 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*87 - 114*
Dibromofluoromethane	*93*		*81 - 113*
Toluene-d8 (Surr)	*108*		*87 - 112*

Lab Sample ID: 640-44430-1 MSD
Matrix: Water
Analysis Batch: 103395

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	2.8	U	400	354		ug/L		88	61 - 131	6	40
Acrylonitrile	3.0	U	800	742		ug/L		93	72 - 123	6	29
Benzene	0.13	U	40.0	40.8		ug/L		102	74 - 125	6	23
Bromoform	0.18	U	40.0	38.2		ug/L		96	52 - 134	3	28
Bromomethane	0.51	J U	40.0	67.0		ug/L		168	10 - 182	8	56
2-Butanone (MEK)	2.6	U	400	414		ug/L		104	68 - 120	3	28
Carbon disulfide	0.23	U	40.0	46.1		ug/L		115	52 - 170	6	31
Carbon tetrachloride	0.18	J U	40.0	50.0		ug/L		125	73 - 131	14	20
Chlorobenzene	0.13	U	40.0	32.5		ug/L		81	80 - 118	12	20

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

Lab Sample ID: 640-44430-1 MSD
Matrix: Water
Analysis Batch: 103395

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobromomethane	0.21	U	40.0	40.1		ug/L		100	63 - 129	0	24
Chlorodibromomethane	0.15	U	40.0	36.2		ug/L		91	64 - 125	5	22
Chloroethane	0.33	U	40.0	53.9		ug/L		135	29 - 148	8	50
Chloroform	0.12	U	40.0	43.1		ug/L		108	78 - 123	3	22
Chloromethane	0.18	U	40.0	49.7		ug/L		124	51 - 142	1	27
cis-1,2-Dichloroethene	0.21	U	40.0	40.8		ug/L		102	64 - 134	0	32
cis-1,3-Dichloropropene	0.14	U	40.0	39.6		ug/L		99	67 - 112	4	23
1,2-Dibromo-3-Chloropropane	0.31	U	40.0	34.4		ug/L		86	52 - 135	4	37
Dibromomethane	0.20	U	40.0	39.9		ug/L		100	78 - 118	4	22
1,2-Dichlorobenzene	0.14	U	40.0	32.8		ug/L		82	72 - 130	6	24
1,4-Dichlorobenzene	0.20	U	40.0	31.1		ug/L		78	76 - 122	9	23
Dichlorobromomethane	0.17	U	40.0	42.8		ug/L		107	76 - 119	3	24
1,1-Dichloroethane	0.20	U	40.0	38.9		ug/L		97	71 - 135	1	22
1,2-Dichloroethane	0.15	U	40.0	44.5		ug/L		111	78 - 127	2	22
1,1-Dichloroethene	0.23	U	40.0	42.2		ug/L		106	60 - 151	6	31
1,2-Dichloropropane	0.17	U	40.0	37.0		ug/L		92	76 - 118	5	23
Ethylbenzene	0.16	U	40.0	33.7		ug/L		84	60 - 132	12	24
Ethylene Dibromide	0.15	U	40.0	41.1		ug/L		103	74 - 116	0	24
2-Hexanone	1.0	U	400	371		ug/L		93	52 - 127	3	24
Iodomethane	0.13	U	40.0	35.0		ug/L		87	10 - 165	12	60
Methylene Chloride	0.21	U	40.0	40.9		ug/L		102	71 - 130	3	33
4-Methyl-2-pentanone (MIBK)	1.5	U	400	384		ug/L		96	67 - 131	4	23
Styrene	0.12	U	40.0	36.1		ug/L		90	74 - 124	9	23
1,1,1,2-Tetrachloroethane	0.14	U	40.0	36.4		ug/L		91	70 - 119	5	23
1,1,2,2-Tetrachloroethane	0.11	U	40.0	33.0		ug/L		82	74 - 124	1	24
Tetrachloroethene	0.19	U	40.0	33.0		ug/L		83	71 - 133	17	22
Toluene	0.14	U	40.0	40.0		ug/L		100	49 - 146	9	21
trans-1,4-Dichloro-2-butene	0.43	U	80.0	66.8		ug/L		84	61 - 125	4	50
trans-1,2-Dichloroethene	0.26	U	40.0	40.8		ug/L		102	72 - 135	5	29
trans-1,3-Dichloropropene	0.14	U	40.0	40.7		ug/L		102	64 - 110	1	26
1,1,1-Trichloroethane	0.16	U	40.0	46.2		ug/L		116	85 - 123	10	22
1,1,2-Trichloroethane	0.20	U	40.0	39.1		ug/L		98	72 - 120	1	22
Trichloroethene	0.16	U	40.0	40.1		ug/L		100	75 - 122	8	20
Trichlorofluoromethane	0.21	J U	40.0	60.9	J	ug/L		152	83 - 147	16	28
1,2,3-Trichloropropane	0.23	U	40.0	37.8		ug/L		94	78 - 128	3	25
Vinyl acetate	0.38	U	80.0	73.4		ug/L		92	12 - 189	1	60
Vinyl chloride	0.22	J U	40.0	55.9		ug/L		140	61 - 148	3	27
Xylenes, Total	0.44	U	120	105		ug/L		87	61 - 136	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*87 - 114*
Dibromofluoromethane	*94*		*81 - 113*
Toluene-d8 (Surr)	*106*		*87 - 112*

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

Lab Sample ID: MB 640-103397/5
Matrix: Water
Analysis Batch: 103397

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/26/13 15:11	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/26/13 15:11	1
Benzene	0.13	U	1.0	0.13	ug/L			07/26/13 15:11	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/26/13 15:11	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/26/13 15:11	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/26/13 15:11	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/26/13 15:11	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/26/13 15:11	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/26/13 15:11	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/26/13 15:11	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/26/13 15:11	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/26/13 15:11	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/26/13 15:11	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/26/13 15:11	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/26/13 15:11	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 15:11	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/26/13 15:11	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/26/13 15:11	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/26/13 15:11	1
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/26/13 15:11	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/26/13 15:11	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 15:11	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/26/13 15:11	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/26/13 15:11	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/26/13 15:11	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/26/13 15:11	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/26/13 15:11	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/26/13 15:11	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/26/13 15:11	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/26/13 15:11	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/26/13 15:11	1
Styrene	0.12	U	1.0	0.12	ug/L			07/26/13 15:11	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/26/13 15:11	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/26/13 15:11	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/26/13 15:11	1
Toluene	0.14	U	1.0	0.14	ug/L			07/26/13 15:11	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/26/13 15:11	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/26/13 15:11	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/26/13 15:11	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/26/13 15:11	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/26/13 15:11	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/26/13 15:11	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/26/13 15:11	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/26/13 15:11	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/26/13 15:11	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/26/13 15:11	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/26/13 15:11	1

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

Lab Sample ID: MB 640-103397/5
Matrix: Water
Analysis Batch: 103397

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		87 - 114		07/26/13 15:11	1
Dibromofluoromethane	95		81 - 113		07/26/13 15:11	1
Toluene-d8 (Surr)	99		87 - 112		07/26/13 15:11	1

Lab Sample ID: LCS 640-103397/3
Matrix: Water
Analysis Batch: 103397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	313		ug/L		104	64 - 132
Acrylonitrile	600	606		ug/L		101	72 - 124
Benzene	30.0	31.0		ug/L		103	80 - 120
Bromoform	30.0	26.0		ug/L		87	64 - 132
Bromomethane	30.0	32.6		ug/L		109	37 - 146
2-Butanone (MEK)	300	318		ug/L		106	66 - 132
Carbon disulfide	30.0	24.4		ug/L		81	72 - 132
Carbon tetrachloride	30.0	28.7		ug/L		96	79 - 126
Chlorobenzene	30.0	32.0		ug/L		107	82 - 116
Chlorobromomethane	30.0	31.7		ug/L		106	72 - 124
Chlorodibromomethane	30.0	26.7		ug/L		89	73 - 125
Chloroethane	30.0	26.3		ug/L		88	47 - 160
Chloroform	30.0	24.9		ug/L		83	81 - 120
Chloromethane	30.0	30.7		ug/L		102	61 - 136
cis-1,2-Dichloroethene	30.0	30.1		ug/L		100	75 - 128
cis-1,3-Dichloropropene	30.0	26.3		ug/L		88	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	24.2		ug/L		81	57 - 128
Dibromomethane	30.0	31.9		ug/L		106	80 - 119
1,2-Dichlorobenzene	30.0	33.5		ug/L		112	83 - 122
1,4-Dichlorobenzene	30.0	33.7		ug/L		112	82 - 119
Dichlorobromomethane	30.0	26.5		ug/L		88	82 - 120
1,1-Dichloroethane	30.0	24.4		ug/L		81	78 - 124
1,2-Dichloroethane	30.0	28.3		ug/L		94	82 - 123
1,1-Dichloroethene	30.0	24.9		ug/L		83	72 - 133
1,2-Dichloropropane	30.0	30.6		ug/L		102	78 - 121
Ethylbenzene	30.0	26.1		ug/L		87	85 - 119
Ethylene Dibromide	30.0	25.3		ug/L		84	78 - 120
2-Hexanone	300	328		ug/L		109	54 - 132
Iodomethane	30.0	26.2		ug/L		87	32 - 169
Methylene Chloride	30.0	23.6		ug/L		79	75 - 125
4-Methyl-2-pentanone (MIBK)	300	324		ug/L		108	67 - 134
Styrene	30.0	27.0		ug/L		90	86 - 121
1,1,1,2-Tetrachloroethane	30.0	26.8		ug/L		89	80 - 118
1,1,2,2-Tetrachloroethane	30.0	31.3		ug/L		104	78 - 118
Tetrachloroethene	30.0	31.7		ug/L		106	81 - 126
Toluene	30.0	25.5		ug/L		85	82 - 122
trans-1,4-Dichloro-2-butene	60.0	54.8		ug/L		91	76 - 128
trans-1,2-Dichloroethene	30.0	29.5		ug/L		98	77 - 128
trans-1,3-Dichloropropene	30.0	28.5		ug/L		95	76 - 122

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

Lab Sample ID: LCS 640-103397/3
Matrix: Water
Analysis Batch: 103397

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-Trichloroethane	30.0	28.8		ug/L		96	85 - 122
1,1,2-Trichloroethane	30.0	31.2		ug/L		104	76 - 122
Trichloroethene	30.0	26.9		ug/L		90	82 - 121
Trichlorofluoromethane	30.0	33.0		ug/L		110	84 - 139
1,2,3-Trichloropropane	30.0	27.4		ug/L		91	79 - 128
Vinyl acetate	60.0	66.0		ug/L		110	39 - 185
Vinyl chloride	30.0	31.8		ug/L		106	70 - 139
Xylenes, Total	90.0	87.8		ug/L		98	86 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*87 - 114*
Dibromofluoromethane	*97*		*81 - 113*
Toluene-d8 (Surr)	*102*		*87 - 112*

Lab Sample ID: LCSD 640-103397/4
Matrix: Water
Analysis Batch: 103397

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
Acetone	300	318		ug/L		106	64 - 132	2	28
Acrylonitrile	600	610		ug/L		102	72 - 124	1	40
Benzene	30.0	32.1		ug/L		107	80 - 120	3	20
Bromoform	30.0	26.6		ug/L		89	64 - 132	2	20
Bromomethane	30.0	36.0		ug/L		120	37 - 146	10	38
2-Butanone (MEK)	300	328		ug/L		109	66 - 132	3	28
Carbon disulfide	30.0	24.7		ug/L		82	72 - 132	1	23
Carbon tetrachloride	30.0	28.5		ug/L		95	79 - 126	0	20
Chlorobenzene	30.0	32.4		ug/L		108	82 - 116	1	20
Chlorobromomethane	30.0	31.8		ug/L		106	72 - 124	0	20
Chlorodibromomethane	30.0	27.3		ug/L		91	73 - 125	2	20
Chloroethane	30.0	26.2		ug/L		87	47 - 160	0	35
Chloroform	30.0	25.4		ug/L		85	81 - 120	2	20
Chloromethane	30.0	29.9		ug/L		100	61 - 136	3	20
cis-1,2-Dichloroethene	30.0	30.8		ug/L		103	75 - 128	2	20
cis-1,3-Dichloropropene	30.0	26.9		ug/L		90	79 - 120	2	20
1,2-Dibromo-3-Chloropropane	30.0	23.8		ug/L		79	57 - 128	1	25
Dibromomethane	30.0	32.4		ug/L		108	80 - 119	1	20
1,2-Dichlorobenzene	30.0	34.0		ug/L		113	83 - 122	2	20
1,4-Dichlorobenzene	30.0	33.7		ug/L		112	82 - 119	0	20
Dichlorobromomethane	30.0	28.2		ug/L		94	82 - 120	6	20
1,1-Dichloroethane	30.0	25.0		ug/L		83	78 - 124	3	20
1,2-Dichloroethane	30.0	27.7		ug/L		92	82 - 123	2	20
1,1-Dichloroethene	30.0	25.8		ug/L		86	72 - 133	4	24
1,2-Dichloropropane	30.0	30.5		ug/L		102	78 - 121	0	20
Ethylbenzene	30.0	26.5		ug/L		88	85 - 119	1	20
Ethylene Dibromide	30.0	25.3		ug/L		84	78 - 120	0	20
2-Hexanone	300	334		ug/L		111	54 - 132	2	32
Iodomethane	30.0	29.7		ug/L		99	32 - 169	12	40

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

Lab Sample ID: LCSD 640-103397/4
Matrix: Water
Analysis Batch: 103397

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
Methylene Chloride			30.0	25.3		ug/L		84	75 - 125	7	22
4-Methyl-2-pentanone (MIBK)			300	324		ug/L		108	67 - 134	0	20
Styrene			30.0	27.5		ug/L		92	86 - 121	2	20
1,1,1,2-Tetrachloroethane			30.0	26.1		ug/L		87	80 - 118	3	20
1,1,2,2-Tetrachloroethane			30.0	31.2		ug/L		104	78 - 118	0	20
Tetrachloroethene			30.0	32.6		ug/L		109	81 - 126	3	20
Toluene			30.0	26.2		ug/L		87	82 - 122	3	20
trans-1,4-Dichloro-2-butene			60.0	54.8		ug/L		91	76 - 128	0	26
trans-1,2-Dichloroethene			30.0	30.4		ug/L		101	77 - 128	3	22
trans-1,3-Dichloropropene			30.0	28.8		ug/L		96	76 - 122	1	20
1,1,1-Trichloroethane			30.0	28.7		ug/L		96	85 - 122	0	20
1,1,2-Trichloroethane			30.0	31.1		ug/L		104	76 - 122	1	20
Trichloroethene			30.0	26.7		ug/L		89	82 - 121	1	20
Trichlorofluoromethane			30.0	31.7		ug/L		106	84 - 139	4	20
1,2,3-Trichloropropane			30.0	28.3		ug/L		94	79 - 128	3	20
Vinyl acetate			60.0	63.9		ug/L		106	39 - 185	3	27
Vinyl chloride			30.0	31.0		ug/L		103	70 - 139	2	20
Xylenes, Total			90.0	90.1		ug/L		100	86 - 123	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*87 - 114*
Dibromofluoromethane	*96*		*81 - 113*
Toluene-d8 (Surr)	*100*		*87 - 112*

Lab Sample ID: MB 640-103399/6
Matrix: Water
Analysis Batch: 103399

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/27/13 18:42	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/27/13 18:42	1
Benzene	0.13	U	1.0	0.13	ug/L			07/27/13 18:42	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/27/13 18:42	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/27/13 18:42	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/27/13 18:42	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/27/13 18:42	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/27/13 18:42	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/27/13 18:42	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/27/13 18:42	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/27/13 18:42	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/27/13 18:42	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/27/13 18:42	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/27/13 18:42	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/27/13 18:42	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 18:42	1
1,2-Dibromo-3-Chloropropane	0.31	U	1.0	0.31	ug/L			07/27/13 18:42	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/27/13 18:42	1
1,2-Dichlorobenzene	0.14	U	1.0	0.14	ug/L			07/27/13 18:42	1

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

Lab Sample ID: MB 640-103399/6
Matrix: Water
Analysis Batch: 103399

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.20	U	1.0	0.20	ug/L			07/27/13 18:42	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/27/13 18:42	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 18:42	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/27/13 18:42	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/27/13 18:42	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/27/13 18:42	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/27/13 18:42	1
Ethylene Dibromide	0.15	U	1.0	0.15	ug/L			07/27/13 18:42	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/27/13 18:42	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/27/13 18:42	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/27/13 18:42	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/27/13 18:42	1
Styrene	0.12	U	1.0	0.12	ug/L			07/27/13 18:42	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/27/13 18:42	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/27/13 18:42	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/27/13 18:42	1
Toluene	0.14	U	1.0	0.14	ug/L			07/27/13 18:42	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/27/13 18:42	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/27/13 18:42	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/27/13 18:42	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/27/13 18:42	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/27/13 18:42	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/27/13 18:42	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/27/13 18:42	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/27/13 18:42	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/27/13 18:42	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/27/13 18:42	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/27/13 18:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*87 - 114*		*07/27/13 18:42*	*1*
Dibromofluoromethane	*95*		*81 - 113*		*07/27/13 18:42*	*1*
Toluene-d8 (Surr)	*99*		*87 - 112*		*07/27/13 18:42*	*1*

Lab Sample ID: LCS 640-103399/3
Matrix: Water
Analysis Batch: 103399

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	296		ug/L		99	64 - 132
Acrylonitrile	600	558		ug/L		93	72 - 124
Benzene	30.0	31.1		ug/L		104	80 - 120
Bromoform	30.0	30.9		ug/L		103	64 - 132
Bromomethane	30.0	42.6		ug/L		142	37 - 146
2-Butanone (MEK)	300	309		ug/L		103	66 - 132
Carbon disulfide	30.0	25.1		ug/L		84	72 - 132
Carbon tetrachloride	30.0	32.8		ug/L		109	79 - 126
Chlorobenzene	30.0	34.4		ug/L		115	82 - 116

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

Lab Sample ID: LCS 640-103399/3
Matrix: Water
Analysis Batch: 103399

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobromomethane	30.0	29.8		ug/L		99	72 - 124
Chlorodibromomethane	30.0	32.7		ug/L		109	73 - 125
Chloroethane	30.0	25.0		ug/L		83	47 - 160
Chloroform	30.0	25.5		ug/L		85	81 - 120
Chloromethane	30.0	26.2		ug/L		87	61 - 136
cis-1,2-Dichloroethene	30.0	29.0		ug/L		97	75 - 128
cis-1,3-Dichloropropene	30.0	28.2		ug/L		94	79 - 120
1,2-Dibromo-3-Chloropropane	30.0	26.5		ug/L		88	57 - 128
Dibromomethane	30.0	33.2		ug/L		111	80 - 119
1,2-Dichlorobenzene	30.0	34.4		ug/L		115	83 - 122
1,4-Dichlorobenzene	30.0	34.2		ug/L		114	82 - 119
Dichlorobromomethane	30.0	30.0		ug/L		100	82 - 120
1,1-Dichloroethane	30.0	23.0	J	ug/L		77	78 - 124
1,2-Dichloroethane	30.0	30.3		ug/L		101	82 - 123
1,1-Dichloroethene	30.0	24.8		ug/L		83	72 - 133
1,2-Dichloropropane	30.0	29.5		ug/L		98	78 - 121
Ethylbenzene	30.0	28.2		ug/L		94	85 - 119
Ethylene Dibromide	30.0	26.4		ug/L		88	78 - 120
2-Hexanone	300	334		ug/L		111	54 - 132
Iodomethane	30.0	34.3		ug/L		114	32 - 169
Methylene Chloride	30.0	22.7		ug/L		76	75 - 125
4-Methyl-2-pentanone (MIBK)	300	326		ug/L		109	67 - 134
Styrene	30.0	28.6		ug/L		95	86 - 121
1,1,1,2-Tetrachloroethane	30.0	29.9		ug/L		100	80 - 118
1,1,2,2-Tetrachloroethane	30.0	32.4		ug/L		108	78 - 118
Tetrachloroethene	30.0	35.0		ug/L		117	81 - 126
Toluene	30.0	26.2		ug/L		87	82 - 122
trans-1,4-Dichloro-2-butene	60.0	57.9		ug/L		97	76 - 128
trans-1,2-Dichloroethene	30.0	29.4		ug/L		98	77 - 128
trans-1,3-Dichloropropene	30.0	30.8		ug/L		103	76 - 122
1,1,1-Trichloroethane	30.0	31.7		ug/L		106	85 - 122
1,1,2-Trichloroethane	30.0	31.1		ug/L		104	76 - 122
Trichloroethene	30.0	27.9		ug/L		93	82 - 121
Trichlorofluoromethane	30.0	34.7		ug/L		116	84 - 139
1,2,3-Trichloropropane	30.0	28.9		ug/L		96	79 - 128
Vinyl acetate	60.0	60.6		ug/L		101	39 - 185
Vinyl chloride	30.0	26.9		ug/L		90	70 - 139
Xylenes, Total	90.0	95.0		ug/L		106	86 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*87 - 114*
Dibromofluoromethane	*94*		*81 - 113*
Toluene-d8 (Surr)	*99*		*87 - 112*

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

Lab Sample ID: LCSD 640-103399/4
Matrix: Water
Analysis Batch: 103399

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
Acetone	300	292		ug/L		97	64 - 132	1	28
Acrylonitrile	600	569		ug/L		95	72 - 124	2	40
Benzene	30.0	32.0		ug/L		107	80 - 120	3	20
Bromoform	30.0	29.6		ug/L		99	64 - 132	4	20
Bromomethane	30.0	44.2	J	ug/L		147	37 - 146	4	38
2-Butanone (MEK)	300	299		ug/L		100	66 - 132	3	28
Carbon disulfide	30.0	26.4		ug/L		88	72 - 132	5	23
Carbon tetrachloride	30.0	33.6		ug/L		112	79 - 126	2	20
Chlorobenzene	30.0	33.9		ug/L		113	82 - 116	1	20
Chlorobromomethane	30.0	31.3		ug/L		104	72 - 124	5	20
Chlorodibromomethane	30.0	30.7		ug/L		102	73 - 125	6	20
Chloroethane	30.0	26.2		ug/L		87	47 - 160	5	35
Chloroform	30.0	26.0		ug/L		87	81 - 120	2	20
Chloromethane	30.0	26.8		ug/L		89	61 - 136	2	20
cis-1,2-Dichloroethene	30.0	30.4		ug/L		101	75 - 128	4	20
cis-1,3-Dichloropropene	30.0	28.4		ug/L		95	79 - 120	1	20
1,2-Dibromo-3-Chloropropane	30.0	25.9		ug/L		86	57 - 128	2	25
Dibromomethane	30.0	33.2		ug/L		111	80 - 119	0	20
1,2-Dichlorobenzene	30.0	34.1		ug/L		114	83 - 122	1	20
1,4-Dichlorobenzene	30.0	34.8		ug/L		116	82 - 119	2	20
Dichlorobromomethane	30.0	30.2		ug/L		101	82 - 120	1	20
1,1-Dichloroethane	30.0	24.9		ug/L		83	78 - 124	8	20
1,2-Dichloroethane	30.0	30.6		ug/L		102	82 - 123	1	20
1,1-Dichloroethene	30.0	25.6		ug/L		85	72 - 133	3	24
1,2-Dichloropropane	30.0	29.7		ug/L		99	78 - 121	1	20
Ethylbenzene	30.0	27.6		ug/L		92	85 - 119	2	20
Ethylene Dibromide	30.0	26.2		ug/L		87	78 - 120	1	20
2-Hexanone	300	312		ug/L		104	54 - 132	7	32
Iodomethane	30.0	37.8		ug/L		126	32 - 169	10	40
Methylene Chloride	30.0	24.6		ug/L		82	75 - 125	8	22
4-Methyl-2-pentanone (MIBK)	300	320		ug/L		107	67 - 134	2	20
Styrene	30.0	28.0		ug/L		93	86 - 121	2	20
1,1,1,2-Tetrachloroethane	30.0	29.2		ug/L		97	80 - 118	2	20
1,1,2,2-Tetrachloroethane	30.0	30.8		ug/L		103	78 - 118	5	20
Tetrachloroethene	30.0	34.1		ug/L		114	81 - 126	3	20
Toluene	30.0	26.7		ug/L		89	82 - 122	2	20
trans-1,4-Dichloro-2-butene	60.0	54.1		ug/L		90	76 - 128	7	26
trans-1,2-Dichloroethene	30.0	30.5		ug/L		102	77 - 128	4	22
trans-1,3-Dichloropropene	30.0	29.2		ug/L		97	76 - 122	5	20
1,1,1-Trichloroethane	30.0	31.2		ug/L		104	85 - 122	1	20
1,1,2-Trichloroethane	30.0	30.9		ug/L		103	76 - 122	0	20
Trichloroethene	30.0	27.9		ug/L		93	82 - 121	0	20
Trichlorofluoromethane	30.0	34.5		ug/L		115	84 - 139	1	20
1,2,3-Trichloropropane	30.0	26.6		ug/L		89	79 - 128	8	20
Vinyl acetate	60.0	57.2		ug/L		95	39 - 185	6	27
Vinyl chloride	30.0	28.7		ug/L		96	70 - 139	6	20
Xylenes, Total	90.0	93.0		ug/L		103	86 - 123	2	20

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

Lab Sample ID: LCSD 640-103399/4
Matrix: Water
Analysis Batch: 103399

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	99		87 - 114
Dibromofluoromethane	97		81 - 113
Toluene-d8 (Surr)	101		87 - 112

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

Lab Sample ID: MB 640-103338/3-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103338

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0058	U	0.019	0.0058	ug/L		07/25/13 13:17	07/30/13 13:54	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	102		56 - 144	07/25/13 13:17	07/30/13 13:54	1

Lab Sample ID: LCS 640-103338/4-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DBCP	0.236	0.260		ug/L		110	89 - 132
EDB	0.236	0.250		ug/L		106	85 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,1,1,2-Tetrachloroethane	105		56 - 144

Lab Sample ID: LCSD 640-103338/5-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DBCP	0.236	0.258		ug/L		109	89 - 132	1	11
EDB	0.236	0.255		ug/L		108	85 - 118	2	12

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,1,1,2-Tetrachloroethane	102		56 - 144

Lab Sample ID: MB 640-103339/3-A
Matrix: Water
Analysis Batch: 103471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103339

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0058	U	0.019	0.0058	ug/L		07/25/13 13:27	07/31/13 15:25	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:27	07/31/13 15:25	1

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

Lab Sample ID: MB 640-103339/3-A
Matrix: Water
Analysis Batch: 103471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103339

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	116		56 - 144	07/25/13 13:27	07/31/13 15:25	1

Lab Sample ID: LCS 640-103339/4-A
Matrix: Water
Analysis Batch: 103471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103339

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DBCP			0.236	0.269		ug/L		114	89 - 132		
EDB			0.236	0.258		ug/L		109	85 - 118		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,1,1,2-Tetrachloroethane	109		56 - 144

Lab Sample ID: LCSD 640-103339/5-A
Matrix: Water
Analysis Batch: 103471

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103339

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DBCP			0.236	0.277		ug/L		117	89 - 132	3	11
EDB			0.236	0.264		ug/L		112	85 - 118	2	12

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,1,1,2-Tetrachloroethane	97		56 - 144

Lab Sample ID: 640-44404-1 MS
Matrix: Water
Analysis Batch: 103471

Client Sample ID: MWB-29(S)c
Prep Type: Total/NA
Prep Batch: 103339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
DBCP	0.0057	U	0.473	0.534		ug/L		113	89 - 132		
EDB	0.0061	U	0.473	0.515		ug/L		109	85 - 118		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,1,1,2-Tetrachloroethane	105		56 - 144

Lab Sample ID: 640-44404-1 MSD
Matrix: Water
Analysis Batch: 103471

Client Sample ID: MWB-29(S)c
Prep Type: Total/NA
Prep Batch: 103339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DBCP	0.0057	U	0.473	0.532		ug/L		113	89 - 132	0	11
EDB	0.0061	U	0.473	0.518		ug/L		110	85 - 118	1	12

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,1,1,2-Tetrachloroethane	93		56 - 144

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

Lab Sample ID: MB 640-103362/10-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103434 — **Prep Batch: 103362**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DBCP	0.0058	U	0.019	0.0058	ug/L		07/26/13 12:40	07/29/13 14:38	1
EDB	0.0061	U	0.019	0.0061	ug/L		07/26/13 12:40	07/29/13 14:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*102*		*56 - 144*	*07/26/13 12:40*	*07/29/13 14:38*	*1*

Lab Sample ID: LCS 640-103362/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103434 — **Prep Batch: 103362**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DBCP			0.236	0.224		ug/L		95	89 - 132		
EDB			0.236	0.221		ug/L		93	85 - 118		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane			*98*		*56 - 144*

Lab Sample ID: LCSD 640-103362/12-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103434 — **Prep Batch: 103362**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DBCP			0.236	0.244		ug/L		103	89 - 132	9	11
EDB			0.236	0.248		ug/L		105	85 - 118	11	12

Surrogate			*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane			*104*		*56 - 144*

Lab Sample ID: 640-44430-1 MS — **Client Sample ID: MWB-34(S)d**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103434 — **Prep Batch: 103362**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
DBCP	0.0057	U	0.473	0.436		ug/L		92	89 - 132		
EDB	0.0060	U	0.473	0.429		ug/L		91	85 - 118		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane	*84*		*56 - 144*

Lab Sample ID: 640-44430-1 MSD — **Client Sample ID: MWB-34(S)d**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 103434 — **Prep Batch: 103362**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DBCP	0.0057	U	0.473	0.429		ug/L		91	89 - 132	2	11
EDB	0.0060	U	0.473	0.419		ug/L		89	85 - 118	2	12

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

Lab Sample ID: 640-44430-1 MSD
Matrix: Water
Analysis Batch: 103434

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA
Prep Batch: 103362

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane	*82*		*56 - 144*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-287703/5
Matrix: Water
Analysis Batch: 287703

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			08/05/13 09:51	1

Lab Sample ID: LCS 680-287703/6
Matrix: Water
Analysis Batch: 287703

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			10.0	10.0		mg/L		100	90 - 110		

Lab Sample ID: LCSD 680-287703/7
Matrix: Water
Analysis Batch: 287703

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			10.0	10.0		mg/L		100	90 - 110	0	30

Lab Sample ID: 640-44430-4 MS
Matrix: Water
Analysis Batch: 287703

Client Sample ID: MWB-21(S)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	6.8		10.0	16.7		mg/L		99	80 - 120		

Lab Sample ID: 640-44430-4 MSD
Matrix: Water
Analysis Batch: 287703

Client Sample ID: MWB-21(S)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.8		10.0	16.7		mg/L		99	80 - 120	0	30

Lab Sample ID: 640-44430-14 MS
Matrix: Water
Analysis Batch: 287703

Client Sample ID: Field Blank 01 44430
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	0.25	U	10.0	10.2		mg/L		102	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 680-287751/31
Matrix: Water
Analysis Batch: 287751

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			08/03/13 18:57	1

Lab Sample ID: LCS 680-287751/32
Matrix: Water
Analysis Batch: 287751

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.94		mg/L		99	90 - 110

Lab Sample ID: LCSD 680-287751/33
Matrix: Water
Analysis Batch: 287751

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	10.0	9.90		mg/L		99	90 - 110	0	30

Lab Sample ID: 640-44404-11 MS
Matrix: Water
Analysis Batch: 287751

Client Sample ID: MWB-29(D)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.3		10.0	16.6		mg/L		103	80 - 120

Lab Sample ID: MB 680-287752/63
Matrix: Water
Analysis Batch: 287752

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			08/04/13 01:34	1

Lab Sample ID: LCS 680-287752/64
Matrix: Water
Analysis Batch: 287752

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.89		mg/L		99	90 - 110

Lab Sample ID: LCSD 680-287752/65
Matrix: Water
Analysis Batch: 287752

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	10.0	9.92		mg/L		99	90 - 110	0	30

Lab Sample ID: 640-44404-20 MS
Matrix: Water
Analysis Batch: 287752

Client Sample ID: MWB-19(D)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.6		10.0	15.0		mg/L		103	80 - 120

Lab Sample ID: 640-44404-20 MSD
Matrix: Water
Analysis Batch: 287752

Client Sample ID: MWB-19(D)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.6		10.0	14.8		mg/L		102	80 - 120	1	30

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-187131/1-A
Matrix: Water
Analysis Batch: 187233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187131

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00050	0.00020	ug/L		07/30/13 17:15	07/31/13 08:45	1

Lab Sample ID: LCS 400-187131/2-A
Matrix: Water
Analysis Batch: 187233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00482		ug/L		96	79 - 121

Lab Sample ID: LCSD 400-187131/3-A
Matrix: Water
Analysis Batch: 187233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187131

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00500	0.00491		ug/L		98	79 - 121	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-286358/1-A
Matrix: Water
Analysis Batch: 287468

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 286358

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:22	08/02/13 04:12	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:22	08/02/13 04:12	1
Barium	1.3	U	5.0	1.3	ug/L		07/26/13 14:22	08/02/13 04:12	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:22	08/02/13 04:12	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:22	08/02/13 04:12	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:22	08/02/13 04:12	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:22	08/02/13 04:12	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:22	08/02/13 04:12	1
Iron	33	U	100	33	ug/L		07/26/13 14:22	08/02/13 04:12	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:22	08/02/13 04:12	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:22	08/02/13 04:12	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:22	08/02/13 04:12	1
Sodium	0.25	U	0.50	0.25	mg/L		07/26/13 14:22	08/02/13 04:12	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:22	08/02/13 04:12	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:22	08/02/13 04:12	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:22	08/02/13 04:12	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:22	08/02/13 04:12	1

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

Lab Sample ID: LCS 680-286358/2-A
Matrix: Water
Analysis Batch: 287468

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.0		ug/L		106	75 - 125
Arsenic	100	105		ug/L		105	75 - 125
Barium	100	102		ug/L		102	75 - 125
Beryllium	50.0	49.3		ug/L		99	75 - 125
Cadmium	50.0	49.4		ug/L		99	75 - 125
Chromium	100	97.5		ug/L		98	75 - 125
Cobalt	50.0	47.1		ug/L		94	75 - 125
Copper	100	97.2		ug/L		97	75 - 125
Iron	5000	4910		ug/L		98	75 - 125
Lead	50.0	47.4		ug/L		95	75 - 125
Nickel	100	98.2		ug/L		98	75 - 125
Selenium	100	102		ug/L		102	75 - 125
Sodium	5.00	4.52		mg/L		90	75 - 125
Silver	50.0	51.6		ug/L		103	75 - 125
Thallium	40.0	38.3		ug/L		96	75 - 125
Vanadium	100	95.2		ug/L		95	75 - 125
Zinc	100	97.6		ug/L		98	75 - 125

Lab Sample ID: MB 680-286378/1-A
Matrix: Water
Analysis Batch: 288061

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 14:48	08/06/13 13:41	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 14:48	08/06/13 13:41	1
Barium	1.3	U	5.0	1.3	ug/L		07/26/13 14:48	08/06/13 13:41	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 14:48	08/06/13 13:41	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 14:48	08/06/13 13:41	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 14:48	08/06/13 13:41	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 14:48	08/06/13 13:41	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 14:48	08/06/13 13:41	1
Iron	33	U	100	33	ug/L		07/26/13 14:48	08/06/13 13:41	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 14:48	08/06/13 13:41	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 14:48	08/06/13 13:41	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 14:48	08/06/13 13:41	1
Sodium	0.25	U	0.50	0.25	mg/L		07/26/13 14:48	08/06/13 13:41	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 14:48	08/06/13 13:41	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 14:48	08/06/13 13:41	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 14:48	08/06/13 13:41	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 14:48	08/06/13 13:41	1

Lab Sample ID: LCS 680-286378/2-A
Matrix: Water
Analysis Batch: 288061

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	55.7		ug/L		111	75 - 125
Arsenic	100	105		ug/L		105	75 - 125

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

Lab Sample ID: LCS 680-286378/2-A
Matrix: Water
Analysis Batch: 288061

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	100	103		ug/L		103	75 - 125
Beryllium	50.0	50.8		ug/L		102	75 - 125
Cadmium	50.0	51.4		ug/L		103	75 - 125
Chromium	100	105		ug/L		105	75 - 125
Cobalt	50.0	50.6		ug/L		101	75 - 125
Copper	100	105		ug/L		105	75 - 125
Iron	5000	5370		ug/L		107	75 - 125
Lead	50.0	50.8		ug/L		102	75 - 125
Nickel	100	105		ug/L		105	75 - 125
Selenium	100	98.2		ug/L		98	75 - 125
Sodium	5.00	5.35		mg/L		107	75 - 125
Silver	50.0	53.5		ug/L		107	75 - 125
Thallium	40.0	41.6		ug/L		104	75 - 125
Vanadium	100	101		ug/L		101	75 - 125
Zinc	100	97.6		ug/L		98	75 - 125

Lab Sample ID: 640-44404-9 MS
Matrix: Water
Analysis Batch: 288061

Client Sample ID: MWB-27(I)c
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	U	50.0	55.2		ug/L		110	75 - 125
Arsenic	1.3	U	100	106		ug/L		106	75 - 125
Barium	48		100	151		ug/L		102	75 - 125
Beryllium	0.25	U	50.0	51.1		ug/L		102	75 - 125
Cadmium	0.095	U	50.0	51.7		ug/L		103	75 - 125
Chromium	2.5	U	100	106		ug/L		106	75 - 125
Cobalt	0.15	U	50.0	49.6		ug/L		99	75 - 125
Copper	3.0	I	100	106		ug/L		103	75 - 125
Iron	440		5000	5710		ug/L		105	75 - 125
Lead	0.20	U	50.0	50.2		ug/L		100	75 - 125
Nickel	110		100	105	J	ug/L		-3	75 - 125
Selenium	1.0	U	100	100		ug/L		100	75 - 125
Sodium	3.4		5.00	8.69		mg/L		105	75 - 125
Silver	0.25	U	50.0	53.3		ug/L		107	75 - 125
Thallium	0.50	U	40.0	41.2		ug/L		103	75 - 125
Vanadium	3.8	U	100	103		ug/L		103	75 - 125
Zinc	8.3	U	100	99.3		ug/L		99	75 - 125

Lab Sample ID: 640-44404-9 MSD
Matrix: Water
Analysis Batch: 288061

Client Sample ID: MWB-27(I)c
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	U	50.0	54.6		ug/L		109	75 - 125	1	20
Arsenic	1.3	U	100	103		ug/L		103	75 - 125	3	20
Barium	48		100	149		ug/L		101	75 - 125	1	20
Beryllium	0.25	U	50.0	50.1		ug/L		100	75 - 125	2	20
Cadmium	0.095	U	50.0	50.6		ug/L		101	75 - 125	2	20

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

Lab Sample ID: 640-44404-9 MSD
Matrix: Water
Analysis Batch: 288061

Client Sample ID: MWB-27(I)c
Prep Type: Total Recoverable
Prep Batch: 286378

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	2.5	U	100	104		ug/L		104	75 - 125	2	20
Cobalt	0.15	U	50.0	48.8		ug/L		98	75 - 125	2	20
Copper	3.0	I	100	104		ug/L		101	75 - 125	2	20
Iron	440		5000	5490		ug/L		101	75 - 125	4	20
Lead	0.20	U	50.0	50.5		ug/L		101	75 - 125	1	20
Nickel	110		100	104	J	ug/L		-4	75 - 125	1	20
Selenium	1.0	U	100	97.8		ug/L		98	75 - 125	3	20
Sodium	3.4		5.00	8.35		mg/L		98	75 - 125	4	20
Silver	0.25	U	50.0	52.8		ug/L		106	75 - 125	1	20
Thallium	0.50	U	40.0	41.4		ug/L		104	75 - 125	1	20
Vanadium	3.8	U	100	100		ug/L		100	75 - 125	3	20
Zinc	8.3	U	100	97.8		ug/L		98	75 - 125	1	20

Lab Sample ID: MB 680-286429/1-A
Matrix: Water
Analysis Batch: 286987

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 286429

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/26/13 22:16	07/31/13 00:26	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/26/13 22:16	07/31/13 00:26	1
Barium	1.3	U	5.0	1.3	ug/L		07/26/13 22:16	07/31/13 00:26	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/26/13 22:16	07/31/13 00:26	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/26/13 22:16	07/31/13 00:26	1
Chromium	2.5	U	5.0	2.5	ug/L		07/26/13 22:16	07/31/13 00:26	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/26/13 22:16	07/31/13 00:26	1
Copper	1.1	U	5.0	1.1	ug/L		07/26/13 22:16	07/31/13 00:26	1
Iron	33	U	100	33	ug/L		07/26/13 22:16	07/31/13 00:26	1
Lead	0.20	U	1.5	0.20	ug/L		07/26/13 22:16	07/31/13 00:26	1
Nickel	2.0	U	5.0	2.0	ug/L		07/26/13 22:16	07/31/13 00:26	1
Selenium	1.0	U	2.5	1.0	ug/L		07/26/13 22:16	07/31/13 00:26	1
Sodium	0.25	U	0.50	0.25	mg/L		07/26/13 22:16	07/31/13 00:26	1
Silver	0.25	U	1.0	0.25	ug/L		07/26/13 22:16	07/31/13 00:26	1
Thallium	0.50	U	1.0	0.50	ug/L		07/26/13 22:16	07/31/13 00:26	1
Vanadium	3.8	U	10	3.8	ug/L		07/26/13 22:16	07/31/13 00:26	1
Zinc	8.3	U	20	8.3	ug/L		07/26/13 22:16	07/31/13 00:26	1

Lab Sample ID: LCS 680-286429/2-A
Matrix: Water
Analysis Batch: 286987

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	57.7		ug/L		115	75 - 125
Arsenic	100	108		ug/L		108	75 - 125
Barium	100	108		ug/L		108	75 - 125
Beryllium	50.0	53.7		ug/L		107	75 - 125
Cadmium	50.0	53.8		ug/L		108	75 - 125
Chromium	100	105		ug/L		105	75 - 125
Cobalt	50.0	51.8		ug/L		104	75 - 125
Copper	100	106		ug/L		106	75 - 125

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

Lab Sample ID: LCS 680-286429/2-A
Matrix: Water
Analysis Batch: 286987

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	5410		ug/L		108	75 - 125
Lead	50.0	52.7		ug/L		105	75 - 125
Nickel	100	105		ug/L		105	75 - 125
Selenium	100	105		ug/L		105	75 - 125
Sodium	5.00	5.24		mg/L		105	75 - 125
Silver	50.0	55.0		ug/L		110	75 - 125
Thallium	40.0	42.4		ug/L		106	75 - 125
Vanadium	100	102		ug/L		102	75 - 125
Zinc	100	103		ug/L		103	75 - 125

Lab Sample ID: 640-44430-1 MS
Matrix: Water
Analysis Batch: 286987

Client Sample ID: MWB-34(S)d
Prep Type: Total Recoverable
Prep Batch: 286429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	U	50.0	58.1		ug/L		116	75 - 125
Arsenic	1.3	U	100	112		ug/L		112	75 - 125
Barium	5.0		100	113		ug/L		108	75 - 125
Beryllium	0.25	U	50.0	54.0		ug/L		108	75 - 125
Cadmium	0.095	U	50.0	54.2		ug/L		108	75 - 125
Chromium	2.5	U	100	109		ug/L		109	75 - 125
Cobalt	0.51		50.0	51.6		ug/L		102	75 - 125
Copper	1.7	I	100	107		ug/L		105	75 - 125
Iron	240		5000	5730		ug/L		110	75 - 125
Lead	0.20	U	50.0	53.0		ug/L		106	75 - 125
Nickel	4.7	I	100	108		ug/L		103	75 - 125
Selenium	1.0	U	100	95.1		ug/L		95	75 - 125
Sodium	57		5.00	64.9	J	mg/L		156	75 - 125
Silver	0.25	U	50.0	54.3		ug/L		109	75 - 125
Thallium	0.50	U	40.0	42.7		ug/L		107	75 - 125
Vanadium	7.5	I	100	111		ug/L		104	75 - 125
Zinc	36		100	139		ug/L		103	75 - 125

Lab Sample ID: 640-44430-1 MSD
Matrix: Water
Analysis Batch: 286987

Client Sample ID: MWB-34(S)d
Prep Type: Total Recoverable
Prep Batch: 286429

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	U	50.0	57.1		ug/L		114	75 - 125	2	20
Arsenic	1.3	U	100	107		ug/L		107	75 - 125	4	20
Barium	5.0		100	110		ug/L		105	75 - 125	3	20
Beryllium	0.25	U	50.0	53.4		ug/L		107	75 - 125	1	20
Cadmium	0.095	U	50.0	53.0		ug/L		106	75 - 125	2	20
Chromium	2.5	U	100	105		ug/L		105	75 - 125	4	20
Cobalt	0.51		50.0	50.2		ug/L		99	75 - 125	3	20
Copper	1.7	I	100	104		ug/L		102	75 - 125	4	20
Iron	240		5000	5550		ug/L		106	75 - 125	3	20
Lead	0.20	U	50.0	51.2		ug/L		102	75 - 125	3	20
Nickel	4.7	I	100	105		ug/L		100	75 - 125	3	20

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

Lab Sample ID: 640-44430-1 MSD | **Client Sample ID: MWB-34(S)d**
Matrix: Water | **Prep Type: Total Recoverable**
Analysis Batch: 286987 | **Prep Batch: 286429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	1.0	U	100	96.0		ug/L		96	75 - 125	1	20
Sodium	57		5.00	63.1		mg/L		120	75 - 125	3	20
Silver	0.25	U	50.0	53.1		ug/L		106	75 - 125	2	20
Thallium	0.50	U	40.0	42.1		ug/L		105	75 - 125	1	20
Vanadium	7.5	I	100	108		ug/L		100	75 - 125	3	20
Zinc	36		100	134		ug/L		98	75 - 125	4	20

Lab Sample ID: MB 680-286672/1-A | **Client Sample ID: Method Blank**
Matrix: Water | **Prep Type: Total Recoverable**
Analysis Batch: 287467 | **Prep Batch: 286672**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Barium	1.3	U	5.0	1.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/29/13 16:04	07/31/13 10:55	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/29/13 16:04	07/31/13 10:55	1
Chromium	2.5	U	5.0	2.5	ug/L		07/29/13 16:04	07/31/13 10:55	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/29/13 16:04	07/31/13 10:55	1
Copper	1.1	U	5.0	1.1	ug/L		07/29/13 16:04	07/31/13 10:55	1
Iron	33	U	100	33	ug/L		07/29/13 16:04	07/31/13 10:55	1
Lead	0.20	U	1.5	0.20	ug/L		07/29/13 16:04	07/31/13 10:55	1
Nickel	2.0	U	5.0	2.0	ug/L		07/29/13 16:04	07/31/13 10:55	1
Selenium	1.0	U	2.5	1.0	ug/L		07/29/13 16:04	07/31/13 10:55	1
Silver	0.25	U	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 10:55	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 10:55	1
Vanadium	3.8	U	10	3.8	ug/L		07/29/13 16:04	07/31/13 10:55	1
Zinc	8.3	U	20	8.3	ug/L		07/29/13 16:04	07/31/13 10:55	1

Lab Sample ID: LCS 680-286672/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Water | **Prep Type: Total Recoverable**
Analysis Batch: 287467 | **Prep Batch: 286672**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.9		ug/L		108	75 - 125
Arsenic	100	102		ug/L		102	75 - 125
Barium	100	102		ug/L		102	75 - 125
Beryllium	50.0	51.0		ug/L		102	75 - 125
Cadmium	50.0	50.7		ug/L		101	75 - 125
Calcium	5.00	5.06		mg/L		101	75 - 125
Chromium	100	101		ug/L		101	75 - 125
Cobalt	50.0	48.4		ug/L		97	75 - 125
Copper	100	100		ug/L		100	75 - 125
Iron	5000	5180		ug/L		104	75 - 125
Lead	50.0	49.6		ug/L		99	75 - 125
Magnesium	5.00	4.99		mg/L		100	75 - 125
Nickel	100	98.7		ug/L		99	75 - 125
Selenium	100	101		ug/L		101	75 - 125
Silver	50.0	52.3		ug/L		105	75 - 125

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

Lab Sample ID: LCS 680-286672/2-A
Matrix: Water
Analysis Batch: 287467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	40.0	40.6		ug/L		101	75 - 125
Vanadium	100	96.0		ug/L		96	75 - 125
Zinc	100	96.3		ug/L		96	75 - 125

Lab Sample ID: LCSD 680-286672/3-A
Matrix: Water
Analysis Batch: 287467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	50.0	55.8		ug/L		112	75 - 125	3	20
Arsenic	100	105		ug/L		105	75 - 125	3	20
Barium	100	104		ug/L		104	75 - 125	2	20
Beryllium	50.0	52.1		ug/L		104	75 - 125	2	20
Cadmium	50.0	51.8		ug/L		104	75 - 125	2	20
Calcium	5.00	5.10		mg/L		102	75 - 125	1	20
Chromium	100	103		ug/L		103	75 - 125	2	20
Cobalt	50.0	49.1		ug/L		98	75 - 125	1	20
Copper	100	103		ug/L		103	75 - 125	3	20
Iron	5000	5490		ug/L		110	75 - 125	6	20
Lead	50.0	50.9		ug/L		102	75 - 125	3	20
Magnesium	5.00	5.01		mg/L		100	75 - 125	0	20
Nickel	100	103		ug/L		103	75 - 125	4	20
Selenium	100	102		ug/L		102	75 - 125	1	20
Silver	50.0	53.8		ug/L		108	75 - 125	3	20
Thallium	40.0	41.2		ug/L		103	75 - 125	1	20
Vanadium	100	99.1		ug/L		99	75 - 125	3	20
Zinc	100	97.4		ug/L		97	75 - 125	1	20

Lab Sample ID: 640-44433-9 MS
Matrix: Water
Analysis Batch: 287467

Client Sample ID: SW-1
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.3	U	50.0	54.8		ug/L		110	75 - 125
Arsenic	1.3	U	100	105		ug/L		105	75 - 125
Barium	53		100	148		ug/L		95	75 - 125
Beryllium	0.25	U	50.0	51.8		ug/L		104	75 - 125
Cadmium	0.095	U	50.0	50.4		ug/L		101	75 - 125
Calcium	4.9		5.00	9.47		mg/L		91	75 - 125
Chromium	2.6	I	100	103		ug/L		100	75 - 125
Cobalt	0.56		50.0	48.4		ug/L		96	75 - 125
Copper	1.9	I	100	102		ug/L		100	75 - 125
Iron	2800		5000	7670		ug/L		96	75 - 125
Lead	2.7		50.0	52.7		ug/L		100	75 - 125
Magnesium	1.7		5.00	6.47		mg/L		95	75 - 125
Nickel	2.4	I	100	100		ug/L		98	75 - 125
Selenium	1.0	U	100	103		ug/L		103	75 - 125
Silver	0.25	U	50.0	51.4		ug/L		103	75 - 125
Thallium	0.50	U	40.0	40.4		ug/L		101	75 - 125

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

Lab Sample ID: 640-44433-9 MS
Matrix: Water
Analysis Batch: 287467

Client Sample ID: SW-1
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	3.8	U	100	99.1		ug/L		99	75 - 125
Zinc	16	I	100	109		ug/L		93	75 - 125

Lab Sample ID: 640-44433-9 MSD
Matrix: Water
Analysis Batch: 287467

Client Sample ID: SW-1
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.3	U	50.0	54.3		ug/L		109	75 - 125	1	20
Arsenic	1.3	U	100	104		ug/L		104	75 - 125	0	20
Barium	53		100	149		ug/L		96	75 - 125	1	20
Beryllium	0.25	U	50.0	52.6		ug/L		105	75 - 125	1	20
Cadmium	0.095	U	50.0	50.9		ug/L		102	75 - 125	1	20
Calcium	4.9		5.00	9.35		mg/L		89	75 - 125	1	20
Chromium	2.6	I	100	103		ug/L		100	75 - 125	0	20
Cobalt	0.56		50.0	48.7		ug/L		96	75 - 125	1	20
Copper	1.9	I	100	103		ug/L		101	75 - 125	1	20
Iron	2800		5000	7640		ug/L		96	75 - 125	0	20
Lead	2.7		50.0	52.1		ug/L		99	75 - 125	1	20
Magnesium	1.7		5.00	6.43		mg/L		95	75 - 125	1	20
Nickel	2.4	I	100	101		ug/L		99	75 - 125	1	20
Selenium	1.0	U	100	101		ug/L		101	75 - 125	2	20
Silver	0.25	U	50.0	51.9		ug/L		104	75 - 125	1	20
Thallium	0.50	U	40.0	40.1		ug/L		100	75 - 125	1	20
Vanadium	3.8	U	100	99.3		ug/L		99	75 - 125	0	20
Zinc	16	I	100	109		ug/L		93	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-286433/1-A
Matrix: Water
Analysis Batch: 286834

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286433

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:20	1

Lab Sample ID: LCS 680-286433/2-A
Matrix: Water
Analysis Batch: 286834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.58		ug/L		103	80 - 120

Lab Sample ID: 640-44430-2 MS
Matrix: Water
Analysis Batch: 286834

Client Sample ID: MWB-34(I)d
Prep Type: Total/NA
Prep Batch: 286433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.091	U	1.00	0.986		ug/L		99	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 640-44430-2 MSD — **Client Sample ID: MWB-34(I)d**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.091	U	1.00	0.991		ug/L		99	80 - 120	0	20

Lab Sample ID: 640-44430-11 MS — **Client Sample ID: MWB-31(D)b**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.091	U	1.00	1.13		ug/L		113	80 - 120

Lab Sample ID: 640-44430-11 MSD — **Client Sample ID: MWB-31(D)b**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.091	U	1.00	1.06		ug/L		106	80 - 120	6	20

Lab Sample ID: MB 680-286434/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 17:01	1

Lab Sample ID: LCS 680-286434/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.53		ug/L		101	80 - 120

Lab Sample ID: 640-44404-1 MS — **Client Sample ID: MWB-29(S)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.091	U	1.00	1.08		ug/L		108	80 - 120

Lab Sample ID: 640-44404-1 MSD — **Client Sample ID: MWB-29(S)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.091	U	1.00	0.951		ug/L		95	80 - 120	13	20

Lab Sample ID: 640-44404-11 MS — **Client Sample ID: MWB-29(D)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.091	U	1.00	0.952		ug/L		95	80 - 120

Lab Sample ID: 640-44404-11 MSD — **Client Sample ID: MWB-29(D)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.091	U	1.00	1.03		ug/L		103	80 - 120	8	20

Lab Sample ID: MB 680-286846/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286846**

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:44	07/29/13 18:20	1

Lab Sample ID: LCS 680-286846/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286834 — **Prep Batch: 286846**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.62		ug/L		105	80 - 120

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Lab Sample ID: MB 680-287994/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287994

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	3.3	U	3.3	3.3	mg/L			07/31/13 10:55	1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-286965/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286965

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.026	U	0.050	0.026	mg/L			07/30/13 18:00	1

Lab Sample ID: LCS 680-286965/8 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	1.00	0.970		mg/L		97	90 - 110

Lab Sample ID: 640-44430-2 MS — **Client Sample ID: MWB-34(I)d**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.066		1.00	0.780	J	mg/L		71	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 640-44430-2 MSD — **Client Sample ID: MWB-34(I)d**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	0.066		1.00	0.781	J	mg/L		71	90 - 110	0	30

Lab Sample ID: 640-44404-24 DU — **Client Sample ID: MWB-17(D)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 286965

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia (as N)	0.14		0.168		mg/L		20	30

Lab Sample ID: MB 680-287092/30 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287092

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.026	U	0.050	0.026	mg/L			07/31/13 16:39	1

Lab Sample ID: LCS 680-287092/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: 640-44404-2 MS — **Client Sample ID: MWB-12(D)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287092

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	0.15		1.00	0.886	J	mg/L		73	90 - 110

Lab Sample ID: 640-44404-2 MSD — **Client Sample ID: MWB-12(D)c**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287092

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia (as N)	0.15		1.00	0.891	J	mg/L		74	90 - 110	1	30

Lab Sample ID: MB 680-287093/29 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287093

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.026	U	0.050	0.026	mg/L			07/31/13 16:39	1

Lab Sample ID: LCS 680-287093/28 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 287093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia (as N)	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: 640-44404-1 MS
Matrix: Water
Analysis Batch: 287093

Client Sample ID: MWB-29(S)c
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	1.07		mg/L		96	90 - 110

Lab Sample ID: 640-44404-1 MSD
Matrix: Water
Analysis Batch: 287093

Client Sample ID: MWB-29(S)c
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	1.06		mg/L		95	90 - 110	1	30

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-286470/13
Matrix: Water
Analysis Batch: 286470

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/27/13 11:16	1

Lab Sample ID: LCS 680-286470/14
Matrix: Water
Analysis Batch: 286470

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	0.997	0.995		mg/L		100	90 - 110

Lab Sample ID: MB 680-286471/13
Matrix: Water
Analysis Batch: 286471

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/27/13 11:51	1

Lab Sample ID: LCS 680-286471/16
Matrix: Water
Analysis Batch: 286471

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	0.997	0.993		mg/L		100	90 - 110

Lab Sample ID: MB 680-286994/13
Matrix: Water
Analysis Batch: 286994

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 10:56	1

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

Lab Sample ID: LCS 680-286994/14
Matrix: Water
Analysis Batch: 286994

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			0.997	0.987		mg/L		99	90 - 110		

Lab Sample ID: LCSD 680-286994/19
Matrix: Water
Analysis Batch: 286994

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			0.997	0.990		mg/L		99	90 - 110	0	10

Lab Sample ID: 640-44404-11 MS
Matrix: Water
Analysis Batch: 286994

Client Sample ID: MWB-29(D)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.061		0.997	1.03		mg/L		97	90 - 110		

Lab Sample ID: 640-44404-11 MSD
Matrix: Water
Analysis Batch: 286994

Client Sample ID: MWB-29(D)c
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	0.061		0.997	1.03		mg/L		98	90 - 110	0	10

Lab Sample ID: 640-44404-19 DU
Matrix: Water
Analysis Batch: 286994

Client Sample ID: MWB-19(I)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate Nitrite as N	0.014	I	0.0156	I	mg/L		12	10

Lab Sample ID: MB 680-287081/13
Matrix: Water
Analysis Batch: 287081

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/31/13 16:03	1

Lab Sample ID: LCS 680-287081/14
Matrix: Water
Analysis Batch: 287081

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			0.997	0.989		mg/L		99	90 - 110		

Lab Sample ID: 640-44430-8 MS
Matrix: Water
Analysis Batch: 287081

Client Sample ID: MWB-32(D)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.017	I	0.997	0.985		mg/L		97	90 - 110		

Lab Sample ID: 640-44430-8 MSD
Matrix: Water
Analysis Batch: 287081

Client Sample ID: MWB-32(D)d
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	0.017	I	0.997	0.987		mg/L		97	90 - 110	0	10

Lab Sample ID: MB 680-287575/13
Matrix: Water
Analysis Batch: 287575

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			08/03/13 10:18	1

Lab Sample ID: LCS 680-287575/14
Matrix: Water
Analysis Batch: 287575

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	0.997	1.02		mg/L		102	90 - 110

Lab Sample ID: 640-44404-9 MS
Matrix: Water
Analysis Batch: 287575

Client Sample ID: MWB-27(I)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.014	I	0.997	0.978		mg/L		97	90 - 110

Lab Sample ID: 640-44404-9 MSD
Matrix: Water
Analysis Batch: 287575

Client Sample ID: MWB-27(I)c
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	0.014	I	0.997	0.986		mg/L		98	90 - 110	1	10

Method: 365.4 - Phosphorus, Total

Lab Sample ID: MB 680-286927/2-A
Matrix: Water
Analysis Batch: 287002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286927

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus	0.041	U	0.10	0.041	mg/L		07/30/13 17:00	07/31/13 11:14	1

Lab Sample ID: LCS 680-286927/1-A
Matrix: Water
Analysis Batch: 287002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus	2.00	2.13		mg/L		106	60 - 140

Method: 365.4 - Phosphorus, Total (Continued)

Lab Sample ID: 640-44433-11 MS
Matrix: Water
Analysis Batch: 287002

Client Sample ID: SW-3
Prep Type: Total/NA
Prep Batch: 286927

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus	0.060	I	2.00	2.13		mg/L		103	60 - 140

Lab Sample ID: 640-44433-11 MSD
Matrix: Water
Analysis Batch: 287002

Client Sample ID: SW-3
Prep Type: Total/NA
Prep Batch: 286927

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phosphorus	0.060	I	2.00	2.17		mg/L		105	60 - 140	2	40

Lab Sample ID: 640-44433-10 DU
Matrix: Water
Analysis Batch: 287002

Client Sample ID: SW-2
Prep Type: Total/NA
Prep Batch: 286927

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Phosphorus	0.041	U	0.041	U	mg/L		NC	40

Method: 4500 P F - Orthophosphate

Lab Sample ID: MB 640-103385/18
Matrix: Water
Analysis Batch: 103385

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P	0.0014	U	0.010	0.0014	mg/L			07/25/13 19:23	1

Lab Sample ID: LCS 640-103385/20
Matrix: Water
Analysis Batch: 103385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate as P	0.0300	0.0301		mg/L		100	90 - 110

Lab Sample ID: LCSD 640-103385/21
Matrix: Water
Analysis Batch: 103385

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 as P	0.0300	0.0308		mg/L		103	90 - 110	2	30

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

Lab Sample ID: MB 660-139912/1
Matrix: Water
Analysis Batch: 139912

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			07/30/13 14:48	1

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

Lab Sample ID: LCS 660-139912/2
Matrix: Water
Analysis Batch: 139912

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	10000	9950		mg/L		100	80 - 120

Lab Sample ID: 640-44404-2 DU
Matrix: Water
Analysis Batch: 139912

Client Sample ID: MWB-12(D)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	210		210		mg/L		2	20

Lab Sample ID: 640-44404-7 DU
Matrix: Water
Analysis Batch: 139912

Client Sample ID: MWB-13(S)c
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		230		mg/L		4	20

Lab Sample ID: MB 660-139914/1
Matrix: Water
Analysis Batch: 139914

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			07/30/13 16:19	1

Lab Sample ID: LCS 660-139914/2
Matrix: Water
Analysis Batch: 139914

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	10000	9960		mg/L		100	80 - 120

Lab Sample ID: 640-44430-1 DU
Matrix: Water
Analysis Batch: 139914

Client Sample ID: MWB-34(S)d
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	440		460		mg/L		5	20

Lab Sample ID: MB 660-139915/1
Matrix: Water
Analysis Batch: 139915

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			07/30/13 17:33	1

Lab Sample ID: LCS 660-139915/2
Matrix: Water
Analysis Batch: 139915

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	10000	9990		mg/L		100	80 - 120

Lab Sample ID: 640-44430-11 DU
Matrix: Water
Analysis Batch: 139915

Client Sample ID: MWB-31(D)b
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		208		mg/L		5	20

Lab Sample ID: 640-44433-11 DU
Matrix: Water
Analysis Batch: 139915

Client Sample ID: SW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	250		278		mg/L		11	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 660-139881/1
Matrix: Water
Analysis Batch: 139881

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			07/30/13 08:02	1

Lab Sample ID: LCS 660-139881/2
Matrix: Water
Analysis Batch: 139881

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	95.2		mg/L		95	80 - 120

Lab Sample ID: MB 660-139907/1
Matrix: Water
Analysis Batch: 139907

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			07/30/13 12:52	1

Lab Sample ID: LCS 660-139907/2
Matrix: Water
Analysis Batch: 139907

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	80 - 120

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: SCB 660-139771/2 SCB
Matrix: Water
Analysis Batch: 139771

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

Analyte	SCB Result	SCB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			07/26/13 06:08	1

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: USB 660-139771/1 USB
Matrix: Water
Analysis Batch: 139771

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

Analyte	USB Result	USB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			07/26/13 06:08	1

Lab Sample ID: LCS 660-139771/3
Matrix: Water
Analysis Batch: 139771

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	198		mg/L		100	85 - 115

Method: SM 5220D - COD

Lab Sample ID: MB 680-287673/3
Matrix: Water
Analysis Batch: 287673

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	6.3	U	20	6.3	mg/L			08/04/13 14:10	1

Lab Sample ID: LCS 680-287673/4
Matrix: Water
Analysis Batch: 287673

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	100	107		mg/L		107	90 - 110

Lab Sample ID: 640-44433-9 MS
Matrix: Water
Analysis Batch: 287673

Client Sample ID: SW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	150		100	237	J	mg/L		84	90 - 110

Lab Sample ID: 640-44433-9 MSD
Matrix: Water
Analysis Batch: 287673

Client Sample ID: 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
Chemical Oxygen Demand	150		100	230	J	mg/L		78	90 - 110	3	30

Method: SM 5310C - TOC

Lab Sample ID: MB 640-103347/7
Matrix: Water
Analysis Batch: 103347

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			07/25/13 15:09	1

Method: SM 5310C - TOC (Continued)

Lab Sample ID: LCS 640-103347/8
Matrix: Water
Analysis Batch: 103347

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			10.0	9.76		mg/L		98	80 - 120		

Lab Sample ID: LCSD 640-103347/9
Matrix: Water
Analysis Batch: 103347

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			10.0	9.79		mg/L		98	80 - 120	0	25

GC/MS VOA

Analysis Batch: 103395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total/NA	Water	8260C	
640-44430-1 MS	MWB-34(S)d	Total/NA	Water	8260C	
640-44430-1 MSD	MWB-34(S)d	Total/NA	Water	8260C	
640-44430-2	MWB-34(I)d	Total/NA	Water	8260C	
640-44430-3	MWB-34(D)d	Total/NA	Water	8260C	
640-44430-4	MWB-21(S)c	Total/NA	Water	8260C	
640-44430-5	MWB-3(S)b	Total/NA	Water	8260C	
640-44430-6	MWB-3(I)b	Total/NA	Water	8260C	
640-44430-7	MWB-33(S)d	Total/NA	Water	8260C	
640-44430-8	MWB-32(D)d	Total/NA	Water	8260C	
640-44430-9	MWB-32(I)d	Total/NA	Water	8260C	
640-44430-10	MWB-32(S)d	Total/NA	Water	8260C	
640-44430-11	MWB-31(D)b	Total/NA	Water	8260C	
640-44430-12	MWB-2(I)b	Total/NA	Water	8260C	
640-44430-13	MWB-2(S)b	Total/NA	Water	8260C	
640-44430-15	Trip Blank 01 44430	Total/NA	Water	8260C	
640-44433-9	SW-1	Total/NA	Water	8260C	
640-44433-10	SW-2	Total/NA	Water	8260C	
640-44433-11	SW-3	Total/NA	Water	8260C	
640-44433-12	Trip Blank 04 44433	Total/NA	Water	8260C	
LCS 640-103395/2	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-103395/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-103395/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 103397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	8260C	
640-44404-2	MWB-12(D)c	Total/NA	Water	8260C	
640-44404-3	MWB-12(1)c	Total/NA	Water	8260C	
640-44404-4	MWB-12(S)c	Total/NA	Water	8260C	
640-44404-5	MWB-22(S)c	Total/NA	Water	8260C	
640-44404-6	MWB-13(I)c	Total/NA	Water	8260C	
640-44404-7	MWB-13(S)c	Total/NA	Water	8260C	
640-44404-8	MWB-27(D)c	Total/NA	Water	8260C	
640-44404-9	MWB-27(I)c	Total/NA	Water	8260C	
640-44404-10	MWB-27(S)c	Total/NA	Water	8260C	
640-44404-11	MWB-29(D)c	Total/NA	Water	8260C	
640-44404-12	MWB-29(I)c	Total/NA	Water	8260C	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	8260C	
LCS 640-103397/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-103397/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-103397/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 103399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-14	MWB-11(S)c	Total/NA	Water	8260C	
640-44404-15	MWB-7(S)c	Total/NA	Water	8260C	
640-44404-16	MWB-7(1)c	Total/NA	Water	8260C	
640-44404-17	MWB-7(D)c	Total/NA	Water	8260C	
640-44404-18	MWB-19(S)c	Total/NA	Water	8260C	
640-44404-19	MWB-19(I)c	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 103399 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-20	MWB-19(D)c	Total/NA	Water	8260C	
640-44404-21	MWB-17(S)c	Total/NA	Water	8260C	
640-44404-22	Trip Blank 01 44404	Total/NA	Water	8260C	
640-44404-23	MWB-20(S)c	Total/NA	Water	8260C	
640-44404-24	MWB-17(D)c	Total/NA	Water	8260C	
640-44404-25	MWB-17(I)c	Total/NA	Water	8260C	
LCS 640-103399/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-103399/4	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-103399/6	Method Blank	Total/NA	Water	8260C	

GC Semi VOA

Prep Batch: 103338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-17	MWB-7(D)c	Total/NA	Water	8011	
640-44404-18	MWB-19(S)c	Total/NA	Water	8011	
640-44404-19	MWB-19(I)c	Total/NA	Water	8011	
640-44404-20	MWB-19(D)c	Total/NA	Water	8011	
640-44404-21	MWB-17(S)c	Total/NA	Water	8011	
640-44404-23	MWB-20(S)c	Total/NA	Water	8011	
640-44404-24	MWB-17(D)c	Total/NA	Water	8011	
640-44404-25	MWB-17(I)c	Total/NA	Water	8011	
640-44433-9	SW-1	Total/NA	Water	8011	
640-44433-10	SW-2	Total/NA	Water	8011	
640-44433-11	SW-3	Total/NA	Water	8011	
LCS 640-103338/4-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 640-103338/5-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 640-103338/3-A	Method Blank	Total/NA	Water	8011	

Prep Batch: 103339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	8011	
640-44404-1 MS	MWB-29(S)c	Total/NA	Water	8011	
640-44404-1 MSD	MWB-29(S)c	Total/NA	Water	8011	
640-44404-2	MWB-12(D)c	Total/NA	Water	8011	
640-44404-3	MWB-12(1)c	Total/NA	Water	8011	
640-44404-4	MWB-12(S)c	Total/NA	Water	8011	
640-44404-5	MWB-22(S)c	Total/NA	Water	8011	
640-44404-6	MWB-13(I)c	Total/NA	Water	8011	
640-44404-7	MWB-13(S)c	Total/NA	Water	8011	
640-44404-8	MWB-27(D)c	Total/NA	Water	8011	
640-44404-9	MWB-27(I)c	Total/NA	Water	8011	
640-44404-10	MWB-27(S)c	Total/NA	Water	8011	
640-44404-11	MWB-29(D)c	Total/NA	Water	8011	
640-44404-12	MWB-29(I)c	Total/NA	Water	8011	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	8011	
640-44404-14	MWB-11(S)c	Total/NA	Water	8011	
640-44404-15	MWB-7(S)c	Total/NA	Water	8011	
640-44404-16	MWB-7(1)c	Total/NA	Water	8011	
LCS 640-103339/4-A	Lab Control Sample	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 103339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 640-103339/5-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 640-103339/3-A	Method Blank	Total/NA	Water	8011	

Prep Batch: 103362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total/NA	Water	8011	
640-44430-1 MS	MWB-34(S)d	Total/NA	Water	8011	
640-44430-1 MSD	MWB-34(S)d	Total/NA	Water	8011	
640-44430-2	MWB-34(I)d	Total/NA	Water	8011	
640-44430-3	MWB-34(D)d	Total/NA	Water	8011	
640-44430-4	MWB-21(S)c	Total/NA	Water	8011	
640-44430-5	MWB-3(S)b	Total/NA	Water	8011	
640-44430-6	MWB-3(I)b	Total/NA	Water	8011	
640-44430-7	MWB-33(S)d	Total/NA	Water	8011	
640-44430-8	MWB-32(D)d	Total/NA	Water	8011	
640-44430-9	MWB-32(I)d	Total/NA	Water	8011	
640-44430-10	MWB-32(S)d	Total/NA	Water	8011	
640-44430-11	MWB-31(D)b	Total/NA	Water	8011	
640-44430-12	MWB-2(I)b	Total/NA	Water	8011	
640-44430-13	MWB-2(S)b	Total/NA	Water	8011	
LCS 640-103362/11-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 640-103362/12-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 640-103362/10-A	Method Blank	Total/NA	Water	8011	

Analysis Batch: 103434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total/NA	Water	8011	103362
640-44430-1 MS	MWB-34(S)d	Total/NA	Water	8011	103362
640-44430-1 MSD	MWB-34(S)d	Total/NA	Water	8011	103362
640-44430-2	MWB-34(I)d	Total/NA	Water	8011	103362
640-44430-3	MWB-34(D)d	Total/NA	Water	8011	103362
640-44430-4	MWB-21(S)c	Total/NA	Water	8011	103362
640-44430-5	MWB-3(S)b	Total/NA	Water	8011	103362
640-44430-6	MWB-3(I)b	Total/NA	Water	8011	103362
640-44430-7	MWB-33(S)d	Total/NA	Water	8011	103362
640-44430-8	MWB-32(D)d	Total/NA	Water	8011	103362
640-44430-9	MWB-32(I)d	Total/NA	Water	8011	103362
640-44430-10	MWB-32(S)d	Total/NA	Water	8011	103362
640-44430-11	MWB-31(D)b	Total/NA	Water	8011	103362
640-44430-12	MWB-2(I)b	Total/NA	Water	8011	103362
640-44430-13	MWB-2(S)b	Total/NA	Water	8011	103362
LCS 640-103362/11-A	Lab Control Sample	Total/NA	Water	8011	103362
LCSD 640-103362/12-A	Lab Control Sample Dup	Total/NA	Water	8011	103362
MB 640-103362/10-A	Method Blank	Total/NA	Water	8011	103362

Analysis Batch: 103438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-17	MWB-7(D)c	Total/NA	Water	8011	103338
640-44404-18	MWB-19(S)c	Total/NA	Water	8011	103338
640-44404-19	MWB-19(I)c	Total/NA	Water	8011	103338
640-44404-20	MWB-19(D)c	Total/NA	Water	8011	103338

GC Semi VOA (Continued)

Analysis Batch: 103438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-21	MWB-17(S)c	Total/NA	Water	8011	103338
640-44404-23	MWB-20(S)c	Total/NA	Water	8011	103338
640-44404-24	MWB-17(D)c	Total/NA	Water	8011	103338
640-44404-25	MWB-17(I)c	Total/NA	Water	8011	103338
640-44433-9	SW-1	Total/NA	Water	8011	103338
640-44433-10	SW-2	Total/NA	Water	8011	103338
640-44433-11	SW-3	Total/NA	Water	8011	103338
LCS 640-103338/4-A	Lab Control Sample	Total/NA	Water	8011	103338
LCSD 640-103338/5-A	Lab Control Sample Dup	Total/NA	Water	8011	103338
MB 640-103338/3-A	Method Blank	Total/NA	Water	8011	103338

Analysis Batch: 103471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	8011	103339
640-44404-1 MS	MWB-29(S)c	Total/NA	Water	8011	103339
640-44404-1 MSD	MWB-29(S)c	Total/NA	Water	8011	103339
640-44404-4	MWB-12(S)c	Total/NA	Water	8011	103339
640-44404-5	MWB-22(S)c	Total/NA	Water	8011	103339
640-44404-6	MWB-13(I)c	Total/NA	Water	8011	103339
LCS 640-103339/4-A	Lab Control Sample	Total/NA	Water	8011	103339
LCSD 640-103339/5-A	Lab Control Sample Dup	Total/NA	Water	8011	103339
MB 640-103339/3-A	Method Blank	Total/NA	Water	8011	103339

Analysis Batch: 103509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-2	MWB-12(D)c	Total/NA	Water	8011	103339
640-44404-3	MWB-12(1)c	Total/NA	Water	8011	103339
640-44404-7	MWB-13(S)c	Total/NA	Water	8011	103339
640-44404-8	MWB-27(D)c	Total/NA	Water	8011	103339
640-44404-9	MWB-27(I)c	Total/NA	Water	8011	103339
640-44404-10	MWB-27(S)c	Total/NA	Water	8011	103339
640-44404-11	MWB-29(D)c	Total/NA	Water	8011	103339
640-44404-12	MWB-29(I)c	Total/NA	Water	8011	103339
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	8011	103339
640-44404-14	MWB-11(S)c	Total/NA	Water	8011	103339
640-44404-15	MWB-7(S)c	Total/NA	Water	8011	103339
640-44404-16	MWB-7(1)c	Total/NA	Water	8011	103339

HPLC/IC

Analysis Batch: 287703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-4	MWB-21(S)c	Total/NA	Water	300.0	
640-44430-4 MS	MWB-21(S)c	Total/NA	Water	300.0	
640-44430-4 MSD	MWB-21(S)c	Total/NA	Water	300.0	
640-44430-5	MWB-3(S)b	Total/NA	Water	300.0	
640-44430-6	MWB-3(I)b	Total/NA	Water	300.0	
640-44430-7	MWB-33(S)d	Total/NA	Water	300.0	
640-44430-8	MWB-32(D)d	Total/NA	Water	300.0	
640-44430-9	MWB-32(I)d	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 287703 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-10	MWB-32(S)d	Total/NA	Water	300.0	
640-44430-11	MWB-31(D)b	Total/NA	Water	300.0	
640-44430-12	MWB-2(I)b	Total/NA	Water	300.0	
640-44430-13	MWB-2(S)b	Total/NA	Water	300.0	
640-44430-14	Field Blank 01 44430	Total/NA	Water	300.0	
640-44430-14 MS	Field Blank 01 44430	Total/NA	Water	300.0	
LCS 680-287703/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-287703/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-287703/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 287751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	300.0	
640-44404-2	MWB-12(D)c	Total/NA	Water	300.0	
640-44404-3	MWB-12(1)c	Total/NA	Water	300.0	
640-44404-4	MWB-12(S)c	Total/NA	Water	300.0	
640-44404-5	MWB-22(S)c	Total/NA	Water	300.0	
640-44404-6	MWB-13(I)c	Total/NA	Water	300.0	
640-44404-7	MWB-13(S)c	Total/NA	Water	300.0	
640-44404-8	MWB-27(D)c	Total/NA	Water	300.0	
640-44404-9	MWB-27(I)c	Total/NA	Water	300.0	
640-44404-10	MWB-27(S)c	Total/NA	Water	300.0	
640-44404-11	MWB-29(D)c	Total/NA	Water	300.0	
640-44404-11 MS	MWB-29(D)c	Total/NA	Water	300.0	
640-44404-12	MWB-29(I)c	Total/NA	Water	300.0	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	300.0	
640-44404-14	MWB-11(S)c	Total/NA	Water	300.0	
640-44404-15	MWB-7(S)c	Total/NA	Water	300.0	
640-44404-16	MWB-7(1)c	Total/NA	Water	300.0	
640-44404-17	MWB-7(D)c	Total/NA	Water	300.0	
640-44404-18	MWB-19(S)c	Total/NA	Water	300.0	
640-44404-19	MWB-19(I)c	Total/NA	Water	300.0	
LCS 680-287751/32	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-287751/33	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-287751/31	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 287752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-20	MWB-19(D)c	Total/NA	Water	300.0	
640-44404-20 MS	MWB-19(D)c	Total/NA	Water	300.0	
640-44404-20 MSD	MWB-19(D)c	Total/NA	Water	300.0	
640-44404-21	MWB-17(S)c	Total/NA	Water	300.0	
640-44404-23	MWB-20(S)c	Total/NA	Water	300.0	
640-44404-24	MWB-17(D)c	Total/NA	Water	300.0	
640-44404-25	MWB-17(I)c	Total/NA	Water	300.0	
640-44430-1	MWB-34(S)d	Total/NA	Water	300.0	
640-44430-2	MWB-34(I)d	Total/NA	Water	300.0	
640-44430-3	MWB-34(D)d	Total/NA	Water	300.0	
LCS 680-287752/64	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-287752/65	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-287752/63	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 187131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	1631E	
640-44433-10	SW-2	Total/NA	Water	1631E	
640-44433-11	SW-3	Total/NA	Water	1631E	
LCS 400-187131/2-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-187131/3-A	Lab Control Sample Dup	Total/NA	Water	1631E	
MB 400-187131/1-A	Method Blank	Total/NA	Water	1631E	

Analysis Batch: 187233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	1631E	187131
640-44433-10	SW-2	Total/NA	Water	1631E	187131
640-44433-11	SW-3	Total/NA	Water	1631E	187131
LCS 400-187131/2-A	Lab Control Sample	Total/NA	Water	1631E	187131
LCSD 400-187131/3-A	Lab Control Sample Dup	Total/NA	Water	1631E	187131
MB 400-187131/1-A	Method Blank	Total/NA	Water	1631E	187131

Prep Batch: 286358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total Recoverable	Water	3005A	
640-44404-2	MWB-12(D)c	Total Recoverable	Water	3005A	
640-44404-3	MWB-12(1)c	Total Recoverable	Water	3005A	
640-44404-4	MWB-12(S)c	Total Recoverable	Water	3005A	
640-44404-5	MWB-22(S)c	Total Recoverable	Water	3005A	
640-44404-6	MWB-13(I)c	Total Recoverable	Water	3005A	
640-44404-7	MWB-13(S)c	Total Recoverable	Water	3005A	
640-44404-8	MWB-27(D)c	Total Recoverable	Water	3005A	
LCS 680-286358/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-286358/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 286378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-9	MWB-27(I)c	Total Recoverable	Water	3005A	
640-44404-9 MS	MWB-27(I)c	Total Recoverable	Water	3005A	
640-44404-9 MSD	MWB-27(I)c	Total Recoverable	Water	3005A	
640-44404-10	MWB-27(S)c	Total Recoverable	Water	3005A	
640-44404-11	MWB-29(D)c	Total Recoverable	Water	3005A	
640-44404-12	MWB-29(I)c	Total Recoverable	Water	3005A	
640-44404-13	MWB-11(1)(R)c	Total Recoverable	Water	3005A	
640-44404-14	MWB-11(S)c	Total Recoverable	Water	3005A	
640-44404-15	MWB-7(S)c	Total Recoverable	Water	3005A	
640-44404-16	MWB-7(1)c	Total Recoverable	Water	3005A	
640-44404-17	MWB-7(D)c	Total Recoverable	Water	3005A	
640-44404-18	MWB-19(S)c	Total Recoverable	Water	3005A	
640-44404-19	MWB-19(I)c	Total Recoverable	Water	3005A	
640-44404-20	MWB-19(D)c	Total Recoverable	Water	3005A	
640-44404-21	MWB-17(S)c	Total Recoverable	Water	3005A	
640-44404-23	MWB-20(S)c	Total Recoverable	Water	3005A	
640-44404-24	MWB-17(D)c	Total Recoverable	Water	3005A	
640-44404-25	MWB-17(I)c	Total Recoverable	Water	3005A	
LCS 680-286378/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-286378/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 286429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total Recoverable	Water	3005A	
640-44430-1 MS	MWB-34(S)d	Total Recoverable	Water	3005A	
640-44430-1 MSD	MWB-34(S)d	Total Recoverable	Water	3005A	
640-44430-2	MWB-34(I)d	Total Recoverable	Water	3005A	
640-44430-3	MWB-34(D)d	Total Recoverable	Water	3005A	
640-44430-4	MWB-21(S)c	Total Recoverable	Water	3005A	
640-44430-5	MWB-3(S)b	Total Recoverable	Water	3005A	
640-44430-6	MWB-3(I)b	Total Recoverable	Water	3005A	
640-44430-7	MWB-33(S)d	Total Recoverable	Water	3005A	
640-44430-8	MWB-32(D)d	Total Recoverable	Water	3005A	
640-44430-9	MWB-32(I)d	Total Recoverable	Water	3005A	
640-44430-10	MWB-32(S)d	Total Recoverable	Water	3005A	
640-44430-11	MWB-31(D)b	Total Recoverable	Water	3005A	
640-44430-12	MWB-2(I)b	Total Recoverable	Water	3005A	
640-44430-13	MWB-2(S)b	Total Recoverable	Water	3005A	
640-44430-14	Field Blank 01 44430	Total Recoverable	Water	3005A	
LCS 680-286429/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-286429/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 286433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total/NA	Water	7470A	
640-44430-2	MWB-34(I)d	Total/NA	Water	7470A	
640-44430-2 MS	MWB-34(I)d	Total/NA	Water	7470A	
640-44430-2 MSD	MWB-34(I)d	Total/NA	Water	7470A	
640-44430-3	MWB-34(D)d	Total/NA	Water	7470A	
640-44430-4	MWB-21(S)c	Total/NA	Water	7470A	
640-44430-5	MWB-3(S)b	Total/NA	Water	7470A	
640-44430-6	MWB-3(I)b	Total/NA	Water	7470A	
640-44430-7	MWB-33(S)d	Total/NA	Water	7470A	
640-44430-8	MWB-32(D)d	Total/NA	Water	7470A	
640-44430-9	MWB-32(I)d	Total/NA	Water	7470A	
640-44430-10	MWB-32(S)d	Total/NA	Water	7470A	
640-44430-11	MWB-31(D)b	Total/NA	Water	7470A	
640-44430-11 MS	MWB-31(D)b	Total/NA	Water	7470A	
640-44430-11 MSD	MWB-31(D)b	Total/NA	Water	7470A	
640-44430-12	MWB-2(I)b	Total/NA	Water	7470A	
640-44430-13	MWB-2(S)b	Total/NA	Water	7470A	
640-44430-14	Field Blank 01 44430	Total/NA	Water	7470A	
LCS 680-286433/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-286433/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 286434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	7470A	
640-44404-1 MS	MWB-29(S)c	Total/NA	Water	7470A	
640-44404-1 MSD	MWB-29(S)c	Total/NA	Water	7470A	
640-44404-2	MWB-12(D)c	Total/NA	Water	7470A	
640-44404-3	MWB-12(1)c	Total/NA	Water	7470A	
640-44404-4	MWB-12(S)c	Total/NA	Water	7470A	
640-44404-5	MWB-22(S)c	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 286434 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-6	MWB-13(I)c	Total/NA	Water	7470A	
640-44404-7	MWB-13(S)c	Total/NA	Water	7470A	
640-44404-8	MWB-27(D)c	Total/NA	Water	7470A	
640-44404-9	MWB-27(I)c	Total/NA	Water	7470A	
640-44404-10	MWB-27(S)c	Total/NA	Water	7470A	
640-44404-11	MWB-29(D)c	Total/NA	Water	7470A	
640-44404-11 MS	MWB-29(D)c	Total/NA	Water	7470A	
640-44404-11 MSD	MWB-29(D)c	Total/NA	Water	7470A	
640-44404-12	MWB-29(I)c	Total/NA	Water	7470A	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	7470A	
640-44404-14	MWB-11(S)c	Total/NA	Water	7470A	
640-44404-15	MWB-7(S)c	Total/NA	Water	7470A	
640-44404-16	MWB-7(1)c	Total/NA	Water	7470A	
640-44404-17	MWB-7(D)c	Total/NA	Water	7470A	
640-44404-18	MWB-19(S)c	Total/NA	Water	7470A	
640-44404-19	MWB-19(I)c	Total/NA	Water	7470A	
640-44404-20	MWB-19(D)c	Total/NA	Water	7470A	
LCS 680-286434/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-286434/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 286672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total Recoverable	Water	3005A	
640-44433-9 MS	SW-1	Total Recoverable	Water	3005A	
640-44433-9 MSD	SW-1	Total Recoverable	Water	3005A	
640-44433-10	SW-2	Total Recoverable	Water	3005A	
640-44433-11	SW-3	Total Recoverable	Water	3005A	
LCS 680-286672/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-286672/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 680-286672/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 286834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	7470A	286434
640-44404-1 MS	MWB-29(S)c	Total/NA	Water	7470A	286434
640-44404-1 MSD	MWB-29(S)c	Total/NA	Water	7470A	286434
640-44404-2	MWB-12(D)c	Total/NA	Water	7470A	286434
640-44404-3	MWB-12(1)c	Total/NA	Water	7470A	286434
640-44404-4	MWB-12(S)c	Total/NA	Water	7470A	286434
640-44404-5	MWB-22(S)c	Total/NA	Water	7470A	286434
640-44404-6	MWB-13(I)c	Total/NA	Water	7470A	286434
640-44404-7	MWB-13(S)c	Total/NA	Water	7470A	286434
640-44404-8	MWB-27(D)c	Total/NA	Water	7470A	286434
640-44404-9	MWB-27(I)c	Total/NA	Water	7470A	286434
640-44404-10	MWB-27(S)c	Total/NA	Water	7470A	286434
640-44404-11	MWB-29(D)c	Total/NA	Water	7470A	286434
640-44404-11 MS	MWB-29(D)c	Total/NA	Water	7470A	286434
640-44404-11 MSD	MWB-29(D)c	Total/NA	Water	7470A	286434
640-44404-12	MWB-29(I)c	Total/NA	Water	7470A	286434
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	7470A	286434
640-44404-14	MWB-11(S)c	Total/NA	Water	7470A	286434

Metals (Continued)

Analysis Batch: 286834 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-15	MWB-7(S)c	Total/NA	Water	7470A	286434
640-44404-16	MWB-7(1)c	Total/NA	Water	7470A	286434
640-44404-17	MWB-7(D)c	Total/NA	Water	7470A	286434
640-44404-18	MWB-19(S)c	Total/NA	Water	7470A	286434
640-44404-19	MWB-19(I)c	Total/NA	Water	7470A	286434
640-44404-20	MWB-19(D)c	Total/NA	Water	7470A	286434
640-44404-21	MWB-17(S)c	Total/NA	Water	7470A	286846
640-44404-23	MWB-20(S)c	Total/NA	Water	7470A	286846
640-44404-24	MWB-17(D)c	Total/NA	Water	7470A	286846
640-44404-25	MWB-17(I)c	Total/NA	Water	7470A	286846
640-44430-1	MWB-34(S)d	Total/NA	Water	7470A	286433
640-44430-2	MWB-34(I)d	Total/NA	Water	7470A	286433
640-44430-2 MS	MWB-34(I)d	Total/NA	Water	7470A	286433
640-44430-2 MSD	MWB-34(I)d	Total/NA	Water	7470A	286433
640-44430-3	MWB-34(D)d	Total/NA	Water	7470A	286433
640-44430-4	MWB-21(S)c	Total/NA	Water	7470A	286433
640-44430-5	MWB-3(S)b	Total/NA	Water	7470A	286433
640-44430-6	MWB-3(I)b	Total/NA	Water	7470A	286433
640-44430-7	MWB-33(S)d	Total/NA	Water	7470A	286433
640-44430-8	MWB-32(D)d	Total/NA	Water	7470A	286433
640-44430-9	MWB-32(I)d	Total/NA	Water	7470A	286433
640-44430-10	MWB-32(S)d	Total/NA	Water	7470A	286433
640-44430-11	MWB-31(D)b	Total/NA	Water	7470A	286433
640-44430-11 MS	MWB-31(D)b	Total/NA	Water	7470A	286433
640-44430-11 MSD	MWB-31(D)b	Total/NA	Water	7470A	286433
640-44430-12	MWB-2(I)b	Total/NA	Water	7470A	286433
640-44430-13	MWB-2(S)b	Total/NA	Water	7470A	286433
640-44430-14	Field Blank 01 44430	Total/NA	Water	7470A	286433
LCS 680-286433/2-A	Lab Control Sample	Total/NA	Water	7470A	286433
LCS 680-286434/2-A	Lab Control Sample	Total/NA	Water	7470A	286434
LCS 680-286846/2-A	Lab Control Sample	Total/NA	Water	7470A	286846
MB 680-286433/1-A	Method Blank	Total/NA	Water	7470A	286433
MB 680-286434/1-A	Method Blank	Total/NA	Water	7470A	286434
MB 680-286846/1-A	Method Blank	Total/NA	Water	7470A	286846

Prep Batch: 286846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-21	MWB-17(S)c	Total/NA	Water	7470A	
640-44404-23	MWB-20(S)c	Total/NA	Water	7470A	
640-44404-24	MWB-17(D)c	Total/NA	Water	7470A	
640-44404-25	MWB-17(I)c	Total/NA	Water	7470A	
LCS 680-286846/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-286846/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 286987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-1	MWB-34(S)d	Total Recoverable	Water	6020	286429
640-44430-1 MS	MWB-34(S)d	Total Recoverable	Water	6020	286429
640-44430-1 MSD	MWB-34(S)d	Total Recoverable	Water	6020	286429
640-44430-2	MWB-34(I)d	Total Recoverable	Water	6020	286429
640-44430-3	MWB-34(D)d	Total Recoverable	Water	6020	286429

Metals (Continued)

Analysis Batch: 286987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-4	MWB-21(S)c	Total Recoverable	Water	6020	286429
640-44430-5	MWB-3(S)b	Total Recoverable	Water	6020	286429
640-44430-6	MWB-3(I)b	Total Recoverable	Water	6020	286429
640-44430-7	MWB-33(S)d	Total Recoverable	Water	6020	286429
640-44430-8	MWB-32(D)d	Total Recoverable	Water	6020	286429
640-44430-9	MWB-32(I)d	Total Recoverable	Water	6020	286429
640-44430-10	MWB-32(S)d	Total Recoverable	Water	6020	286429
640-44430-11	MWB-31(D)b	Total Recoverable	Water	6020	286429
640-44430-12	MWB-2(I)b	Total Recoverable	Water	6020	286429
640-44430-13	MWB-2(S)b	Total Recoverable	Water	6020	286429
640-44430-14	Field Blank 01 44430	Total Recoverable	Water	6020	286429
LCS 680-286429/2-A	Lab Control Sample	Total Recoverable	Water	6020	286429
MB 680-286429/1-A	Method Blank	Total Recoverable	Water	6020	286429

Analysis Batch: 287467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total Recoverable	Water	6020	286672
640-44433-9 MS	SW-1	Total Recoverable	Water	6020	286672
640-44433-9 MSD	SW-1	Total Recoverable	Water	6020	286672
640-44433-10	SW-2	Total Recoverable	Water	6020	286672
640-44433-11	SW-3	Total Recoverable	Water	6020	286672
LCS 680-286672/2-A	Lab Control Sample	Total Recoverable	Water	6020	286672
LCSD 680-286672/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020	286672
MB 680-286672/1-A	Method Blank	Total Recoverable	Water	6020	286672

Analysis Batch: 287468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total Recoverable	Water	6020	286358
640-44404-2	MWB-12(D)c	Total Recoverable	Water	6020	286358
640-44404-3	MWB-12(1)c	Total Recoverable	Water	6020	286358
640-44404-4	MWB-12(S)c	Total Recoverable	Water	6020	286358
640-44404-5	MWB-22(S)c	Total Recoverable	Water	6020	286358
640-44404-6	MWB-13(I)c	Total Recoverable	Water	6020	286358
640-44404-7	MWB-13(S)c	Total Recoverable	Water	6020	286358
640-44404-8	MWB-27(D)c	Total Recoverable	Water	6020	286358
LCS 680-286358/2-A	Lab Control Sample	Total Recoverable	Water	6020	286358
MB 680-286358/1-A	Method Blank	Total Recoverable	Water	6020	286358

Analysis Batch: 287994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	SM 2340B	
640-44433-10	SW-2	Total/NA	Water	SM 2340B	
640-44433-11	SW-3	Total/NA	Water	SM 2340B	
MB 680-287994/1	Method Blank	Total/NA	Water	SM 2340B	

Analysis Batch: 288061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-9	MWB-27(I)c	Total Recoverable	Water	6020	286378
640-44404-9 MS	MWB-27(I)c	Total Recoverable	Water	6020	286378
640-44404-9 MSD	MWB-27(I)c	Total Recoverable	Water	6020	286378
640-44404-10	MWB-27(S)c	Total Recoverable	Water	6020	286378

Metals (Continued)

Analysis Batch: 288061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-11	MWB-29(D)c	Total Recoverable	Water	6020	286378
640-44404-12	MWB-29(I)c	Total Recoverable	Water	6020	286378
640-44404-13	MWB-11(1)(R)c	Total Recoverable	Water	6020	286378
640-44404-14	MWB-11(S)c	Total Recoverable	Water	6020	286378
640-44404-15	MWB-7(S)c	Total Recoverable	Water	6020	286378
640-44404-16	MWB-7(1)c	Total Recoverable	Water	6020	286378
640-44404-17	MWB-7(D)c	Total Recoverable	Water	6020	286378
640-44404-18	MWB-19(S)c	Total Recoverable	Water	6020	286378
640-44404-19	MWB-19(I)c	Total Recoverable	Water	6020	286378
640-44404-20	MWB-19(D)c	Total Recoverable	Water	6020	286378
640-44404-21	MWB-17(S)c	Total Recoverable	Water	6020	286378
640-44404-23	MWB-20(S)c	Total Recoverable	Water	6020	286378
640-44404-24	MWB-17(D)c	Total Recoverable	Water	6020	286378
640-44404-25	MWB-17(I)c	Total Recoverable	Water	6020	286378
LCS 680-286378/2-A	Lab Control Sample	Total Recoverable	Water	6020	286378
MB 680-286378/1-A	Method Blank	Total Recoverable	Water	6020	286378

General Chemistry

Analysis Batch: 103347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	SM 5310C	
640-44433-10	SW-2	Total/NA	Water	SM 5310C	
640-44433-11	SW-3	Total/NA	Water	SM 5310C	
LCS 640-103347/8	Lab Control Sample	Total/NA	Water	SM 5310C	
LCSD 640-103347/9	Lab Control Sample Dup	Total/NA	Water	SM 5310C	
MB 640-103347/7	Method Blank	Total/NA	Water	SM 5310C	

Analysis Batch: 103385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	4500 P F	
640-44433-10	SW-2	Total/NA	Water	4500 P F	
640-44433-11	SW-3	Total/NA	Water	4500 P F	
LCS 640-103385/20	Lab Control Sample	Total/NA	Water	4500 P F	
LCSD 640-103385/21	Lab Control Sample Dup	Total/NA	Water	4500 P F	
MB 640-103385/18	Method Blank	Total/NA	Water	4500 P F	

Analysis Batch: 103562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	Nitrate by calc	
640-44404-2	MWB-12(D)c	Total/NA	Water	Nitrate by calc	
640-44404-3	MWB-12(1)c	Total/NA	Water	Nitrate by calc	
640-44404-4	MWB-12(S)c	Total/NA	Water	Nitrate by calc	
640-44404-5	MWB-22(S)c	Total/NA	Water	Nitrate by calc	
640-44404-6	MWB-13(I)c	Total/NA	Water	Nitrate by calc	
640-44404-7	MWB-13(S)c	Total/NA	Water	Nitrate by calc	
640-44404-8	MWB-27(D)c	Total/NA	Water	Nitrate by calc	
640-44404-9	MWB-27(I)c	Total/NA	Water	Nitrate by calc	
640-44404-10	MWB-27(S)c	Total/NA	Water	Nitrate by calc	
640-44404-11	MWB-29(D)c	Total/NA	Water	Nitrate by calc	

General Chemistry (Continued)

Analysis Batch: 103562 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-12	MWB-29(I)c	Total/NA	Water	Nitrate by calc	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	Nitrate by calc	
640-44404-14	MWB-11(S)c	Total/NA	Water	Nitrate by calc	
640-44404-15	MWB-7(S)c	Total/NA	Water	Nitrate by calc	
640-44404-16	MWB-7(1)c	Total/NA	Water	Nitrate by calc	
640-44404-17	MWB-7(D)c	Total/NA	Water	Nitrate by calc	
640-44404-18	MWB-19(S)c	Total/NA	Water	Nitrate by calc	
640-44404-19	MWB-19(I)c	Total/NA	Water	Nitrate by calc	
640-44404-20	MWB-19(D)c	Total/NA	Water	Nitrate by calc	
640-44404-21	MWB-17(S)c	Total/NA	Water	Nitrate by calc	
640-44404-23	MWB-20(S)c	Total/NA	Water	Nitrate by calc	
640-44404-24	MWB-17(D)c	Total/NA	Water	Nitrate by calc	
640-44404-25	MWB-17(I)c	Total/NA	Water	Nitrate by calc	
640-44430-1	MWB-34(S)d	Total/NA	Water	Nitrate by calc	
640-44430-2	MWB-34(I)d	Total/NA	Water	Nitrate by calc	
640-44430-3	MWB-34(D)d	Total/NA	Water	Nitrate by calc	
640-44430-4	MWB-21(S)c	Total/NA	Water	Nitrate by calc	
640-44430-5	MWB-3(S)b	Total/NA	Water	Nitrate by calc	
640-44430-6	MWB-3(I)b	Total/NA	Water	Nitrate by calc	
640-44430-7	MWB-33(S)d	Total/NA	Water	Nitrate by calc	
640-44430-8	MWB-32(D)d	Total/NA	Water	Nitrate by calc	
640-44430-9	MWB-32(I)d	Total/NA	Water	Nitrate by calc	
640-44430-10	MWB-32(S)d	Total/NA	Water	Nitrate by calc	
640-44430-11	MWB-31(D)b	Total/NA	Water	Nitrate by calc	
640-44430-12	MWB-2(I)b	Total/NA	Water	Nitrate by calc	
640-44430-13	MWB-2(S)b	Total/NA	Water	Nitrate by calc	
640-44430-14	Field Blank 01 44430	Total/NA	Water	Nitrate by calc	
640-44433-9	SW-1	Total/NA	Water	Nitrate by calc	
640-44433-10	SW-2	Total/NA	Water	Nitrate by calc	
640-44433-11	SW-3	Total/NA	Water	Nitrate by calc	

Analysis Batch: 103609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	UnionizedNH3	
640-44433-10	SW-2	Total/NA	Water	UnionizedNH3	
640-44433-11	SW-3	Total/NA	Water	UnionizedNH3	

Analysis Batch: 139771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	SM 5210B	
640-44433-10	SW-2	Total/NA	Water	SM 5210B	
640-44433-11	SW-3	Total/NA	Water	SM 5210B	
LCS 660-139771/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-139771/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-139771/1 USB	Method Blank	Total/NA	Water	SM 5210B	

Analysis Batch: 139881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-10	SW-2	Total/NA	Water	SM 2540D	
640-44433-11	SW-3	Total/NA	Water	SM 2540D	
LCS 660-139881/2	Lab Control Sample	Total/NA	Water	SM 2540D	

General Chemistry (Continued)

Analysis Batch: 139881 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-139881/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 139907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	SM 2540D	
LCS 660-139907/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-139907/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 139912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	SM 2540C	
640-44404-2	MWB-12(D)c	Total/NA	Water	SM 2540C	
640-44404-2 DU	MWB-12(D)c	Total/NA	Water	SM 2540C	
640-44404-3	MWB-12(1)c	Total/NA	Water	SM 2540C	
640-44404-4	MWB-12(S)c	Total/NA	Water	SM 2540C	
640-44404-5	MWB-22(S)c	Total/NA	Water	SM 2540C	
640-44404-6	MWB-13(I)c	Total/NA	Water	SM 2540C	
640-44404-7	MWB-13(S)c	Total/NA	Water	SM 2540C	
640-44404-7 DU	MWB-13(S)c	Total/NA	Water	SM 2540C	
640-44404-8	MWB-27(D)c	Total/NA	Water	SM 2540C	
640-44404-9	MWB-27(I)c	Total/NA	Water	SM 2540C	
640-44404-10	MWB-27(S)c	Total/NA	Water	SM 2540C	
640-44404-11	MWB-29(D)c	Total/NA	Water	SM 2540C	
640-44404-12	MWB-29(I)c	Total/NA	Water	SM 2540C	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	SM 2540C	
640-44404-14	MWB-11(S)c	Total/NA	Water	SM 2540C	
640-44404-15	MWB-7(S)c	Total/NA	Water	SM 2540C	
640-44404-16	MWB-7(1)c	Total/NA	Water	SM 2540C	
640-44404-17	MWB-7(D)c	Total/NA	Water	SM 2540C	
640-44404-18	MWB-19(S)c	Total/NA	Water	SM 2540C	
640-44404-19	MWB-19(I)c	Total/NA	Water	SM 2540C	
640-44404-20	MWB-19(D)c	Total/NA	Water	SM 2540C	
LCS 660-139912/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-139912/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 139914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-21	MWB-17(S)c	Total/NA	Water	SM 2540C	
640-44404-23	MWB-20(S)c	Total/NA	Water	SM 2540C	
640-44404-24	MWB-17(D)c	Total/NA	Water	SM 2540C	
640-44404-25	MWB-17(I)c	Total/NA	Water	SM 2540C	
640-44430-1	MWB-34(S)d	Total/NA	Water	SM 2540C	
640-44430-1 DU	MWB-34(S)d	Total/NA	Water	SM 2540C	
640-44430-2	MWB-34(I)d	Total/NA	Water	SM 2540C	
640-44430-3	MWB-34(D)d	Total/NA	Water	SM 2540C	
640-44430-4	MWB-21(S)c	Total/NA	Water	SM 2540C	
640-44430-5	MWB-3(S)b	Total/NA	Water	SM 2540C	
640-44430-6	MWB-3(I)b	Total/NA	Water	SM 2540C	
LCS 660-139914/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-139914/1	Method Blank	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 139915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-7	MWB-33(S)d	Total/NA	Water	SM 2540C	
640-44430-8	MWB-32(D)d	Total/NA	Water	SM 2540C	
640-44430-9	MWB-32(I)d	Total/NA	Water	SM 2540C	
640-44430-10	MWB-32(S)d	Total/NA	Water	SM 2540C	
640-44430-11	MWB-31(D)b	Total/NA	Water	SM 2540C	
640-44430-11 DU	MWB-31(D)b	Total/NA	Water	SM 2540C	
640-44430-12	MWB-2(I)b	Total/NA	Water	SM 2540C	
640-44430-13	MWB-2(S)b	Total/NA	Water	SM 2540C	
640-44430-14	Field Blank 01 44430	Total/NA	Water	SM 2540C	
640-44433-9	SW-1	Total/NA	Water	SM 2540C	
640-44433-10	SW-2	Total/NA	Water	SM 2540C	
640-44433-11	SW-3	Total/NA	Water	SM 2540C	
640-44433-11 DU	SW-3	Total/NA	Water	SM 2540C	
LCS 660-139915/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-139915/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 286470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-10	MWB-32(S)d	Total/NA	Water	353.2	
640-44430-12	MWB-2(I)b	Total/NA	Water	353.2	
640-44430-13	MWB-2(S)b	Total/NA	Water	353.2	
640-44433-9	SW-1	Total/NA	Water	353.2	
640-44433-10	SW-2	Total/NA	Water	353.2	
640-44433-11	SW-3	Total/NA	Water	353.2	
LCS 680-286470/14	Lab Control Sample	Total/NA	Water	353.2	
MB 680-286470/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 286471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-14	Field Blank 01 44430	Total/NA	Water	353.2	
LCS 680-286471/16	Lab Control Sample	Total/NA	Water	353.2	
MB 680-286471/13	Method Blank	Total/NA	Water	353.2	

Prep Batch: 286927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	Digestion	
640-44433-10	SW-2	Total/NA	Water	Digestion	
640-44433-10 DU	SW-2	Total/NA	Water	Digestion	
640-44433-11	SW-3	Total/NA	Water	Digestion	
640-44433-11 MS	SW-3	Total/NA	Water	Digestion	
640-44433-11 MSD	SW-3	Total/NA	Water	Digestion	
LCS 680-286927/1-A	Lab Control Sample	Total/NA	Water	Digestion	
MB 680-286927/2-A	Method Blank	Total/NA	Water	Digestion	

Analysis Batch: 286965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-24	MWB-17(D)c	Total/NA	Water	350.1	
640-44404-24 DU	MWB-17(D)c	Total/NA	Water	350.1	
640-44430-1	MWB-34(S)d	Total/NA	Water	350.1	
640-44430-2	MWB-34(I)d	Total/NA	Water	350.1	
640-44430-2 MS	MWB-34(I)d	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 286965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44430-2 MSD	MWB-34(I)d	Total/NA	Water	350.1	
640-44430-3	MWB-34(D)d	Total/NA	Water	350.1	
640-44430-4	MWB-21(S)c	Total/NA	Water	350.1	
640-44430-5	MWB-3(S)b	Total/NA	Water	350.1	
640-44430-6	MWB-3(I)b	Total/NA	Water	350.1	
640-44430-7	MWB-33(S)d	Total/NA	Water	350.1	
640-44430-8	MWB-32(D)d	Total/NA	Water	350.1	
640-44430-9	MWB-32(I)d	Total/NA	Water	350.1	
640-44430-10	MWB-32(S)d	Total/NA	Water	350.1	
640-44430-11	MWB-31(D)b	Total/NA	Water	350.1	
640-44430-12	MWB-2(I)b	Total/NA	Water	350.1	
640-44430-13	MWB-2(S)b	Total/NA	Water	350.1	
640-44430-14	Field Blank 01 44430	Total/NA	Water	350.1	
LCS 680-286965/8	Lab Control Sample	Total/NA	Water	350.1	
MB 680-286965/9	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 286994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	353.2	
640-44404-2	MWB-12(D)c	Total/NA	Water	353.2	
640-44404-3	MWB-12(1)c	Total/NA	Water	353.2	
640-44404-4	MWB-12(S)c	Total/NA	Water	353.2	
640-44404-5	MWB-22(S)c	Total/NA	Water	353.2	
640-44404-10	MWB-27(S)c	Total/NA	Water	353.2	
640-44404-11	MWB-29(D)c	Total/NA	Water	353.2	
640-44404-11 MS	MWB-29(D)c	Total/NA	Water	353.2	
640-44404-11 MSD	MWB-29(D)c	Total/NA	Water	353.2	
640-44404-12	MWB-29(I)c	Total/NA	Water	353.2	
640-44404-14	MWB-11(S)c	Total/NA	Water	353.2	
640-44404-15	MWB-7(S)c	Total/NA	Water	353.2	
640-44404-16	MWB-7(1)c	Total/NA	Water	353.2	
640-44404-17	MWB-7(D)c	Total/NA	Water	353.2	
640-44404-18	MWB-19(S)c	Total/NA	Water	353.2	
640-44404-19	MWB-19(I)c	Total/NA	Water	353.2	
640-44404-19 DU	MWB-19(I)c	Total/NA	Water	353.2	
640-44404-20	MWB-19(D)c	Total/NA	Water	353.2	
LCS 680-286994/14	Lab Control Sample	Total/NA	Water	353.2	
LCSD 680-286994/19	Lab Control Sample Dup	Total/NA	Water	353.2	
MB 680-286994/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 287002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	365.4	286927
640-44433-10	SW-2	Total/NA	Water	365.4	286927
640-44433-10 DU	SW-2	Total/NA	Water	365.4	286927
640-44433-11	SW-3	Total/NA	Water	365.4	286927
640-44433-11 MS	SW-3	Total/NA	Water	365.4	286927
640-44433-11 MSD	SW-3	Total/NA	Water	365.4	286927
LCS 680-286927/1-A	Lab Control Sample	Total/NA	Water	365.4	286927
MB 680-286927/2-A	Method Blank	Total/NA	Water	365.4	286927

General Chemistry (Continued)

Analysis Batch: 287081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-6	MWB-13(I)c	Total/NA	Water	353.2	
640-44404-7	MWB-13(S)c	Total/NA	Water	353.2	
640-44404-8	MWB-27(D)c	Total/NA	Water	353.2	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	353.2	
640-44404-21	MWB-17(S)c	Total/NA	Water	353.2	
640-44404-23	MWB-20(S)c	Total/NA	Water	353.2	
640-44404-24	MWB-17(D)c	Total/NA	Water	353.2	
640-44404-25	MWB-17(I)c	Total/NA	Water	353.2	
640-44430-1	MWB-34(S)d	Total/NA	Water	353.2	
640-44430-2	MWB-34(I)d	Total/NA	Water	353.2	
640-44430-3	MWB-34(D)d	Total/NA	Water	353.2	
640-44430-4	MWB-21(S)c	Total/NA	Water	353.2	
640-44430-5	MWB-3(S)b	Total/NA	Water	353.2	
640-44430-6	MWB-3(I)b	Total/NA	Water	353.2	
640-44430-7	MWB-33(S)d	Total/NA	Water	353.2	
640-44430-8	MWB-32(D)d	Total/NA	Water	353.2	
640-44430-8 MS	MWB-32(D)d	Total/NA	Water	353.2	
640-44430-8 MSD	MWB-32(D)d	Total/NA	Water	353.2	
640-44430-9	MWB-32(I)d	Total/NA	Water	353.2	
640-44430-11	MWB-31(D)b	Total/NA	Water	353.2	
LCS 680-287081/14	Lab Control Sample	Total/NA	Water	353.2	
MB 680-287081/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 287092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-2	MWB-12(D)c	Total/NA	Water	350.1	
640-44404-2 MS	MWB-12(D)c	Total/NA	Water	350.1	
640-44404-2 MSD	MWB-12(D)c	Total/NA	Water	350.1	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	350.1	
640-44404-14	MWB-11(S)c	Total/NA	Water	350.1	
640-44404-15	MWB-7(S)c	Total/NA	Water	350.1	
640-44404-16	MWB-7(1)c	Total/NA	Water	350.1	
640-44404-17	MWB-7(D)c	Total/NA	Water	350.1	
640-44404-18	MWB-19(S)c	Total/NA	Water	350.1	
640-44404-19	MWB-19(I)c	Total/NA	Water	350.1	
640-44404-20	MWB-19(D)c	Total/NA	Water	350.1	
640-44404-21	MWB-17(S)c	Total/NA	Water	350.1	
640-44404-23	MWB-20(S)c	Total/NA	Water	350.1	
640-44404-25	MWB-17(I)c	Total/NA	Water	350.1	
LCS 680-287092/29	Lab Control Sample	Total/NA	Water	350.1	
MB 680-287092/30	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 287093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	350.1	
640-44404-1 MS	MWB-29(S)c	Total/NA	Water	350.1	
640-44404-1 MSD	MWB-29(S)c	Total/NA	Water	350.1	
640-44404-3	MWB-12(1)c	Total/NA	Water	350.1	
640-44404-4	MWB-12(S)c	Total/NA	Water	350.1	
640-44404-5	MWB-22(S)c	Total/NA	Water	350.1	
640-44404-6	MWB-13(I)c	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 287093 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-7	MWB-13(S)c	Total/NA	Water	350.1	
640-44404-8	MWB-27(D)c	Total/NA	Water	350.1	
640-44404-9	MWB-27(I)c	Total/NA	Water	350.1	
640-44404-10	MWB-27(S)c	Total/NA	Water	350.1	
640-44404-11	MWB-29(D)c	Total/NA	Water	350.1	
640-44404-12	MWB-29(I)c	Total/NA	Water	350.1	
LCS 680-287093/28	Lab Control Sample	Total/NA	Water	350.1	
MB 680-287093/29	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 287486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	Total Nitrogen	
640-44433-10	SW-2	Total/NA	Water	Total Nitrogen	
640-44433-11	SW-3	Total/NA	Water	Total Nitrogen	

Analysis Batch: 287575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-9	MWB-27(I)c	Total/NA	Water	353.2	
640-44404-9 MS	MWB-27(I)c	Total/NA	Water	353.2	
640-44404-9 MSD	MWB-27(I)c	Total/NA	Water	353.2	
LCS 680-287575/14	Lab Control Sample	Total/NA	Water	353.2	
MB 680-287575/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 287673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44433-9	SW-1	Total/NA	Water	SM 5220D	
640-44433-9 MS	SW-1	Total/NA	Water	SM 5220D	
640-44433-9 MSD	SW-1	Total/NA	Water	SM 5220D	
640-44433-10	SW-2	Total/NA	Water	SM 5220D	
640-44433-11	SW-3	Total/NA	Water	SM 5220D	
LCS 680-287673/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 680-287673/3	Method Blank	Total/NA	Water	SM 5220D	

Field Service / Mobile Lab

Analysis Batch: 103357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-1	MWB-29(S)c	Total/NA	Water	Field Sampling	
640-44404-2	MWB-12(D)c	Total/NA	Water	Field Sampling	
640-44404-3	MWB-12(1)c	Total/NA	Water	Field Sampling	
640-44404-4	MWB-12(S)c	Total/NA	Water	Field Sampling	
640-44404-5	MWB-22(S)c	Total/NA	Water	Field Sampling	
640-44404-6	MWB-13(I)c	Total/NA	Water	Field Sampling	
640-44404-7	MWB-13(S)c	Total/NA	Water	Field Sampling	
640-44404-8	MWB-27(D)c	Total/NA	Water	Field Sampling	
640-44404-9	MWB-27(I)c	Total/NA	Water	Field Sampling	
640-44404-10	MWB-27(S)c	Total/NA	Water	Field Sampling	
640-44404-11	MWB-29(D)c	Total/NA	Water	Field Sampling	
640-44404-12	MWB-29(I)c	Total/NA	Water	Field Sampling	
640-44404-13	MWB-11(1)(R)c	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 103357 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44404-14	MWB-11(S)c	Total/NA	Water	Field Sampling	
640-44404-15	MWB-7(S)c	Total/NA	Water	Field Sampling	
640-44404-16	MWB-7(1)c	Total/NA	Water	Field Sampling	
640-44404-17	MWB-7(D)c	Total/NA	Water	Field Sampling	
640-44404-18	MWB-19(S)c	Total/NA	Water	Field Sampling	
640-44404-19	MWB-19(I)c	Total/NA	Water	Field Sampling	
640-44404-20	MWB-19(D)c	Total/NA	Water	Field Sampling	
640-44404-21	MWB-17(S)c	Total/NA	Water	Field Sampling	
640-44404-23	MWB-20(S)c	Total/NA	Water	Field Sampling	
640-44404-24	MWB-17(D)c	Total/NA	Water	Field Sampling	
640-44404-25	MWB-17(I)c	Total/NA	Water	Field Sampling	
640-44430-1	MWB-34(S)d	Total/NA	Water	Field Sampling	
640-44430-2	MWB-34(I)d	Total/NA	Water	Field Sampling	
640-44430-3	MWB-34(D)d	Total/NA	Water	Field Sampling	
640-44430-4	MWB-21(S)c	Total/NA	Water	Field Sampling	
640-44430-5	MWB-3(S)b	Total/NA	Water	Field Sampling	
640-44430-6	MWB-3(I)b	Total/NA	Water	Field Sampling	
640-44430-7	MWB-33(S)d	Total/NA	Water	Field Sampling	
640-44430-8	MWB-32(D)d	Total/NA	Water	Field Sampling	
640-44430-9	MWB-32(I)d	Total/NA	Water	Field Sampling	
640-44430-10	MWB-32(S)d	Total/NA	Water	Field Sampling	
640-44430-11	MWB-31(D)b	Total/NA	Water	Field Sampling	
640-44430-12	MWB-2(I)b	Total/NA	Water	Field Sampling	
640-44430-13	MWB-2(S)b	Total/NA	Water	Field Sampling	
640-44433-9	SW-1	Total/NA	Water	Field Sampling	
640-44433-10	SW-2	Total/NA	Water	Field Sampling	
640-44433-11	SW-3	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-29(S)c

Lab Sample ID: 640-44404-1

Date Collected: 07/23/13 13:19

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 16:20	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103471	07/31/13 16:06	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 20:24	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:06	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 06:25	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:34	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:02	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 13:18	FDS	TAL TAL

Client Sample ID: MWB-12(D)c

Lab Sample ID: 640-44404-2

Date Collected: 07/23/13 07:27

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 16:44	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 11:53	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 20:36	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:14	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 06:32	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:24	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:43	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 07:26	FDS	TAL TAL

Client Sample ID: MWB-12(1)c

Lab Sample ID: 640-44404-3

Date Collected: 07/23/13 08:00

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 17:07	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 12:07	AMR	TAL TAL

Client Sample ID: MWB-12(1)c

Lab Sample ID: 640-44404-3

Date Collected: 07/23/13 08:00

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	287751	08/03/13 20:49	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:17	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 06:52	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:32	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:02	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 07:59	FDS	TAL TAL

Client Sample ID: MWB-12(S)c

Lab Sample ID: 640-44404-4

Date Collected: 07/23/13 08:29

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 17:30	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103471	07/31/13 16:47	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 21:01	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:19	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 06:59	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:25	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 08:28	FDS	TAL TAL

Client Sample ID: MWB-22(S)c

Lab Sample ID: 640-44404-5

Date Collected: 07/23/13 09:01

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 17:53	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103471	07/31/13 17:01	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 21:14	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:22	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV

Client Sample ID: MWB-22(S)c

Lab Sample ID: 640-44404-5

Date Collected: 07/23/13 09:01

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020		1	287468	08/02/13 07:05	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:26	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 09:00	FDS	TAL TAL

Client Sample ID: MWB-13(I)c

Lab Sample ID: 640-44404-6

Date Collected: 07/23/13 09:33

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 18:16	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103471	07/31/13 17:15	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 21:26	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:25	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 07:12	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:26	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 09:32	FDS	TAL TAL

Client Sample ID: MWB-13(S)c

Lab Sample ID: 640-44404-7

Date Collected: 07/23/13 10:03

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 18:39	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 11:12	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 21:38	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:32	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 07:19	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM

Client Sample ID: MWB-13(S)c

Lab Sample ID: 640-44404-7

Date Collected: 07/23/13 10:03

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	287081	07/31/13 16:28	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 10:02	FDS	TAL TAL

Client Sample ID: MWB-27(D)c

Lab Sample ID: 640-44404-8

Date Collected: 07/23/13 10:38

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 19:02	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 11:26	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 22:16	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:35	BCB	TAL SAV
Total Recoverable	Prep	3005A			286358	07/26/13 14:22	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287468	08/02/13 07:25	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:29	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 10:37	FDS	TAL TAL

Client Sample ID: MWB-27(I)c

Lab Sample ID: 640-44404-9

Date Collected: 07/23/13 11:10

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 19:25	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 11:39	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 22:28	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:38	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 13:54	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	353.2		1	287575	08/03/13 10:21	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 11:09	FDS	TAL TAL

Client Sample ID: MWB-27(S)c

Lab Sample ID: 640-44404-10

Date Collected: 07/23/13 11:41

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 19:48	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 12:21	AMR	TAL TAL
Total/NA	Analysis	300.0		2	287751	08/03/13 22:40	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:40	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 14:27	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:35	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 11:40	FDS	TAL TAL

Client Sample ID: MWB-29(D)c

Lab Sample ID: 640-44404-11

Date Collected: 07/23/13 12:18

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 20:11	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 12:34	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 22:53	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:43	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 14:34	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 10:58	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 12:17	FDS	TAL TAL

Client Sample ID: MWB-29(I)c

Lab Sample ID: 640-44404-12

Date Collected: 07/23/13 12:49

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 20:34	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 12:48	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 23:18	PAT	TAL SAV

Client Sample ID: MWB-29(I)c

Lab Sample ID: 640-44404-12

Date Collected: 07/23/13 12:49

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:51	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 14:41	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:38	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287093	07/31/13 16:12	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 12:48	FDS	TAL TAL

Client Sample ID: MWB-11(1)(R)c

Lab Sample ID: 640-44404-13

Date Collected: 07/23/13 08:20

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103397	07/26/13 20:57	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 13:01	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 23:30	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:53	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:01	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:32	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 16:28	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 08:19	FDS	TAL TAL

Client Sample ID: MWB-11(S)c

Lab Sample ID: 640-44404-14

Date Collected: 07/23/13 07:40

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 19:05	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 13:15	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 23:43	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 17:56	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:14	BWR	TAL SAV

Client Sample ID: MWB-11(S)c

Lab Sample ID: 640-44404-14

Date Collected: 07/23/13 07:40

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:31	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 16:28	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 07:39	FDS	TAL TAL

Client Sample ID: MWB-7(S)c

Lab Sample ID: 640-44404-15

Date Collected: 07/23/13 08:53

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 19:27	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 14:12	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/03/13 23:55	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:04	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:21	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:41	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 08:52	FDS	TAL TAL

Client Sample ID: MWB-7(1)c

Lab Sample ID: 640-44404-16

Date Collected: 07/23/13 09:35

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 19:50	LAG	TAL TAL
Total/NA	Prep	8011			103339	07/25/13 13:27	AMR	TAL TAL
Total/NA	Analysis	8011		1	103509	08/01/13 13:58	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/04/13 00:07	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:06	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:28	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:58	CRW	TAL SAV

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: MWB-7(1)c

Lab Sample ID: 640-44404-16

Date Collected: 07/23/13 09:35
Date Received: 07/24/13 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 09:34	FDS	TAL TAL

Client Sample ID: MWB-7(D)c

Lab Sample ID: 640-44404-17

Date Collected: 07/23/13 10:13
Date Received: 07/24/13 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 20:13	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 17:48	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/04/13 00:45	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:09	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:34	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:28	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 10:12	FDS	TAL TAL

Client Sample ID: MWB-19(S)c

Lab Sample ID: 640-44404-18

Date Collected: 07/23/13 10:56
Date Received: 07/24/13 08:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 20:36	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 18:01	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/04/13 00:57	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:12	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:41	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:40	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 10:55	FDS	TAL TAL

Client Sample ID: MWB-19(I)c

Lab Sample ID: 640-44404-19

Date Collected: 07/23/13 11:25

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 20:59	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 18:15	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287751	08/04/13 01:09	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:14	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:48	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:29	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 11:24	FDS	TAL TAL

Client Sample ID: MWB-19(D)c

Lab Sample ID: 640-44404-20

Date Collected: 07/23/13 12:00

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 21:22	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 18:29	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 02:11	PAT	TAL SAV
Total/NA	Prep	7470A			286434	07/27/13 08:44	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:17	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 15:54	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139912	07/30/13 14:48	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286994	07/31/13 11:42	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 11:59	FDS	TAL TAL

Client Sample ID: MWB-17(S)c

Lab Sample ID: 640-44404-21

Date Collected: 07/23/13 12:38

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 21:45	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 18:43	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 02:49	PAT	TAL SAV

Client Sample ID: MWB-17(S)c

Lab Sample ID: 640-44404-21

Date Collected: 07/23/13 12:38

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			286846	07/27/13 08:44	BCB	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:25	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 16:01	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:34	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 12:37	FDS	TAL TAL

Client Sample ID: Trip Blank 01 44404

Lab Sample ID: 640-44404-22

Date Collected: 07/23/13 00:00

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 22:07	LAG	TAL TAL

Client Sample ID: MWB-20(S)c

Lab Sample ID: 640-44404-23

Date Collected: 07/23/13 13:53

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 22:30	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 18:56	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 03:01	PAT	TAL SAV
Total/NA	Prep	7470A			286846	07/27/13 08:44	BCB	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:27	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 16:21	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:35	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 13:52	FDS	TAL TAL

Client Sample ID: MWB-17(D)c

Lab Sample ID: 640-44404-24

Date Collected: 07/23/13 13:54

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 22:53	LAG	TAL TAL

Client Sample ID: MWB-17(D)c

Lab Sample ID: 640-44404-24

Date Collected: 07/23/13 13:54

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 19:10	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 03:13	PAT	TAL SAV
Total/NA	Prep	7470A			286846	07/27/13 08:44	BCB	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:35	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 16:28	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:37	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 13:53	FDS	TAL TAL

Client Sample ID: MWB-17(I)c

Lab Sample ID: 640-44404-25

Date Collected: 07/23/13 13:15

Matrix: Water

Date Received: 07/24/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103399	07/27/13 23:16	LAG	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 19:24	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 03:26	PAT	TAL SAV
Total/NA	Prep	7470A			286846	07/27/13 08:44	BCB	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 18:38	BCB	TAL SAV
Total Recoverable	Prep	3005A			286378	07/26/13 14:48	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	288061	08/06/13 16:35	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	353.2		1	287081	07/31/13 16:36	CRW	TAL SAV
Total/NA	Analysis	350.1		1	287092	07/31/13 15:53	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 13:14	FDS	TAL TAL

Client Sample ID: MWB-34(S)d

Lab Sample ID: 640-44430-1

Date Collected: 07/23/13 16:37

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 14:05	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 15:47	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 03:38	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV

Client Sample ID: MWB-34(S)d

Lab Sample ID: 640-44430-1

Date Collected: 07/23/13 16:37

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	286834	07/29/13 19:38	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 00:39	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		2	286965	07/31/13 09:48	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:12	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 16:36	FDS	TAL TAL

Client Sample ID: MWB-34(I)d

Lab Sample ID: 640-44430-2

Date Collected: 07/23/13 16:05

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 14:27	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 17:09	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 03:51	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:25	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:12	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/30/13 17:34	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:11	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 16:04	FDS	TAL TAL

Client Sample ID: MWB-34(D)d

Lab Sample ID: 640-44430-3

Date Collected: 07/23/13 15:33

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 14:49	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 17:22	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287752	08/04/13 04:03	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:41	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:19	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL

Client Sample ID: MWB-34(D)d

Lab Sample ID: 640-44430-3

Date Collected: 07/23/13 15:33

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:19	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 15:32	FDS	TAL TAL

Client Sample ID: MWB-21(S)c

Lab Sample ID: 640-44430-4

Date Collected: 07/23/13 15:01

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 15:11	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 17:36	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 10:40	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:43	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:26	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:20	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 15:00	FDS	TAL TAL

Client Sample ID: MWB-3(S)b

Lab Sample ID: 640-44430-5

Date Collected: 07/23/13 15:58

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 15:32	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 17:50	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 11:18	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:46	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:46	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:21	CRW	TAL SAV

Client Sample ID: MWB-3(S)b

Lab Sample ID: 640-44430-5

Date Collected: 07/23/13 15:58

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 15:57	FDS	TAL TAL

Client Sample ID: MWB-3(I)b

Lab Sample ID: 640-44430-6

Date Collected: 07/23/13 15:22

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 15:54	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 18:17	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 11:30	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:49	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:53	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139914	07/30/13 16:19	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:25	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/23/13 15:21	FDS	TAL TAL

Client Sample ID: MWB-33(S)d

Lab Sample ID: 640-44430-7

Date Collected: 07/24/13 07:12

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 16:16	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 18:31	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 11:42	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:51	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 01:59	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:13	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 07:11	FDS	TAL TAL

Client Sample ID: MWB-32(D)d

Lab Sample ID: 640-44430-8

Date Collected: 07/24/13 07:46

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 16:38	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 18:45	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 11:55	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:54	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:06	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:06	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 07:45	FDS	TAL TAL

Client Sample ID: MWB-32(I)d

Lab Sample ID: 640-44430-9

Date Collected: 07/24/13 08:18

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 16:59	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 18:58	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 12:07	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:56	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:13	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:14	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 08:17	FDS	TAL TAL

Client Sample ID: MWB-32(S)d

Lab Sample ID: 640-44430-10

Date Collected: 07/24/13 08:48

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 17:21	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 19:12	AMR	TAL TAL
Total/NA	Analysis	300.0		2	287703	08/05/13 12:20	PAT	TAL SAV

Client Sample ID: MWB-32(S)d

Lab Sample ID: 640-44430-10

Date Collected: 07/24/13 08:48

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 19:59	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:19	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:47	CRW	TAL SAV
Total/NA	Analysis	350.1		1	286965	07/31/13 09:31	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 08:47	FDS	TAL TAL

Client Sample ID: MWB-31(D)b

Lab Sample ID: 640-44430-11

Date Collected: 07/24/13 07:41

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 17:43	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 19:25	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 12:32	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 20:02	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:26	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	350.1		1	286965	07/31/13 09:40	JME	TAL SAV
Total/NA	Analysis	353.2		1	287081	07/31/13 16:18	CRW	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 07:40	FDS	TAL TAL

Client Sample ID: MWB-2(I)b

Lab Sample ID: 640-44430-12

Date Collected: 07/24/13 08:11

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 18:05	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 19:39	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 13:09	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 20:15	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:33	BWR	TAL SAV

Client Sample ID: MWB-2(I)b

Lab Sample ID: 640-44430-12

Date Collected: 07/24/13 08:11

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:49	CRW	TAL SAV
Total/NA	Analysis	350.1		1	286965	07/31/13 09:40	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 08:10	FDS	TAL TAL

Client Sample ID: MWB-2(S)b

Lab Sample ID: 640-44430-13

Date Collected: 07/24/13 08:43

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 18:26	LKS	TAL TAL
Total/NA	Prep	8011			103362	07/26/13 12:40	AMR	TAL TAL
Total/NA	Analysis	8011		1	103434	07/29/13 19:53	AMR	TAL TAL
Total/NA	Analysis	300.0		1	287703	08/05/13 13:22	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 20:17	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:39	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:50	CRW	TAL SAV
Total/NA	Analysis	350.1		1	286965	07/31/13 09:40	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 08:42	FDS	TAL TAL

Client Sample ID: Field Blank 01 44430

Lab Sample ID: 640-44430-14

Date Collected: 07/24/13 09:40

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	287703	08/05/13 13:34	PAT	TAL SAV
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 20:20	BCB	TAL SAV
Total Recoverable	Prep	3005A			286429	07/26/13 22:16	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	286987	07/31/13 02:46	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286471	07/27/13 12:48	CRW	TAL SAV
Total/NA	Analysis	350.1		1	286965	07/31/13 09:40	JME	TAL SAV

Client Sample ID: Trip Blank 01 44430

Lab Sample ID: 640-44430-15

Date Collected: 07/24/13 00:00

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 13:22	LKS	TAL TAL

Client Sample ID: SW-1

Lab Sample ID: 640-44433-9

Date Collected: 07/24/13 12:20

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 12:17	LKS	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 16:39	AMR	TAL TAL
Total/NA	Prep	1631E			187131	07/26/13 17:25	VLC	TAL PEN
Total/NA	Analysis	1631E		1	187233	07/31/13 10:54	VLC	TAL PEN
Total Recoverable	Prep	3005A			286672	07/29/13 16:04	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287467	07/31/13 11:15	BWR	TAL SAV
Total/NA	Analysis	SM 2340B		1	287994	07/31/13 11:15	CME	TAL SAV
Total/NA	Analysis	SM 5310C		5	103347	07/25/13 18:11	JMF	TAL TAL
Total/NA	Analysis	4500 P F		1	103385	07/25/13 19:46	QMC	TAL TAL
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	UnionizedNH3		1	103609	08/06/13 13:24	TJW	TAL TAL
Total/NA	Analysis	SM 5210B		1	139771	07/26/13 06:08	AJG	TAL TAM
Total/NA	Analysis	SM 2540D		1	139907	07/30/13 12:52	TKO	TAL TAM
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:45	CRW	TAL SAV
Total/NA	Prep	Digestion			286927	07/30/13 17:00	AJO	TAL SAV
Total/NA	Analysis	365.4		1	287002	07/31/13 11:20	CMP	TAL SAV
Total/NA	Analysis	Total Nitrogen		1	287486	08/02/13 15:43	JER	TAL SAV
Total/NA	Analysis	SM 5220D		1	287673	08/04/13 14:10	JER	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 12:20	FDS	TAL TAL

Client Sample ID: SW-2

Lab Sample ID: 640-44433-10

Date Collected: 07/24/13 11:25

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 12:39	LKS	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 16:53	AMR	TAL TAL
Total/NA	Prep	1631E			187131	07/26/13 17:25	VLC	TAL PEN
Total/NA	Analysis	1631E		1	187233	07/31/13 11:02	VLC	TAL PEN
Total Recoverable	Prep	3005A			286672	07/29/13 16:04	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287467	07/31/13 11:50	BWR	TAL SAV
Total/NA	Analysis	SM 2340B		1	287994	07/31/13 11:50	CME	TAL SAV

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: SW-2

Lab Sample ID: 640-44433-10

Date Collected: 07/24/13 11:25

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5310C		1	103347	07/25/13 18:27	JMF	TAL TAL
Total/NA	Analysis	4500 P F		1	103385	07/25/13 19:47	QMC	TAL TAL
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	UnionizedNH3		1	103609	08/06/13 13:24	TJW	TAL TAL
Total/NA	Analysis	SM 5210B		1	139771	07/26/13 06:08	AJG	TAL TAM
Total/NA	Analysis	SM 2540D		1	139881	07/30/13 08:02	TKO	TAL TAM
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:44	CRW	TAL SAV
Total/NA	Prep	Digestion			286927	07/30/13 17:00	AJO	TAL SAV
Total/NA	Analysis	365.4		1	287002	07/31/13 11:18	CMP	TAL SAV
Total/NA	Analysis	Total Nitrogen		1	287486	08/02/13 15:43	JER	TAL SAV
Total/NA	Analysis	SM 5220D		1	287673	08/04/13 14:10	JER	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 11:25	FDS	TAL TAL

Client Sample ID: SW-3

Lab Sample ID: 640-44433-11

Date Collected: 07/24/13 11:55

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 13:00	LKS	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 17:06	AMR	TAL TAL
Total/NA	Prep	1631E			187131	07/26/13 17:25	VLC	TAL PEN
Total/NA	Analysis	1631E		1	187233	07/31/13 11:10	VLC	TAL PEN
Total Recoverable	Prep	3005A			286672	07/29/13 16:04	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287467	07/31/13 11:57	BWR	TAL SAV
Total/NA	Analysis	SM 2340B		1	287994	07/31/13 11:57	CME	TAL SAV
Total/NA	Analysis	SM 5310C		4	103347	07/25/13 18:41	JMF	TAL TAL
Total/NA	Analysis	4500 P F		1	103385	07/25/13 19:49	QMC	TAL TAL
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	UnionizedNH3		1	103609	08/06/13 13:24	TJW	TAL TAL
Total/NA	Analysis	SM 5210B		1	139771	07/26/13 06:08	AJG	TAL TAM
Total/NA	Analysis	SM 2540D		1	139881	07/30/13 08:02	TKO	TAL TAM
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286470	07/27/13 11:43	CRW	TAL SAV
Total/NA	Prep	Digestion			286927	07/30/13 17:00	AJO	TAL SAV
Total/NA	Analysis	365.4		1	287002	07/31/13 11:15	CMP	TAL SAV
Total/NA	Analysis	Total Nitrogen		1	287486	08/02/13 15:43	JER	TAL SAV
Total/NA	Analysis	SM 5220D		1	287673	08/04/13 14:10	JER	TAL SAV
Total/NA	Analysis	Field Sampling		1	103357	07/24/13 11:55	FDS	TAL TAL

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Client Sample ID: Trip Blank 04 44433
Date Collected: 07/24/13 00:00
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44433-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103395	07/28/13 11:55	LKS	TAL TAL

Laboratory References:

= Diversified Environmental Laboratories, 3653 Regent Blvd. Suite 509, Jacksonville, FL 32224

ENCO = ENCO-Orlando, 10775 Central Port Drive, Orlando, FL 32824, TEL (407)826-5314

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14
New Jersey	NELAP	2	FL012	06-30-14
Texas	NELAP	6	T104704459-11-2	03-31-14
USDA	Federal		P330-08-00158	08-05-14

Laboratory: TestAmerica Pensacola

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-13 *
Arizona	State Program	9	AZ0710	01-11-14
Arkansas DEQ	State Program	6	88-0689	09-01-13
Florida	NELAP	4	E81010	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200041	10-09-13
Iowa	State Program	7	367	08-01-14
Kansas	NELAP	7	E-10253	10-31-13
Kentucky (UST)	State Program	4	53	06-30-14
Louisiana	NELAP	6	30976	06-30-14
Maryland	State Program	3	233	09-30-13
Massachusetts	State Program	1	M-FL094	06-30-13 *
Michigan	State Program	5	9912	06-30-13 *
New Hampshire	NELAP	1	2505	08-16-13
New Jersey	NELAP	2	FL006	06-30-13 *
North Carolina DENR	State Program	4	314	12-31-13
Oklahoma	State Program	6	9810	08-31-13
Pennsylvania	NELAP	3	68-00467	01-31-14
Rhode Island	State Program	1	LAO00307	12-31-13
South Carolina	State Program	4	96026	06-30-13 *
Tennessee	State Program	4	TN02907	06-30-14
Texas	NELAP	6	T104704286-12-5	09-30-13
USDA	Federal		P330-10-00407	12-10-13
Virginia	NELAP	3	460166	06-14-14
West Virginia DEP	State Program	3	136	08-31-13

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-13 *
Arkansas DEQ	State Program	6	88-0692	02-01-14 *
California	NELAP	9	3217CA	07-31-13 *
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Illinois	NELAP	5	200022	11-30-13
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13 *
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	09-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13 *

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-14
Florida	NELAP	4	E84282	06-30-14
Georgia	State Program	4	905	06-30-13 *
USDA	Federal		P330-11-00177	04-20-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL TAL
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL TAL
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
1631E	Mercury, Low Level (CVAFS)	EPA	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV
365.4	Phosphorus, Total	EPA	TAL SAV
4500 P F	Orthophosphate	SM	TAL TAL
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL TAL
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL TAM
SM 5210B	BOD, 5-Day	SM	TAL TAM
SM 5220D	COD	SM	TAL SAV
SM 5310C	TOC	SM	TAL TAL
Total Nitrogen	Nitrogen, Total	EPA	TAL SAV
UnionizedNH3	Ammonia, Unionized	FL-DEP	TAL TAL
Field Sampling	Field Sampling	EPA	TAL TAL
Chlorophyll a (ORL)	SM 10200H Chlorophyll-A	NONE	ENCO
Fecal Coliform	SM 9222D Fecal Coliform by MF	NONE	

Protocol References:

EPA = US Environmental Protection Agency

FL-DEP = State Of Florida Department Of Environmental Protection, Florida Administrative Code.

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:

= Diversified Environmental Laboratories, 3653 Regent Blvd. Suite 509, Jacksonville, FL 32224

ENCO = ENCO-Orlando, 10775 Central Port Drive, Orlando, FL 32824, TEL (407)826-5314

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44404-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-44404-1	MWB-29(S)c	Water	07/23/13 13:19	07/24/13 08:00
640-44404-2	MWB-12(D)c	Water	07/23/13 07:27	07/24/13 08:00
640-44404-3	MWB-12(1)c	Water	07/23/13 08:00	07/24/13 08:00
640-44404-4	MWB-12(S)c	Water	07/23/13 08:29	07/24/13 08:00
640-44404-5	MWB-22(S)c	Water	07/23/13 09:01	07/24/13 08:00
640-44404-6	MWB-13(I)c	Water	07/23/13 09:33	07/24/13 08:00
640-44404-7	MWB-13(S)c	Water	07/23/13 10:03	07/24/13 08:00
640-44404-8	MWB-27(D)c	Water	07/23/13 10:38	07/24/13 08:00
640-44404-9	MWB-27(I)c	Water	07/23/13 11:10	07/24/13 08:00
640-44404-10	MWB-27(S)c	Water	07/23/13 11:41	07/24/13 08:00
640-44404-11	MWB-29(D)c	Water	07/23/13 12:18	07/24/13 08:00
640-44404-12	MWB-29(I)c	Water	07/23/13 12:49	07/24/13 08:00
640-44404-13	MWB-11(1)(R)c	Water	07/23/13 08:20	07/24/13 08:00
640-44404-14	MWB-11(S)c	Water	07/23/13 07:40	07/24/13 08:00
640-44404-15	MWB-7(S)c	Water	07/23/13 08:53	07/24/13 08:00
640-44404-16	MWB-7(1)c	Water	07/23/13 09:35	07/24/13 08:00
640-44404-17	MWB-7(D)c	Water	07/23/13 10:13	07/24/13 08:00
640-44404-18	MWB-19(S)c	Water	07/23/13 10:56	07/24/13 08:00
640-44404-19	MWB-19(I)c	Water	07/23/13 11:25	07/24/13 08:00
640-44404-20	MWB-19(D)c	Water	07/23/13 12:00	07/24/13 08:00
640-44404-21	MWB-17(S)c	Water	07/23/13 12:38	07/24/13 08:00
640-44404-22	Trip Blank 01 44404	Water	07/23/13 00:00	07/24/13 08:00
640-44404-23	MWB-20(S)c	Water	07/23/13 13:53	07/24/13 08:00
640-44404-24	MWB-17(D)c	Water	07/23/13 13:54	07/24/13 08:00
640-44404-25	MWB-17(I)c	Water	07/23/13 13:15	07/24/13 08:00
640-44430-1	MWB-34(S)d	Water	07/23/13 16:37	07/25/13 08:00
640-44430-2	MWB-34(I)d	Water	07/23/13 16:05	07/25/13 08:00
640-44430-3	MWB-34(D)d	Water	07/23/13 15:33	07/25/13 08:00
640-44430-4	MWB-21(S)c	Water	07/23/13 15:01	07/25/13 08:00
640-44430-5	MWB-3(S)b	Water	07/23/13 15:58	07/25/13 08:00
640-44430-6	MWB-3(I)b	Water	07/23/13 15:22	07/25/13 08:00
640-44430-7	MWB-33(S)d	Water	07/24/13 07:12	07/25/13 08:00
640-44430-8	MWB-32(D)d	Water	07/24/13 07:46	07/25/13 08:00
640-44430-9	MWB-32(I)d	Water	07/24/13 08:18	07/25/13 08:00
640-44430-10	MWB-32(S)d	Water	07/24/13 08:48	07/25/13 08:00
640-44430-11	MWB-31(D)b	Water	07/24/13 07:41	07/25/13 08:00
640-44430-12	MWB-2(I)b	Water	07/24/13 08:11	07/25/13 08:00
640-44430-13	MWB-2(S)b	Water	07/24/13 08:43	07/25/13 08:00
640-44430-14	Field Blank 01 44430	Water	07/24/13 09:40	07/25/13 08:00
640-44430-15	Trip Blank 01 44430	Water	07/24/13 00:00	07/25/13 08:00
640-44433-9	SW-1	Water	07/24/13 12:20	07/25/13 08:00
640-44433-10	SW-2	Water	07/24/13 11:25	07/25/13 08:00
640-44433-11	SW-3	Water	07/24/13 11:55	07/25/13 08:00
640-44433-12	Trip Blank 04 44433	Water	07/24/13 00:00	07/25/13 08:00

Diversified Environmental Laboratories, Inc.

Amy Marks
Test America
2846 Industrial Plaza Dr
Tallahassee, FL 32301

July 29, 2013

Re:
DELI Project Number: **130724.04**
Client Project Description: **Trail Ridge Landfill**
Client PO Number: **PO105298:4**

Dear Ms. Marks:

Enclosed is the report of laboratory analysis for the following samples:

Sample Number	Sample Description	Date/Time Collected	Date/Time Received
24962	SW-1	07/24/13 12:24	07/24/13 15:00
24963	SW-2	07/24/13 11:25	07/24/13 15:00
24964	SW-3	07/24/13 11:55	07/24/13 15:00

If you have any questions or comments concerning this laboratory report, please do not hesitate to contact us.

Sincerely,

Franklin A. Risk, Jr.
Laboratory Director

Enclosures

This laboratory report consists of a cover page, case narrative page and report page. There may be multiple pages of each. The pages are numbered accordingly. The report may also contain chain of custody forms, project log in forms, QA/QC reports and client worksheets if applicable. The results herein relate only to the items tested or to the samples as received by the laboratory. The report shall not be reproduced except in full, without the written approval of the laboratory. All samples will be disposed of within 30 days of receipt, unless a written request to retain the samples longer is received. All samples referenced in this laboratory report are considered to be environmental samples. The case narrative will contain comments and or notes regarding the samples and analyses.

NELAP #E821059

Diversified Environmental Laboratories, Inc.
3653 Regent Boulevard
Suite 509
Jacksonville, FL 32224

Phone 904.807.9625
Fax 904.807.9627
Email info@delilab.com
Website www.delilab.com

Diversified Environmental Laboratories, Inc

Case Narrative

July 29, 2013

Test America
Amy Marks

Re: DELI Project Number: **130724.04**
Client Project Description: **Trail Ridge Landfill**

Enclosed is the case narrative for the above referenced project:

3 dilutions were run for each sample.

Sample 24962 - The 1:10 dilution fell within range and was the only dilution used for the calculation.

Sample 24963 - None of the 3 dilutions fell withni range. Only they 1:50 dilution was used for the calculation. The other 2 dilutions produced too many colonies to count.

Sample 24964 - The 1:10 dilution fell within range and was the only dilution used for the calculation.

Unless otherwise noted and where applicable:
These samples were received at the proper temperature and with the proper preservation. The samples were analyzed as received, unless otherwise noted. All results in the Quality Control section are labeled appropriately. All results meet the requirements of the NELAP standards, unless otherwise noted. Footnotes are given at the end of the report.

NELAP #E821059

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Website www.delilab.com

Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130724.04	Project Description: Trail Ridge Landfill

Report Date: July 29, 2013

DELI Sample Number 24962 — Matrix: Non Potable Water

Sample Designation SW-1 — Date/Time Collected: 07/24/13 12:24

Parameters	Method	Results	Footnote	Units	DF	MDL	PQL	Prep Date/Time	Analyst	Analysis Date/Time
Coliform, Fecal	SM 9222 D	520		cfu/100mL	10	10	10		JMD	07/24/13 15:30

NELAP #E821059

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Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130724.04	Project Description: Trail Ridge Landfill

Report Date: July 29, 2013

DELI Sample Number 24963 | Matrix: Non Potable Water

Sample Designation SW-2 | Date/Time Collected: 07/24/13 11:25

Parameters	Method	Results	Footnote	Units	DF	MDL	PQL	Prep Date/Time	Analyst	Analysis Date/Time
Coliform, Fecal	SM 9222 D	825	B	cfu/100mL	50	50	50		JMD	07/24/13 15:30

NELAP #E821059

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Jacksonville, FL 32224

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Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130724.04	Project Description: Trail Ridge Landfill

Report Date: July 29, 2013

DELI Sample Number 24964 | Matrix Non Potable Water

Sample Designation SW-3 | Date/Time Collected 07/24/13 11:55

Parameters	Method	Results	Footnote	Units	DF	MDL	PQL	Prep Date/Time	Analyst	Analysis Date/Time
Coliform, Fecal	SM 9222 D	510		cfu/100mL	10	10	10		JMD	07/24/13 15:30

NELAP #E821059

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Suite 509
Jacksonville, FL 32224

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Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130724.04	Project Description: Trail Ridge Landfill

Report Date: July 29, 2013

Footnotes

B	Results based upon colony counts outside the acceptable range.
NA	Not Applicable
ND	Not Detected/None Detected
pH	The QC values are not the %RSD or %Recovery, but are the differences in pH units between a sample duplicate or from a standard. The acceptance criteria is +/- 0.20 pH units.
TNTC	Too Numerous To Count

NELAP #E821059

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Diversified Environmental Laboratories Inc.

Quality Control Data

Date Printed: July 29, 2013
QCData for Project Number 130724.04

Batch No: **B5136**
TestCode: **Coli Fec (MF) 9222D**

Associated Samples: 24962, 24963, 24964

Compound	Blank	LCS Spike	LCS %Rec	LCSD %Rec	RPD %	---QC Limits--- RPD	---QC Limits--- LCS	MS Spike	MS %Rec	MSD %Rec	RPD %	---QC Limits--- RPD	---QC Limits--- MS	Dup RPD	Qualifiers
Parent Sample Number														*24963*	
Coliform, Fecal	<1 U													6.1	
Parent Sample Number															
Coliform, Fecal	<1 U														

* Indicates value is outside control limits for %Recovery or greater than acceptance criteria for RPD

Footnotes

U Compound was analyzed for, but not detected.

NELAP #E821059

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DELI Project # 130724.04

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-28748-7749.2
Client Contact: Ms. Jennifer Pardy	Phone:	E-Mail: amy.marks@testamericainc.com		Page: Page 2 of 2
Company: Golder Associates Inc.		Analysis Requested		Job #:
Address: 3730 Chamblee Tucker Road	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - 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:
State, Zip: GA, 30341				
Phone: 770-492-8204(Tel)	PO #: PO105298:4			
Email: jennifer_pardy@golder.com	WO #:			
Project Name: Trail Ridge Landfill	Project #: 64005280			
Site: Florida	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)	SM9222D - Fecal Coliform (Diversified Env't Labs)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
SW-1	7-24	1224	G	W			1		24962
SW-2	7-24	1125	G	W			1		24963
SW-3	7-24	1155	G	W			1		24964

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		7/24/13 1500	TA		07/24/13 1500	DELI
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:
		0.3°C Sample temp 0.8°C

8/13/2013

Project Login Form

DEL Project Number: 130724.04 Client Name: TestAmerica

Date Received: 07/24/13 Received by: JMD PLF Completed by: JMD

Courier/Shipper Information:

☑ Client ☐ DEL, Inc. ☐ Other (describe) _____

Type & Number of Shipping Containers:

#	Shipping Container Description	Crushed Ice	Cooler/Ice Temp. C	Sample Cont. Temp. C
1	(Cooler) Box Other:	(Yes) No	0.3	0.8
2	Cooler Box Other:	Yes No		
3	Cooler Box Other:	Yes No		
4	Cooler Box Other:	Yes No		
5	Cooler Box Other:	Yes No		

Note: If thermal preservation was used / required, pick a sample container from each cooler and use the IR gun to measure the sample temperature.

Therm Inv. #: 0357 IR Gun Inv. #: 0332

Other Information Checklist:		YES	NO	NA
1	Were custody seals used for shipping containers(s)?	☐	☑	☐
2	If Yes, were the custody seals intact? If no, see comments below.	☐	☐	☑
3	Were custody seals used for sample containers(s)?	☐	☑	☐
4	If Yes, were the custody seals intact? If no, see comments below.	☐	☐	☑
5	Did custody papers accompany samples? (such as COC, specifics, etc.)	☑	☐	☐
6	Were the custody papers properly filled out?	☑	☐	☐
7	Were the sample containers received in good condition? (If no, see comments)	☑	☐	☐
8	Were the sample container labels properly filled out? (date, time, preservation, etc.)	☑	☐	☐
9	Were the labels on the sample containers and custody papers consistent?	☑	☐	☐
10	Were the samples in the correct containers for analysis?	☑	☐	☐
11	Were the correct preservations used for each sample container according to analysis?	☑	☐	☐
12	Were the samples received within the appropriate holding times?	☑	☐	☐
13	Were pH preservation checks made?	☐	☐	☑
14	Were the sample containers provided by DEL, Inc.?	☐	☑	☐
15	Was this a sample kit provided by DEL, Inc.? If Yes, DEL, Inc. Kit #:	☐	☑	☐
16	Were the VOA vials free of headspace? (No bubbles present)	☐	☐	☑

Are the samples acceptable for analysis? Yes If yes, proceed with login. If no, notify client immediately and list rejection reasons in comments area below. Also, please take any needed further action for rejected sample(s).

Container Preservation Check:

Note: VOA vials will not be checked for pH at sample login. The testing laboratory will perform that check during analysis. The pH of microbiological samples will not be checked, due to the risk of contamination. The pH of Oil & Grease samples will not be checked during sample login, due to the potential loss of product.

DEL, Inc. Sample Number	Parameters	Cooler/ Container #	pH upon receipt	Was a preservative added after pH check?	If Yes, which preservative was added? (Incl. Vol.)	Preservative Lot #	New pH value	Sample container size & type?
24462	Fecal Coliform	1	—	Yes / (No)	—	—	—	100mL P
-24464				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				
				Yes / No				

P = Plastic; G = Glass; AG = Amber Glass; TL = Teflon Lid; WM = Wide Mouth

Comments:

Lab General Form 002, Rev. #5, Rev. Date 07/19/11, Effective Date 07/20/11

Sample Login Page 1 of 1

ENCO Laboratories

Accurate. Timely. Responsive. Innovative.

10775 Central Port Drive
Orlando FL, 32824
Phone: 407.826.5314 FAX: 407.850.6945

Wednesday, July 31, 2013
TestAmerica - Tallahassee (TE021)
Attn: Amy Marks
2846 Industrial Plaza Drive
Tallahassee, FL 32301

RE: Laboratory Results for
Project Number: 64005280, Project Name/Desc: Test America -
ENCO Workorder(s): A304201

Dear Amy Marks,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, July 25, 2013.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Ronald Wambles For David Camacho

Project Manager

Enclosure(s)

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: SW-1 **Lab ID: A304201-01** **Sampled: 07/24/13 12:20** **Received: 07/25/13 06:45**

Parameter	Hold Date/Time(s)			Prep Date/Time(s)		Analysis Date/Time(s)
SM 10200H-2001	07/26/13	12:20	08/08/13	07/25/13	10:10	7/30/2013 17:45

Client ID: SW-2 **Lab ID: A304201-02** **Sampled: 07/24/13 11:25** **Received: 07/25/13 06:45**

Parameter	Hold Date/Time(s)			Prep Date/Time(s)		Analysis Date/Time(s)
SM 10200H-2001	07/26/13	11:25	08/08/13	07/25/13	10:10	7/30/2013 17:45

Client ID: SW-3 **Lab ID: A304201-03** **Sampled: 07/24/13 11:55** **Received: 07/25/13 06:45**

Parameter	Hold Date/Time(s)			Prep Date/Time(s)		Analysis Date/Time(s)
SM 10200H-2001	07/26/13	11:55	08/08/13	07/25/13	10:10	7/30/2013 17:45

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

SAMPLE DETECTION SUMMARY

Client ID: SW-1 **Lab ID:** A304201-01

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Chlorophyll a	1.1		0.50	0.50	mg/m3	SM 10200H-2001	

Client ID: SW-2 **Lab ID:** A304201-02

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Chlorophyll a	0.53		0.50	0.50	mg/m3	SM 10200H-2001	

Client ID: SW-3 **Lab ID:** A304201-03

Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
Chlorophyll a	6.9		0.50	0.50	mg/m3	SM 10200H-2001	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

ANALYTICAL RESULTS

Description: SW-1 **Lab Sample ID:** A304201-01 **Received:** 07/25/13 06:45
Matrix: Water **Sampled:** 07/24/13 12:20 **Work Order:** A304201
Project: Test America - **Sampled By:**

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Chlorophyll a [42617-16-3]^	**1.1**		mg/m3	1	0.50	0.50	3G25013	SM 10200H-2001	07/30/13 17:45	MMM	

Description: SW-2 **Lab Sample ID:** A304201-02 **Received:** 07/25/13 06:45
Matrix: Water **Sampled:** 07/24/13 11:25 **Work Order:** A304201
Project: Test America - **Sampled By:**

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Chlorophyll a [42617-16-3]^	**0.53**		mg/m3	1	0.50	0.50	3G25013	SM 10200H-2001	07/30/13 17:45	MMM	

Description: SW-3 **Lab Sample ID:** A304201-03 **Received:** 07/25/13 06:45
Matrix: Water **Sampled:** 07/24/13 11:55 **Work Order:** A304201
Project: Test America - **Sampled By:**

Classical Chemistry Parameters

^ - ENCO Orlando certified analyte [NELAC E83182]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	PQL	Batch	Method	Analyzed	By	Notes
Chlorophyll a [42617-16-3]^	**6.9**		mg/m3	1	0.50	0.50	3G25013	SM 10200H-2001	07/30/13 17:45	MMM	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL DATA

Classical Chemistry Parameters - Quality Control

Batch 3G25013 - NO PREP

Blank (3G25013-BLK1) Prepared: 07/25/2013 10:10 Analyzed: 07/30/2013 17:45

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorophyll a	0.50	U	0.50	mg/m3							

Duplicate (3G25013-DUP1) Prepared: 07/25/2013 10:10 Analyzed: 07/30/2013 17:45

Source: A304195-07

Analyte	Result	Flag	POL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chlorophyll a	3.3		0.50	mg/m3		2.7			22	25	

FLAGS/NOTES AND DEFINITIONS

PQL	PQL: Practical Quantitation Limit.
B	Results are based upon membrane filter colony counts that are outside the method indicated ideal range.
I	The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).
J	Estimated value.
K	Off-scale low; Actual value is known to be less than the value given.
L	Off-scale high; Actual value is known to be greater than value given.
M	Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.
N	Presumptive evidence of presence of material.
O	Sampled, but analysis lost or not performed.
Q	Sample exceeded the accepted holding time.
T	Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only and shall not be used in statistical analysis.
U	Indicates that the compound was analyzed for but not detected.
V	Indicates that the analyte was detected in both the sample and the associated method blank.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.
Z	Too many colonies were present (TNTC); the numeric value represents the filtration volume.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
*****	Not reported due to interference.

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-28748-7749.1
Client Contact: Ms. Jennifer Pardy	Phone:	E-Mail: amy.marks@testamericainc.com		Page: Page 1 of 2
Company: Golder Associates Inc.				Job #:

Address: 3730 Chamblee Tucker Road	Due Date Requested:
City: Atlanta	TAT Requested (days):
State, Zip: GA, 30341	
Phone: 770-492-8204(Tel)	PO #: PO105298.4
Email: jennifer_pardy@golder.com	WO #:
Project Name: Trail Ridge Landfill - Semiannual Surface Water	Project #: 64005280
Site: Florida	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:

A304201

Special Instructions/Note:

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)	1631E - Mercury	351.2, 365.1, Nitrogen, Total	SM4500_NO2_B - Nitrite as N	SM 10200H - Chlorophyll a (TA Orlando)	5210B - Biochemical Oxygen Demand	2540C, 2540D	8011 - EDB, DBCP	8260C - Appendix I VOCs	353.2 - NOx / 350.1 - NH3 / UnionizedNH3	5310C - Total Organic Carbon	4500_P_E_Ortho - ortho-Phosphate	5220D - Chemical Oxygen Demand	6020 - App I Metals / 6010C - Iron / 2340B - Hardness	Total Number of containers
			Preservation Code:				N	S	N	N	N	N	R	N	S	S	N	S	D	
SW-1	7/24	1220	G	W						X										
SW-2	7/24	1125	G	W						X										
SW-3	7/24	1155	G	W						X										

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/24/13 1700			7/25/13 0845	GLP
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°

TestAmerica Jacksonville
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Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40279-8202.2
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 2 of 6
Company: Golder Associates Inc.				Job #: 640-44484
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:7			
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill/Trail Ridge SA Event Desc: Semi-Annual Grou	Project #: 64005280			
Site: Florida	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)	353.2 - Nitrate Nitrite as N / 350.1 - Ammonia	SM4500_NO2_B - Nitrite as N	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - Appendix I VOCs	300.0_28D - Chloride	6020 - 7470 - Appendix I Metals + Fe, Na, Hg	6020 - Dissolved Metals- HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	N	R	N	N	D	D		
MWB29S	7-23	1319	G	W	N		1	1	1	3	3	1	1			
MWB12D	7-23	0727	G	W	N		1	1	1	3	3	1	1			
MWB12I	7-23	0800	G	W	N		1	1	1	3	3	1	1			
MWB12S	7-23	0829	G	W	N		1	1	1	3	3	1	1			
MWB22S	7-23	0901	G	W	N		1	1	1	3	3	1	1			
MWB13I	7-23	0933	G	W	N		1	1	1	3	3	1	1			
MWB13S	7-23	1003	G	W	N		1	1	1	3	3	1	1			
MWB27D	7-23	1038	G	W	N		1	1	1	3	3	1	1			
MWB27I	7-23	1110	G	W	N		1	1	1	3	3	1	1			
MWB27S	7-23	1141	G	W	N		1	1	1	3	3	1	1			
MWB29D	7-23	1218	G	W	N		1	1	1	3	0	1	1			

640-44404 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		7.23.13 / 1420	PRO-TECH		7/23/13 1420	
2		7/23/13 1734			7/24/13 0900	TAT
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.8° 0.6° 1.2°

TestAmerica Jacksonville
8933 Western Way Suite 1
Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40279-8202.3
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 3 of 6
Company: Golder Associates Inc.				Job #: 640-44404
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:7			
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill/Trail Ridge SA Event Desc: Semi-Annual Grou	Project #: 64005280			
Site: Florida	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)	353.2 - Nitrate Nitrite as N / 350.1 - Ammonia	SM4500_NO2_B - Nitrite as N	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - Appendix I VOCs	300.0_28D - Chloride	6020 - 7470 - Appendix I Metals + Fe, Na, Hg	6020 - Dissolved Metals- HOLD							Total Number of containers	Special Instructions/Note:
Preservation Code:							S	N	N	R	N	N	D	D								
MWB 29 I	7-23	1249	G	W	N		1	1	1	3	3	1	1	1								
MWB 11 I (R)	7-23	0820	G	W	N		1	1	1	3	3	1	1	1								
MWB 11 S	7-23	0740	G	W	N		1	1	1	3	3	1	1	1								
MWB 7 S	7-23	0853	G	W	N		1	1	1	3	3	1	1	1								
MWB 7 I	7-23	0933	G	W	N		1	1	1	3	3	1	1	1								
MWB 7 D	7-23	1013	G	W	N		1	1	1	3	3	1	1	1								
MWB 19 S	7-23	1056	G	W	N		1	1	1	3	3	1	1	1								
MWB 19 I	7-23	1125	G	W	N		1	1	1	3	3	1	1	1								
MWB 19 D	7-23	1200	G	W	N		1	1	1	3	3	1	1	1								
MWB 17 S	7-23	1238	G	W	N		1	1	1	3	3	1	1	1								
TRIP	7-23	—	G	W	N						✓											

640-44404-01 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:	7-23-13 / 1420	PROTECH	Received by:	7/23/13 1424	TA
Relinquished by:	7/23/13 1730		Received by:	7/24/13 0800	TAT
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0°C 0.6°C 1.2°C

8/13/2013

TestAmerica Jacksonville
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Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN AMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40279-8202.5
Client Contact: Ms. Chris Paul	Phone: 225, 907, 4060	E-Mail: amy.marks@testamericainc.com		Page: Page 5 of 6
Company: Golder Associates Inc.				Job #: 640-44404
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:7			
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill/Trail Ridge SA Event Desc: Semi-Annual Grou	Project #: 64005280			
Site: Florida	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)	353.2 - Nitrate Nitrite as N / 350.1 - Ammonia	SM4500_NO2_B - Nitrite as N	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - Appendix I VOCs	300.0_28D - Chloride	6020 - 7470 - Appendix I Metals + Fe, Na, Hg	6020 - Dissolved Metals- HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	N	R	N	N	D	D		
MWB20S	7-23	1353	G	W	N		1	1	1	3	3	1	1	1		
MWB17D	7-23	1354	G	W	N		1	1	1	3	3	1	1	1		
MWB17I	7-23	1315	G	W	N		1	1	1	3	3	1	1	1		

640-44404-02 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		7-23-13 1420	PRO-TECH		7/23/13 1421	
2		7/23/13 1730	TA		7/24/13 0800	TAT
3		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: 5.0 C 0.6 1.2

TestAmerica Jacksonville
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Jacksonville, FL 32256
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOVA	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40279-8202.1
Client Contact: Ms. Chris Paul	Phone: 225,907,4060	E-Mail: amy.marks@testamericainc.com		Page: Page 1 of 6
Company: Golder Associates Inc.				Job #: 640-44436
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:7			
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill/Trail Ridge SA Event Desc: Semi-Annual Grou	Project #: 64005280			
Site: Florida	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)	353.2 - Nitrate Nitrite as N / 350.1 - Ammonia	SM4500_NO2_B - Nitrite as N	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - Appendix I VOCs	300.0_28D - Chloride	6020 - 7470 - Appendix I Metals + Fe, Na, Hg	6020 - Dissolved Metals- HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	N	R	N	N	D	D		
MWB2I	7-24	0811	G	W	N		1	1	1	3	3	1	1	1		
MWB25	7-24	0843	G	W	N		1	1	1	3	3	1	1	1		
FIELD BLANK	7-24	0940	G	W	N		1	1	1	3	3	1	1	1		
TRIP	7-24	-	G	W	N						✓					

640-44430 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		7-24-13 1804	PROJTECH		7/24/13 1300	
2		7/24/13 1744			7/24/13 0800	TA
3						

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.8C 0.8C 1.0C

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Jacksonville, FL 32256
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40279-8202.4
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 4 of 6
Company: Golder Associates Inc.				Job#: 640-44430
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:7			
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill/Trail Ridge SA Event Desc: Semi-Annual Grou	Project #: 64005280			
Site: Florida	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)	353.2 - Nitrate Nitrite as N / 350.1 - Ammonia	SM4500_NO2_B - Nitrite as N	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - Appendix I VOCs	300.0_28D - Chloride	6020 - 7470 - Appendix I Metals + Fe, Na, Hg	6020 - Dissolved Metals- HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	N	R	N	N	D	D		
MWB34S	7-23	1637	G	W	N		1	1	1	3	3	1	1	1		
MWB 34I	7-23	1605	G	W	N		1	1	1	3	3	1	1	1		
MWB 34D	7-23	1533	G	W	N		1	1	1	3	3	1	1	1		
MWB 21S	7-23	1501	G	W	N		1	1	1	3	3	1	1	1		
MWB 35	7-23	1558	G	W	N		1	1	1	3	3	1	1	1		
MWB 31	7-23	1522	G	W	N		1	1	1	3	3	1	1	1		
MWB33S	7-24	0712	G	W	N		1	1	1	3	3	1	1	1		
MWB32D	7-24	0746	G	W	N		1	1	1	3	3	1	1	1		
MWB32I	7-24	0818	G	W	N		1	1	1	3	3	1	1	1		
MWB32S	7-24	0848	G	W	N		1	1	1	3	3	1	1	1		
MWB31D	7-24	0741	G	W	N		1	1	1	3	3	1	1	1		

640-44430 Chain of Custody

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

Sample Disposal (A fee may be assessed if sa
☐ 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:	7-24-13 1700	PRO-TECH	Received by:	7/24/13 1700	Company
Relinquished by:	7/24/13 1700	Company	Received by:	7/25/13 0800	Company FAT
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: 2.8° 0.8° 1.0°

TestAmerica Jacksonville
8933 Western Way Suite 1
Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40281-7749.2
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 2 of 2
Company: Golder Associates Inc.		Analysis Requested		Job #: 640-44433
Address: 3730 Chamblee Tucker Road	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days):			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)
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:4			Other:
Email: cpaul@golder.com	WO #:			
Project Name: Trail Ridge Landfill	Project #: 64005280			
Site: Florida	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)	350.1 - Ammonia / Unionized Ammonia / 353.2	8260C - Appendix I VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N		
SW-1	7-24	1220	G	W	N		1			
SW-2	7-24	1125	G	W	N		1			
SW-3	7-24	1155	G	W	N		1	*		
TRIP	7-24	—	G	W	N			✓		* NOTE- SAMPLE BOTTLES FOR SW-1 ARE INCORRECTLY LABLED WITH 1120 SAMPLE TIME, TRUE TIME IS 1220

640-44433 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		7-24-13 1300	PRO-TECH		7/24/13 1300	
2		Date/Time:	Company		Date/Time: 7/25/13 0800	DAT
3		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: 1.7

TestAmerica Jacksonville
8933 Western Way Suite 1
Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40281-7749.1
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 1 of 2
Company: Golder Associates Inc.		Analysis Requested		Job #: 640-44433
Address: 3730 Chamblee Tucker Road	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days):			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)
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:4			
Email: cpaul@golder.com	WO #:			Other:
Project Name: Trail Ridge Landfill	Project #: 64005280			
Site: Florida	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)	1631E - Mercury	351.2, 365.1, Nitrogen,Total	SM4500_NO2_B - Nitrite as N	SUBCONTRACT - SM 10200H-Chlorophyll a	5210B - Biochemical Oxygen Demand	2540C, 2540D	8011 - EDB, DBCP	8260C - Appendix I VOCs	5310C - Total Organic Carbon	4500_P_E_Ortho - ortho-Phosphate	5220D - Chemical Oxygen Demand	6020 - App I Metals /2340B - Hardness	SUBCONTRACT - SM9222D-Fecal Coliform (Diversified Env'	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	N	N	N	R	N	S	N	S	D	N		
SW-1	7-24	1220	G	W	N		3	1	1	1	1	1	3	3	3	1	1	1	1		
SW-2	7-24	1125	G	W	N		3	1	1	1	1	1	3	3	3	1	1	1	1		
SW-3	7-24	1155	G	W	N		3	1	1	1	1	1	3	3	3	1	1	1	1		
TRIP	7-24	—	G	W	N									✓							
																					* NOTE - SAMPLE BOTTLES FOR SW-1 ARE INCORRECTLY LABLED WITH 1120 AS SAMPLE TIME. TRUE TIME IS 1220

640-44433 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: 7-24-13 1304	Company PRO-TECH	Received by: Date/Time: 7/24/13 1304 Company TA
Relinquished by:	Date/Time: 7/24/13 1704	Company	Received by: Date/Time: 7/25/13 0810 Company TA
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB29S	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 7.57	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 138.02			GROUNDWATER ELEVATION (ft NGVD): 130.45	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	PURGING INITIATED AT: 1259	PURGING ENDED AT: 1319		TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1309	1.70	1.70	0.17	7.64	4.38	25.2	37	0.2	1.53	112		
1312	0.51	2.21	0.17	7.63	4.39	25.1	37	0.2	1.41	110		
1315	0.51	2.92	0.17	7.64	4.38	25.1	37	0.2	2.23	112		
1318	0.51	3.23	0.17	7.65	4.37	25.1	37	0.2	1.88	111	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1319		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 15.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB12D	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 102 feet to 112 feet	STATIC DEPTH TO WATER (feet): 4.48		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 124.56			GROUNDWATER ELEVATION (ft NGVD): 120.08		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 112.00 feet) + 0.05 gallons = 1.02 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 107.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 107.00	PURGING INITIATED AT: 0702	PURGING ENDED AT: 0727		TOTAL VOLUME PURGED (gallons): 6.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0714	3.24	~~1.08~~ 3.24	0.27	4.57	7.01	24.8	381	0.0	4.11	-35		
0718	1.08	4.32	0.27	4.57	7.03	24.8	381	0.0	4.06	-37		
0722	1.08	5.40	0.27	4.57	7.02	24.8	380	0.0	4.27	-35		
0726	1.08	6.48	0.27	4.58	7.01	24.8	380	0.0	4.22	-34	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0727		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 107.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB12I	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 61.5 feet to 71.5 feet	STATIC DEPTH TO WATER (feet): 6.72		PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.62 | GROUNDWATER ELEVATION (ft NGVD): 117.90

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 71.50 feet) + 0.05 gallons = 0.78 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 66.50	PURGING INITIATED AT: 0739	PURGING ENDED AT: 0800		TOTAL VOLUME PURGED (gallons): 5.88

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0750	3.08	3.08	0.28	6.80	5.26	25.5	41	0.2	3.29	-82		
0753	0.84	3.92	0.28	6.80	5.22	25.5	40	0.2	3.36	-84		
0756	0.84	4.76	0.28	6.80	5.21	25.5	41	0.2	3.16	-85		
0759	0.84	5.60	0.28	6.80	5.20	25.5	40	0.2	3.24	-85	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0800	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 66.50	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB12S	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	14.5 feet to 24.5 feet	STATIC DEPTH TO WATER (feet):	10.30		PURGE PUMP TYPE OR BAILER:	BP
WELL ELEVATION TOC (ft NGVD):	124.63					GROUNDWATER ELEVATION (ft NGVD):	114.33			

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 24.50 feet) + 0.05 gallons = 0.5 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	19.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	19.50	PURGING INITIATED AT:	0810	PURGING ENDED AT:	0829		TOTAL VOLUME PURGED (gallons):	3.23

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0819	1.53	1.53	0.17	10.48	5.64	24.9	252	0.6	19.72	34		
0822	0.51	2.04	0.17	10.50	5.62	24.9	251	0.5	21.66	33		
0825	0.51	2.55	0.17	10.48	5.64	24.4	248	0.6	21.41	32		
0828	0.51	3.06	0.17	10.50	5.65	24.4	246	0.5	21.89	31	LT-BROWN	
											T,NT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	0829		SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	19.50	TUBING MATERIAL CODE:	T			FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION:	PUMP Y (N)	TUBING Y (N) (replaced)				DUPLICATE: Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB22S	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	16 feet to 26 feet	STATIC DEPTH TO WATER (feet):	11.91	PURGE PUMP TYPE OR BAILER:	BP

WELL ELEVATION TOC (ft NGVD): 126.97 GROUNDWATER ELEVATION (ft NGVD): 115.06

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 26.00 feet) + 0.05 gallons = 0.51 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	21.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	21.00	PURGING INITIATED AT:	0841	PURGING ENDED AT:	0901		TOTAL VOLUME PURGED (gallons):	3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0851	1.80	1.80	0.18	12.28	5.88	24.8	246	0.2	4.88	3		
0854	0.54	2.34	0.18	12.29	5.86	24.8	247	0.2	4.88	2		
0857	0.54	2.88	0.18	12.29	5.86	24.8	247	0.2	4.43	-1		
0900	0.54	3.42	0.18	12.30	5.86	24.8	247	0.3	3.90	-2	NONE	TO
											SLT. YELLOW TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	0901		SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	21.00	TUBING MATERIAL CODE:	T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:			FILTER SIZE:	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)				DUPLICATE: Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB13I	SAMPLE ID:		DATE: 7.23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH 50.4 feet to 60.4 feet	STATIC DEPTH TO WATER (feet): 16.61		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.98			GROUNDWATER ELEVATION (ft NGVD): 109.37		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 60.40 feet) + 0.05 gallons = 0.71 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 55.40	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 55.40	PURGING INITIATED AT: 0912	PURGING ENDED AT: 0933		TOTAL VOLUME PURGED (gallons): 5.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0923	2.75	2.75	0.25	16.79	5.15	25.4	36	0.2	4.73	109		
0926	0.75	3.50	0.25	16.80	5.12	25.4	36	0.2	4.69	110		
0929	0.75	4.25	0.25	16.80	5.14	25.4	36	0.2	4.45	112		
0932	0.75	5.00	0.25	16.80	5.13	25.4	36	0.2	4.12	110	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0933	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 55.40	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB13S	SAMPLE ID:		DATE: 7.23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 16.56 feet to 26.56 feet	STATIC DEPTH TO WATER (feet): 12.42		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 126.06			GROUNDWATER ELEVATION (ft NGVD): 113.64		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 26.56 feet) + 0.05 gallons = 0.51 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.56	PURGING INITIATED AT: 0944	PURGING ENDED AT: 1003	TOTAL VOLUME PURGED (gallons): 3.42

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0953	1.62	1.62	0.18	12.92	5.77	25.4	365	0.6	10.69	71		
0956	0.54	2.16	0.18	12.94	5.78	25.4	365	0.6	12.11	68		
0959	0.54	2.70	0.18	12.93	5.78	25.4	367	0.6	10.73	67		
1002	0.54	3.24	0.18	12.94	5.76	25.4	367	0.6	10.84	67	VERY LT BROWN	
											TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1003	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 21.56	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB27D	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 100 feet to 110 feet	STATIC DEPTH TO WATER (feet): 5.35		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 128.88		GROUNDWATER ELEVATION (ft NGVD): 123.53			

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 110.00 feet) + 0.05 gallons = 1.01 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 105.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 105.00	PURGING INITIATED AT: 1016	PURGING ENDED AT: 1038		TOTAL VOLUME PURGED (gallons): 7.48

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1028	4.08	4.08	0.34	6.23	5.95	21.7	85	0.0	1.95	76		
1031	1.02	5.10	0.34	6.23	5.91	21.7	84	0.0	0.82	77		
1034	1.02	6.12	0.34	6.21	5.94	21.7	85	0.1	1.93	76		
1037	1.02	7.14	0.34	6.24	5.93	21.7	85	0.1	1.40	76	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1038		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 105.00	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB27I	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	52.5 feet to 62.5 feet	STATIC DEPTH TO WATER (feet):	4.97	PURGE PUMP TYPE OR BAILER:	BP
WELL ELEVATION TOC (ft NGVD):	128.63					GROUNDWATER ELEVATION (ft NGVD):	123.66		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 62.50 feet) + 0.05 gallons = 0.73 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	57.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	57.50	PURGING INITIATED AT:	1049	PURGING ENDED AT:	1110		TOTAL VOLUME PURGED (gallons):	5.46

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1100	2.86	2.86	0.26	5.10	5.37	21.5	47	0.2	5.10	102		
1103	0.78	3.64	0.26	5.10	5.37	21.6	47	0.1	5.07	102		
1106	0.78	4.42	0.26	5.10	5.39	21.5	47	0.1	5.35	100		
1109	0.78	5.20	0.26	5.10	5.38	21.5	47	0.1	5.62	100	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	1110		SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	57.50	TUBING MATERIAL CODE:	T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:			FILTER SIZE:	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)				DUPLICATE: Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB27S	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 5.5 feet to 15.5 feet	STATIC DEPTH TO WATER (feet): 6.10		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 128.42			GROUNDWATER ELEVATION (ft NGVD): 122.32		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 15.50 feet) + 0.05 gallons = 0.44 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.50	PURGING INITIATED AT: 1121	PURGING ENDED AT: 1141		TOTAL VOLUME PURGED (gallons): 3.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1131	1.50	1.50	0.15	6.20	5.22	23.4	103	0.0	27.97	117		
1134	0.45	1.95	0.15	6.22	5.26	23.3	102	0.0	27.38	120		
1137	0.45	2.40	0.15	6.22	5.25	23.3	102	0.0	25.91	121		
1140	0.45	2.85	0.15	6.22	5.26	23.3	102	0.0	24.97	121	VERY SLT. BROWN TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1141		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 13.50	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB29D	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	100.5 feet to 110.5 feet	5.53		BP

WELL ELEVATION TOC (ft NGVD): 138.18 GROUNDWATER ELEVATION (ft NGVD): 132.65

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 110.50 feet) + 0.05 gallons = 1.01 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
105.50	105.50	1154	1218		6.48

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1205	2.97	2.97	0.27	6.33	5.46	22.8	62	0.0	2.17	58		
1209	1.08	4.05	0.27	6.34	5.47	22.8	61	0.0	2.77	60		
1213	1.08	5.13	0.27	6.35	5.47	22.8	60	0.0	2.52	61		
1217	1.08	6.21	0.27	6.35	5.46	22.8	60	0.0	1.86	60	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR / FIELD-TECH		1218		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
105.50	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB29I	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH 53.5 feet to 63.5 feet	STATIC DEPTH TO WATER (feet): 5.42		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 138.08			GROUNDWATER ELEVATION (ft NGVD): 132.66		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 63.50 feet) + 0.05 gallons = 0.73 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.50	PURGING INITIATED AT: 1228	PURGING ENDED AT: 1249		TOTAL VOLUME PURGED (gallons): 5.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1239	2.75	2.75	0.25	5.50	5.05	22.8	35	0.3	6.67	83		
1242	0.75	3.50	0.25	5.50	5.09	22.7	34	0.4	8.20	86		
1245	0.75	4.25	0.25	5.51	5.10	22.7	34	0.3	7.42	86		
1248	0.75	5.00	0.25	5.51	5.08	22.8	34	0.4	8.27	85	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1249	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 58.50	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB II I (R)	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	45 feet to 55 feet	STATIC DEPTH TO WATER (feet):	10.50		PURGE PUMP TYPE OR BAILER:	BP
WELL ELEVATION TOC (ft NGVD):	120.43			GROUNDWATER ELEVATION (ft NGVD):		109.93				

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 55.00 feet) + 0.05 gallons = 0.68 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	50.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	50.00	PURGING INITIATED AT:	0755	PURGING ENDED AT:	0819		TOTAL VOLUME PURGED (gallons):	5.76

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0807	2.88	2.88	0.24	10.50	4.54	24.1	39	0.0	9.90	36		
0810	0.72	3.60	0.24	10.50	4.54	24.2	39	0.0	7.53	35		
0813	0.72	4.32	0.24	10.50	4.53	24.3	38	0.0	6.76	30		
0816	0.72	5.04	0.24	10.50	4.54	24.3	39	0.0	5.02	32		
0819	0.72	5.76	0.24	10.50	4.54	24.3	38	0.0	4.45	25	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	BEN RAMGEAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	Ben Ramgeawan	SAMPLING INITIATED AT:	0820		SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	50.00	TUBING MATERIAL CODE:	T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:			FILTER SIZE:	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)			DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: ND

MATERIAL CODES: (Specify) AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB11S	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 9.5 feet to 19.5 feet	STATIC DEPTH TO WATER (feet): 11.53		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 120.81			GROUNDWATER ELEVATION (ft NGVD): 109.28		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 19.50 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50	PURGING INITIATED AT: 0720	PURGING ENDED AT: 0739		TOTAL VOLUME PURGED (gallons): 3.23

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~umhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0730	1.70	1.70	0.17	11.58	3.89	23.5	202	0.0	11.7	258		
0733	0.51	2.21	0.17	11.58	3.90	23.3	203	0.0	6.38	264		
0736	0.51	2.72	0.17	11.58	3.90	23.3	207	0.0	5.81	268		
0739	0.51	3.23	0.17	11.58	3.90	23.4	210	0.0	5.57	279	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMSEAUR / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramseaur	SAMPLING INITIATED AT: 0740		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 14.50	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB7S	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 7.84		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 123.29			GROUNDWATER ELEVATION (ft NGVD): 115.45		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	PURGING INITIATED AT: 0835	PURGING ENDED AT: 0852	TOTAL VOLUME PURGED (gallons): 3.06

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0843	1.44	1.44	0.18	8.11	4.98	26.1	194	0.0	+57	-5.1		
0846	0.54	1.98	0.18	8.11	4.99	26.2	193	0.0	+3.8	-3.3		
0849	0.54	2.52	0.18	8.11	4.98	26.2	191	0.0	13.3	-3.0		
0852	0.54	3.06	0.18	8.11	4.98	26.1	190	0.0	13.6	-3.5	Blown TIN T	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMSEYAN DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramseyan	SAMPLING INITIATED AT: 0853	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 15.00	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MW87I	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	55 feet to 65 feet	3.00		BP

WELL ELEVATION TOC (ft NGVD): 121.53 GROUNDWATER ELEVATION (ft NGVD): 118.53

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 65.00 feet) + 0.05 gallons = 0.74 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
60.00	60.00	0915	0934		4.94

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L or~~ % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0925	2.60	2.60	0.26	3.05	5.13	24.1	44	0.0	2.83	8.0		
0928	0.78	3.38	0.26	3.05	4.92	24.3	42	0.0	2.83	4.7		
0931	0.78	4.16	0.26	3.05	4.91	24.4	42	0.0	3.46	1.8		
0934	0.78	4.94	0.26	3.05	4.91	24.5	43	0.0	2.74	1.2	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
BEN RAMSEAWAY DAN ARMOUR / PRO-TECH	Ben Ramseaway	0935		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
60.00	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW87D	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 107 feet to 117 feet	STATIC DEPTH TO WATER (feet): 0.78		PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 121.65 GROUNDWATER ELEVATION (ft NGVD): 120.87

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 117.00 feet) + 0.05 gallons = 1.05 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 112.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 112.00	PURGING INITIATED AT: 0948	PURGING ENDED AT: 1012		TOTAL VOLUME PURGED (gallons): 5.94

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0958	2.70	2.70	0.27	0.86	6.65	25.2	360	0.0	1.73	-21		
1004	1.08	3.78	0.27	0.86	6.65	25.0	361	0.0	1.58	-23		
1008	1.08	4.86	0.27	0.86	6.67	25.1	358	0.0	1.51	-29		
1012	1.08	5.94	0.27	0.86	6.65	25.2	356	0.0	1.43	-33	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMNEAWAN DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramneawan	SAMPLING INITIATED AT: 1013		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 112.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB19S	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.82		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 127.38			GROUNDWATER ELEVATION (ft NGVD): 120.56		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	PURGING INITIATED AT: 1035	PURGING ENDED AT: 1055		TOTAL VOLUME PURGED (gallons): 3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1043	1.44	1.44	0.18	6.90	4.70	25.1	109	0.0	17.4	35.1		
1046	0.54	1.98	0.18	6.90	4.69	25.3	108	0.0	12.3	30.2		
1049	0.54	2.52	0.18	6.90	4.71	25.3	111	0.0	8.10	22.8		
1052	0.54	3.06	0.18	6.90	4.70	25.2	112	0.0	7.51	21.1		
1055	0.54	3.60	0.18	6.90	4.70	25.2	114	0.0	6.88	20.9	BROWNISH TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMIREZ/DAN ARMOUR/PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramirez	SAMPLING INITIATED AT: 1056		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 15.00	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB19I	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 49 feet to 59 feet	STATIC DEPTH TO WATER (feet): 6.78		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 127.94			GROUNDWATER ELEVATION (ft NGVD): 121.16		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 59.00 feet) + 0.05 gallons = 0.70 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 54.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 54.00	PURGING INITIATED AT: 1105	PURGING ENDED AT: 1124		TOTAL VOLUME PURGED (gallons): 4.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1115	2.50	2.50	0.25	6.80	4.52	24.9	36	0.0	4.81	31.1		
1118	0.75	3.25	0.25	6.80	4.50	25.0	37	0.0	4.41	28.8		
1121	0.75	4.00	0.25	6.80	4.49	25.1	36	0.0	4.52	22.3		
1124	0.75	4.75	0.25	6.80	4.50	25.1	35	0.0	4.29	27.9	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RANGEAWAY DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Rangeaway	SAMPLING INITIATED AT: 1125		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 54.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB19D	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 105.5 feet to 115.5 feet	STATIC DEPTH TO WATER (feet): 6.49		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 128.23			GROUNDWATER ELEVATION (ft NGVD): 121.74		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 115.50 feet) + 0.05 gallons = 1.04 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 110.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 110.50	PURGING INITIATED AT: 1135	PURGING ENDED AT: 1159		TOTAL VOLUME PURGED (gallons): 6.48

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos~~/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1143	2.16	2.16	0.27	7.40	6.71	24.1	376	0.0	14.5	-22.3		
1147	1.08	3.24	0.27	7.40	6.73	24.2	375	0.0	14.3	-26.6		
1151	1.08	4.32	0.27	7.40	6.72	24.4	377	0.0	14.7	-27.1		
1155	1.08	5.40	0.27	7.40	6.73	24.2	376	0.0	14.5	-27.9		
1159	1.08	6.48	0.27	7.40	6.73	24.4	378	0.0	14.5	-27.7	BROWNISH TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMJEAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramjeawan	SAMPLING INITIATED AT: 1200		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 110.50	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB17S	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 8.3 feet to 18.3 feet	STATIC DEPTH TO WATER (feet): 6.42		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 138.31			GROUNDWATER ELEVATION (ft NGVD): 131.89		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 18.30 feet) + 0.05 gallons = 0.46 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.80	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.80	PURGING INITIATED AT: 1215	PURGING ENDED AT: 1237		TOTAL VOLUME PURGED (gallons): 3.74

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1225	1.70	1.70	0.17	6.93	6.31	26.5	113	0.0	17.3	-5.5		
1228	0.51	2.21	0.17	6.93	5.98	25.9	112	0.0	17.1	-19.1		
1231	0.51	2.72	0.17	6.93	5.97	25.8	113	0.0	17.4	-21.3		
1234	0.51	3.23	0.17	6.93	5.98	25.7	110	0.0	17.7	-20.7		
1237	0.51	3.74	0.17	6.93	5.98	25.7	111	0.0	17.9	-17.7	BROWNISH TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMSEAUR / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramseaur	SAMPLING INITIATED AT: 1238	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 13.80	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	X SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: (Specify) AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:		SITE LOCATION:	
TRAIL RIDGE		JACKSONVILLE, FL	
WELL NO: MWB20S	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	10 feet to 20 feet	7.48		BP

WELL ELEVATION TOC (ft NGVD): 121.01 GROUNDWATER ELEVATION (ft NGVD): 113.53

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
15.00	15.00	1333	1353		3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1343	1.70	1.70	0.17	7.62	4.10	25.7	55	0.0	5.48	45		
1346	0.51	2.21	0.17	7.63	4.13	25.7	55	0.0	5.99	48		
1349	0.51	2.72	0.17	7.63	4.15	25.7	54	0.0	5.46	49		
1352	0.51	3.23	0.17	7.64	4.16	25.7	55	0.0	5.64	49	NONE TO A VERY LIGHT TAN TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR / PRO-TECH		1353		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
15.00	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: (Specify) AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB17D	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 117.32 feet to 127.32 feet	STATIC DEPTH TO WATER (feet): 6.61		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 138.52			GROUNDWATER ELEVATION (ft NGVD): 131.91		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 127.32 feet) + 0.05 gallons = 1.11 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 122.32	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 122.32	PURGING INITIATED AT: 1328	PURGING ENDED AT: 1353		TOTAL VOLUME PURGED (gallons): 6.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1338	2.40	2.40	0.24	9.18	5.35	24.7	55	0.0	0.70	54.0		
1343	1.20	3.60	0.24	9.18	5.34	24.3	54	0.0	0.68	45.7		
1348	1.20	4.80	0.24	9.18	5.36	24.3	55	0.0	0.66	38.8		
1353	1.20	6.00	0.24	9.18	5.35	24.2	54	0.0	0.67	40.3	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMJEAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramjeawan	SAMPLING INITIATED AT: 1354		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 122.35	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MW B17I	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	50.13 feet to 60.13 feet	STATIC DEPTH TO WATER (feet):	2.69		PURGE PUMP TYPE OR BAILER:	BP
WELL ELEVATION TOC (ft NGVD):	138.43					GROUNDWATER ELEVATION (ft NGVD):	135.74			

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 60.13 feet) + 0.05 gallons = 0.71 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	55.13	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	55.13	PURGING INITIATED AT:	1255	PURGING ENDED AT:	1314		TOTAL VOLUME PURGED (gallons):	4.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L or~~ % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1305	2.50	2.50	0.25	2.70	4.89	24.3	33	0.0	1.93	33.5		
1308	0.75	3.25	0.25	2.70	4.87	24.2	29	0.0	1.26	35.6		
1311	0.75	4.00	0.25	2.70	4.87	24.2	32	0.0	1.19	31.7		
1314	0.75	4.75	0.25	2.70	4.88	24.1	33	0.0	1.23	30.6	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	BEN RAMSEAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	Ben Ramseawan	SAMPLING INITIATED AT:	1315		SAMPLING ENDED AT:	NR
PUMP OR TUBING DEPTH IN WELL (feet):	55.13	TUBING MATERIAL CODE:	T			FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN! NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB34S	SAMPLE ID:		DATE: 7.20-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH 8.36 feet to 18.36 feet	STATIC DEPTH TO WATER (feet): 9.34		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.78			GROUNDWATER ELEVATION (ft NGVD): 116.44		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (18.36 feet – 9.34 feet) X 0.163 gallons/foot = 1.47 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 18.36 feet) + 0.05 gallons = 0.46 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.36	PURGING INITIATED AT: 1617	PURGING ENDED AT: 1637		TOTAL VOLUME PURGED (gallons): 3.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1627	1.60	1.60	0.16	10.31	6.05	24.7	744	0.2	1.66	33		
1630	0.48	2.08	0.16	10.32	6.08	24.7	740	0.2	2.00	30		
1633	0.48	2.56	0.16	10.32	6.04	24.7	738	0.1	2.25	34		
1636	0.48	3.04	0.16	10.33	6.06	24.7	736	0.1	2.07	35	SLT. YELLOW TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1637		SAMPLING ENDED AT: NR
DAN ARMOUR / PRO-TECH				
PUMP OR TUBING DEPTH IN WELL (feet): 13.36	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS: SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:		SITE LOCATION:	
TRAIL RIDGE		JACKSONVILLE, FL	
WELL NO: MW834I	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	43.95 feet to 53.95 feet	7.79		BP

WELL ELEVATION TOC (ft NGVD): 125.80 GROUNDWATER ELEVATION (ft NGVD): 118.01

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 53.95 feet) + 0.05 gallons = 0.67 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
48.95	48.95	1544	1605		5.04

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1555	2.64	2.64	0.24	7.86	5.27	25.4	39	0.1	7.28	47		
1558	0.72	3.36	0.24	7.89	5.29	25.4	40	0.1	5.22	44		
1601	0.72	4.08	0.24	7.88	5.28	25.4	39	0.1	4.17	43		
1604	0.72	4.80	0.24	7.89	5.27	25.4	40	0.1	4.03	42	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR / PRO-TECH		1605		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
48.95	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW834D	SAMPLE ID:		DATE: 7-23-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 90.78 feet to 100.78 feet	STATIC DEPTH TO WATER (feet): 7.95		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.92			GROUNDWATER ELEVATION (ft NGVD): 117.97		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 100.78 feet) + 0.05 gallons = 0.95 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 95.78	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 95.78	PURGING INITIATED AT: 1512	PURGING ENDED AT: 1533		TOTAL VOLUME PURGED (gallons): 6.72

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1523	3.52	3.52	0.32	8.38	7.08	23.8	368	0.1	2.03	-26		
1526	0.96	4.48	0.32	8.39	7.08	23.7	365	0.0	1.13	-28		
1529	0.96	5.44	0.32	8.39	7.07	23.7	362	0.0	1.42	-26		
1532	0.96	6.40	0.32	8.39	7.08	23.7	361	0.0	2.00	-27	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1533		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 95.78	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB21S	SAMPLE ID:		DATE: 7.23.13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet	STATIC DEPTH TO WATER (feet): 10.62		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 122.84			GROUNDWATER ELEVATION (ft NGVD): 112.22		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (18.00 feet – 10.62 feet) X 0.163 gallons/foot = 1.20 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= 0.3 gallons + (0.006 gallons/foot X 18.00 feet) + 0.05 gallons = 0.46 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.00	PURGING INITIATED AT: 1441	PURGING ENDED AT: 1501		TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1451	1.70	1.70	0.17	11.00	5.07	24.7	60	0.0	3.84	124		
1454	0.51	2.21	0.17	11.00	5.08	24.7	58	0.0	3.64	125		
1457	0.51	2.72	0.17	11.00	5.08	24.7	59	0.0	2.43	124		
1500	0.51	3.23	0.17	11.00	5.09	24.7	59	0.0	2.73	123	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1501		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 13.00	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:		FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MW83S	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 8.39		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 154.38			GROUNDWATER ELEVATION (ft NGVD): 145.99		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.00	PURGING INITIATED AT: 1537	PURGING ENDED AT: 1557		TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1548	1.87	1.87	0.17	9.28	4.76	23.4	67	0.8	4.99	83.1		
1551	0.51	2.38	0.17	9.28	4.77	23.0	68	0.8	4.42	89.7		
1554	0.51	2.89	0.17	9.28	4.78	22.8	69	0.7	0.62	92.5		
1557	0.51	3.40	0.17	9.28	4.78	22.8	67	0.7	0.59	96.6	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT)/ AFFILIATION: BEN RAMSEYAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramseyawan	SAMPLING INITIATED AT: 1558		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 15.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB3I	SAMPLE ID:		DATE: 07/23/2013

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 52 feet to 62 feet	STATIC DEPTH TO WATER (feet): 12.58		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 151.86			GROUNDWATER ELEVATION (ft NGVD): 139.28		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 62.00 feet) + 0.05 gallons = 0.72 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 57.00	PURGING INITIATED AT: 1500	PURGING ENDED AT: 15.21		TOTAL VOLUME PURGED (gallons): 5.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1510	2.50	2.50	0.25	13.38	5.38	24.0	41	0.0	1.47	38.8		
1513	0.75	3.25	0.25	13.38	5.18	23.3	41	0.0	1.74	41.7		
1516	0.75	4.00	0.25	13.38	5.20	23.2	42	0.0	1.19	49.8		
1519	0.75	4.75	0.25	13.38	5.18	23.1	41	0.0	1.12	41.3		
1521	0.75	5.50	0.25	13.38	5.18	23.1	40	0.0	1.18	40.7	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; (3/8") = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: BEN RAMJEAWAN / DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S): Ben Ramjeawan	SAMPLING INITIATED AT: 15.22		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 57.00	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB33S	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10.3 feet to 20.3 feet	STATIC DEPTH TO WATER (feet): 10.21		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 125.90			GROUNDWATER ELEVATION (ft NGVD): 115.69		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.30 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.30	PURGING INITIATED AT: 0652	PURGING ENDED AT: 0712		TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0702	1.70	1.70	0.17	10.28	5.23	24.4	190	0.2	3.12	36		
0705	0.51	2.21	0.17	10.27	5.26	24.4	189	0.2	3.66	39		
0708	0.51	2.72	0.17	10.27	5.27	24.4	186	0.2	2.92	36		
0711	0.51	3.23	0.17	10.28	5.26	24.4	185	0.2	2.63	40	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0712		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 15.30	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB32D	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 98.8 feet to 108.8 feet	STATIC DEPTH TO WATER (feet): 6.62		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 124.93			GROUNDWATER ELEVATION (ft NGVD): 118.31		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 108.81 feet) + 0.05 gallons = 1.00 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 103.81	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 103.81	PURGING INITIATED AT: 0724	PURGING ENDED AT: 0746		TOTAL VOLUME PURGED (gallons): 7.70

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0736	4.20	4.20	0.35	7.16	5.95	21.6	128	0.2	2.42	26		
0739	1.05	5.25	0.35	7.16	5.94	21.5	126	0.3	2.42	29		
0742	1.05	6.30	0.35	7.18	5.97	21.6	129	0.2	2.17	26		
0745	1.05	7.35	0.35	7.18	5.96	21.6	131	0.2	2.40	28	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0746		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 103.81	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB32I	SAMPLE ID:		DATE: 7.24.13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH 54.56 feet to 64.56 feet	STATIC DEPTH TO WATER (feet): 6.35		PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 124.79			GROUNDWATER ELEVATION (ft NGVD): 118.44		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 64.56 feet) + 0.05 gallons = 0.74 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 59.56	PURGING INITIATED AT: 0757	PURGING ENDED AT: 0818	TOTAL VOLUME PURGED (gallons): 5.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0808	2.75	2.75	0.25	6.44	5.22	21.6	41	0.0	29.12	114		
0811	0.75	3.50	0.25	6.45	5.25	21.5	41	0.1	29.35	111		
0814	0.75	4.25	0.25	6.45	5.25	21.5	41	0.1	28.89	112		
0817	0.75	5.00	0.25	6.45	5.24	21.5	41	0.1	28.99	111	SLT. WHITISH TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0818	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 59.56	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: MWB32S	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 9.9 feet to 19.9 feet	STATIC DEPTH TO WATER (feet): 8.05		PURGE PUMP TYPE OR BAILER: BP

WELL ELEVATION TOC (ft NGVD): 124.64 GROUNDWATER ELEVATION (ft NGVD): 116.59

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 19.90 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.90	PURGING INITIATED AT: 0828	PURGING ENDED AT: 0848		TOTAL VOLUME PURGED (gallons): 3.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0838	1.70	1.70	0.17	9.22	5.11	22.5	252	0.3	10.53	91		
0841	0.51	2.21	0.17	9.23	5.07	22.5	252	0.3	10.22	88		
0844	0.51	2.72	0.17	9.23	5.09	22.5	252	0.3	11.64	89		
0847	0.51	3.23	0.17	9.24	5.08	22.5	252	0.3	12.19	91	BROWN	TINT

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0848		SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): 14.90	TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:		SITE LOCATION:	
TRAIL RIDGE		JACKSONVILLE, FL	
WELL NO: MW831D	SAMPLE ID:		DATE: 07/24/2013

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	119 feet to 129 feet	17.22		BP

WELL ELEVATION TOC (ft NGVD): 156.15 GROUNDWATER ELEVATION (ft NGVD): 138.93

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 129.00 feet) + 0.05 gallons = 1.12 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
124.00	124.00	0710	0740		7.20

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0720	2.40	2.40	0.24	21.23	6.37	21.8	385	0.0	9.36			
0725	1.20	3.60	0.24	21.24	6.36	21.9	383	0.0	9.12			
0730	1.20	4.80	0.24	21.25	6.37	21.8	378	0.0	8.69			
0735	1.20	6.00	0.24	21.27	6.36	21.9	382	0.0	8.37			
0740	1.20	7.20	0.24	21.30	6.36	21.9	383	0.0	8.52	NONE		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
BEN RAMSEAUR AND DAN ARMOUR / PRO-TECH	Ben Ramseaur	0741		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
124.00	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB2I	SAMPLE ID:		DATE: 07/24/2013

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	51.5 feet to 61.5 feet	9.12		BP

WELL ELEVATION TOC (ft NGVD): 145.73 GROUNDWATER ELEVATION (ft NGVD): 136.61

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 61.50 feet) + 0.05 gallons = 0.72 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
56.50	56.50	0747	0810		5.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~mhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L or~~ % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0758	2.75	2.75	0.25	9.18	4.65	21.8	41	0.6	2.67	045		
0801	0.75	3.50	0.25	9.18	4.62	21.8	41	0.6	2.90	43		
0804	0.75	4.25	0.25	9.18	4.61	21.9	40	0.5	3.93	38		
0807	0.75	5.00	0.25	9.18	4.62	21.7	42	0.5	3.86	33		
0810	0.75	5.75	0.25	9.18	4.62	21.8	40	0.5	3.89	28	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
BEN RAMSEAUR/DAN ARMOUR / PRO-TECH	Ben Ramseaur	0811		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
56.50	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	MWB2S	SAMPLE ID:		DATE: 07/24/2013

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
2	3/8	10 feet to 20 feet	8.81		BP

WELL ELEVATION TOC (ft NGVD): 146.64 GROUNDWATER ELEVATION (ft NGVD): 137.83

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= 0.3 gallons + (0.006 gallons/foot X 20.00 feet) + 0.05 gallons = 0.47 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
15.00	15.00	0823	0842		3.42

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) ~~mg/L~~ or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
0833	1.80	1.80	0.18	9.03	4.30	23.7	68	0.9	2.38	143		
0836	0.54	2.34	0.18	9.03	4.30	23.7	65	0.9	2.36	142		
0839	0.54	2.88	0.18	9.03	4.31	23.8	64	0.9	2.12	138		
0842	0.54	3.42	0.18	9.03	4.31	23.9	61	0.8	2.08	135	NONE	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
BEN RAMSEAUR / DAN ARMOUR / PRO-TECH	Ben Ramseaur	0843		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
15.00	T			

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SHEEN; NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	TRAIL RIDGE		SITE LOCATION:	JACKSONVILLE, FL
WELL NO:	SW-1	SAMPLE ID:		DATE:

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: – feet to – feet	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:
NA	NA		NA		NA

WELL ELEVATION TOC (ft NGVD): NA — GROUNDWATER ELEVATION (ft NGVD): NA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):
NA	NA	NA	NA		NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1120	NA	NA	NA	NA	4.09	24.2	112	5.3	4.52	138	YELLOW/BROWN TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:		SAMPLING ENDED AT:
DAN ARMOUR / PRO-TECH		1120		NR

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:		FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
NA	NA			

FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced) — DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SW-1 = SURFACE WATER POINT NO SHEEN

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-2	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: – feet to – feet	STATIC DEPTH TO WATER (feet): NA		PURGE PUMP TYPE OR BAILER: NA

WELL ELEVATION TOC (ft NGVD): NA — GROUNDWATER ELEVATION (ft NGVD): NA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA	TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1125	NA	NA	NA	NA	4.19	21.8	73	5.9	13.69	81	NONE	To
											LIGHT	TAN
											TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1125	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SW-2 = SURFACE WATER POINT NO SHEEN

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-3	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: – feet to – feet	STATIC DEPTH TO WATER (feet): NA		PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA		TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1155	NA	NA	NA	NA	6.94	27.7	370	4.8	13.71	55	SLT. YELLOW TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1155	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
SW-3 = SURFACE WATER POINT NO SHEEN

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-44431-1
Client Project/Site: Trail Ridge Landfill
Sampling Event: Annual Leachate

For:
Golder Associates Inc.
3730 Chamblee Tucker Road
Atlanta, Georgia 30341

Attn: Mr. Mike Smilley

Authorized for release by:
8/13/2013 3:24:14 PM

Amy Marks, Project Manager II
amy.marks@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value; value may not be accurate.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J	Estimated value; value may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J	Estimated value; value may not be accurate.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Dioxin

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 640-44431-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-44431-1

Comments
No additional comments.

Receipt
The samples were received on 7/25/2013 at 8:00 AM. The samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.8º C.

Containers for methods 8081/8082 and 8290 were received for sample LCS (COMP-1); however, they were not listed on the Chain of Custody. The laboratory proceeded with analysis for both methods per project requirements.

GC/MS VOA
Method 8260C: The following sample was diluted due to the high concentration of one or more target analytes: COMP-1 (640-44431-3).

Method 8260C: The laboratory control sample duplicate (LCSD) associated with batch 103400 recovered outside control limits for Carbon Tetrachloride. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the results have been qualified and reported.

No analytical or quality issues were noted.

GC/MS Semi VOA
Method 8260C: The following sample was diluted due to the high concentration of one or more target analytes: COMP-1 (640-44431-3).

Method 8270D: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: COMP-1 (640-44431-3).

Method 8270D: Internal standard responses were outside of acceptance limits for the following sample: COMP-1 (640-44431-3). The sample shows evidence of matrix interference.

Method 8270D: The laboratory control sample duplicate (LCSD) associated with batch 103337 recovered outside control limits for multiple analytes. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the results have been qualified and reported.

No other analytical or quality issues were noted.

GC Semi VOA
Method 8081B/8082A: Three surrogates are used for this analysis. The laboratory's SOP allows two of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: COMP-1 (640-44431-3), (640-44431-3 MS), and (640-44431-3 MSD). The associated results have been reported and qualified.

Method 8081B/8082A: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 103459 recovered outside accuracy (%Rec) and / or precision (RPD) limits for multiple analytes. The associated laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) met acceptance criteria; therefore, the results have been reported and qualified.

Method 8141B: The matrix spike (MS) and matrix spike duplicate (MSD) associated with batch 103341 were outside control limits for Disulfoton . The associated laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) met acceptance criteria; therefore, the results have been reported and qualified.

Method 8151A: The extract of the following sample was centrifuged to aid in the removal of suspended solids which were formed during the concentration process: COMP-1 (640-44431-3). The sample extract was diluted prior to analysis due to extreme color, odor, and chemical composition of the sample matrix. As such, surrogate recoveries are not reported and elevated reporting limits (RLs) are provided.

Job ID: 640-44431-1 (Continued)

Laboratory: TestAmerica Tallahassee (Continued)

No other analytical or quality issues were noted.

Dioxin
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Field Service / Mobile Lab
Field data collected and provided by Professional Technical Services.

General Chemistry
Method SM 4500 S2 F: The following samples were diluted for Sulfide due to the difficult matrix of the sample:(640-44431-3 DU), COMP-1 (640-44431-3). Elevated reporting limits (RL) are provided.

No other analytical or quality issues were noted.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1

Lab Sample ID: 640-44431-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	530	I	2500	280	ug/L	100		8260C	Total/NA
Benzene	6300		100	13	ug/L	100		8260C	Total/NA
Methylene Chloride	31	I	500	21	ug/L	100		8260C	Total/NA
Vinyl acetate	340		200	38	ug/L	100		8260C	Total/NA
Acetophenone	66	I	130	29	ug/L	10		8270D	Total/NA
Isophorone	77	I	130	11	ug/L	10		8270D	Total/NA
3 & 4 Methylphenol	1200		130	30	ug/L	10		8270D	Total/NA
Naphthalene	25	I	130	18	ug/L	10		8270D	Total/NA
Phenol	120	I	130	15	ug/L	10		8270D	Total/NA
Chloride	2800		50	25	mg/L	100		300.0	Total/NA
Iron	59000		50	24	ug/L	1		6010B	Total Recoverable
Sodium	520		10	2.8	mg/L	10		6010B	Total Recoverable
Antimony	61		5.0	2.3	ug/L	1		6020	Total Recoverable
Arsenic	250		2.5	1.3	ug/L	1		6020	Total Recoverable
Barium	210		5.0	1.3	ug/L	1		6020	Total Recoverable
Cadmium	0.52		0.50	0.095	ug/L	1		6020	Total Recoverable
Chromium	350		5.0	2.5	ug/L	1		6020	Total Recoverable
Cobalt	62		0.50	0.15	ug/L	1		6020	Total Recoverable
Copper	15		5.0	1.1	ug/L	1		6020	Total Recoverable
Lead	8.4		1.5	0.20	ug/L	1		6020	Total Recoverable
Nickel	290		5.0	2.0	ug/L	1		6020	Total Recoverable
Selenium	5.0		2.5	1.0	ug/L	1		6020	Total Recoverable
Silver	0.38	I	1.0	0.25	ug/L	1		6020	Total Recoverable
Tin	150		5.0	1.3	ug/L	1		6020	Total Recoverable
Vanadium	120		10	3.8	ug/L	1		6020	Total Recoverable
Zinc	1200		20	8.3	ug/L	1		6020	Total Recoverable
Mercury	0.14	I	0.20	0.091	ug/L	1		7470A	Total/NA
Ammonia (as N)	1200		50	26	mg/L	1000		350.1	Total/NA
Nitrate Nitrite as N	0.19		0.050	0.010	mg/L	1		353.2	Total/NA
Nitrate as N	0.19		0.010	0.0054	mg/L	1		Nitrate by calc	Total/NA
Bicarbonate Alkalinity as CaCO3	6300		25	25	mg/L	5		SM 2320B	Total/NA
Total Dissolved Solids	12000		250	250	mg/L	1		SM 2540C	Total/NA
Cyanide, Total	0.016		0.010	0.0025	mg/L	1		SM 4500 CN E	Total/NA
Sulfide	15		10	10	mg/L	1		SM 4500 S2 F	Total/NA
Field pH	7.79				SU	1		Field Sampling	Total/NA
Field Temperature	25.6				Degrees C	1		Field Sampling	Total/NA
Specific Conductance	18810				umhos/cm	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.1				mg/L	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1 (Continued) — Lab Sample ID: 640-44431-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Color	Black				PCU	1		Field Sampling	Total/NA
Sheen	Yes				NONE	1		Field Sampling	Total/NA

Client Sample ID: Trip Blank 05 — Lab Sample ID: 640-44431-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**530**	**I**	2500	280	ug/L			07/29/13 17:17	100
Acetonitrile	3500	U	20000	3500	ug/L			07/29/13 17:17	100
Acrolein	750	U	2000	750	ug/L			07/29/13 17:17	100
Acrylonitrile	300	U	2000	300	ug/L			07/29/13 17:17	100
Benzene	**6300**		100	13	ug/L			07/29/13 17:17	100
Bromoform	18	U	100	18	ug/L			07/29/13 17:17	100
Bromomethane	51	U	100	51	ug/L			07/29/13 17:17	100
2-Butanone (MEK)	260	U	1000	260	ug/L			07/29/13 17:17	100
Carbon disulfide	23	U	100	23	ug/L			07/29/13 17:17	100
Carbon tetrachloride	18	J U	100	18	ug/L			07/29/13 17:17	100
Chlorobenzene	13	U	100	13	ug/L			07/29/13 17:17	100
Chlorobromomethane	21	U	100	21	ug/L			07/29/13 17:17	100
2-Chloro-1,3-butadiene	14	U	100	14	ug/L			07/29/13 17:17	100
Chlorodibromomethane	15	U	100	15	ug/L			07/29/13 17:17	100
Chloroethane	33	U	100	33	ug/L			07/29/13 17:17	100
Chloroform	12	U	100	12	ug/L			07/29/13 17:17	100
Chloromethane	18	U	100	18	ug/L			07/29/13 17:17	100
3-Chloro-1-propene	34	U	100	34	ug/L			07/29/13 17:17	100
cis-1,2-Dichloroethene	21	U	100	21	ug/L			07/29/13 17:17	100
cis-1,3-Dichloropropene	14	U	100	14	ug/L			07/29/13 17:17	100
Dibromomethane	20	U	100	20	ug/L			07/29/13 17:17	100
Dichlorobromomethane	17	U	100	17	ug/L			07/29/13 17:17	100
Dichlorodifluoromethane	28	U	100	28	ug/L			07/29/13 17:17	100
1,1-Dichloroethane	20	U	100	20	ug/L			07/29/13 17:17	100
1,2-Dichloroethane	15	U	100	15	ug/L			07/29/13 17:17	100
1,1-Dichloroethene	23	U	100	23	ug/L			07/29/13 17:17	100
1,2-Dichloropropane	17	U	100	17	ug/L			07/29/13 17:17	100
1,3-Dichloropropane	13	U	100	13	ug/L			07/29/13 17:17	100
2,2-Dichloropropane	20	U	100	20	ug/L			07/29/13 17:17	100
1,1-Dichloropropene	13	U	100	13	ug/L			07/29/13 17:17	100
Ethylbenzene	16	U	100	16	ug/L			07/29/13 17:17	100
Ethyl methacrylate	15	U	100	15	ug/L			07/29/13 17:17	100
2-Hexanone	100	U	1000	100	ug/L			07/29/13 17:17	100
Iodomethane	13	U	500	13	ug/L			07/29/13 17:17	100
Isobutyl alcohol	1500	U	20000	1500	ug/L			07/29/13 17:17	100
Methacrylonitrile	120	U	2000	120	ug/L			07/29/13 17:17	100
Methylene Chloride	**31**	**I**	500	21	ug/L			07/29/13 17:17	100
Methyl methacrylate	29	U	100	29	ug/L			07/29/13 17:17	100
4-Methyl-2-pentanone (MIBK)	150	U	1000	150	ug/L			07/29/13 17:17	100
m-Xylene & p-Xylene	30	U	200	30	ug/L			07/29/13 17:17	100
o-Xylene	15	U	100	15	ug/L			07/29/13 17:17	100
Propionitrile	380	U	2000	380	ug/L			07/29/13 17:17	100
Styrene	12	U	100	12	ug/L			07/29/13 17:17	100
1,1,1,2-Tetrachloroethane	14	U	100	14	ug/L			07/29/13 17:17	100
1,1,2,2-Tetrachloroethane	11	U	100	11	ug/L			07/29/13 17:17	100
Tetrachloroethene	19	U	100	19	ug/L			07/29/13 17:17	100
Toluene	14	U	100	14	ug/L			07/29/13 17:17	100
trans-1,4-Dichloro-2-butene	43	U	200	43	ug/L			07/29/13 17:17	100
trans-1,2-Dichloroethene	26	U	100	26	ug/L			07/29/13 17:17	100

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	14	U	100	14	ug/L			07/29/13 17:17	100
1,1,1-Trichloroethane	16	U	100	16	ug/L			07/29/13 17:17	100
1,1,2-Trichloroethane	20	U	100	20	ug/L			07/29/13 17:17	100
Trichloroethene	16	U	100	16	ug/L			07/29/13 17:17	100
Trichlorofluoromethane	21	U	100	21	ug/L			07/29/13 17:17	100
1,2,3-Trichloropropane	23	U	100	23	ug/L			07/29/13 17:17	100
Vinyl acetate	**340**		200	38	ug/L			07/29/13 17:17	100
Vinyl chloride	22	U	100	22	ug/L			07/29/13 17:17	100
Xylenes, Total	44	U	200	44	ug/L			07/29/13 17:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*87 - 114*		*07/29/13 17:17*	*100*
Dibromofluoromethane	*97*		*81 - 113*		*07/29/13 17:17*	*100*
Toluene-d8 (Surr)	*100*		*87 - 112*		*07/29/13 17:17*	*100*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	15	U	130	15	ug/L		07/25/13 13:07	08/01/13 17:21	10
Acenaphthylene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Acetophenone	**66**	**I**	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Acetylaminofluorene	16	U	130	16	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Aminobiphenyl	30	U	130	30	ug/L		07/25/13 13:07	08/01/13 17:21	10
Anthracene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzo[a]anthracene	11	J U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzo[b]fluoranthene	10	U	130	10	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzo[k]fluoranthene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzo[g,h,i]perylene	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzo[a]pyrene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Benzyl alcohol	19	U	130	19	ug/L		07/25/13 13:07	08/01/13 17:21	10
Bis(2-chloroethoxy)methane	12	U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
Bis(2-chloroethyl)ether	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
Bis(2-ethylhexyl) phthalate	31	U	130	31	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Bromophenyl phenyl ether	12	U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
Butyl benzyl phthalate	12	U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Chloroaniline	21	U	250	21	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Chloro-3-methylphenol	14	U	130	14	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Chloronaphthalene	18	J U	130	18	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Chlorophenol	20	U	130	20	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Chlorophenyl phenyl ether	19	U	130	19	ug/L		07/25/13 13:07	08/01/13 17:21	10
Chrysene	13	J U	130	13	ug/L		07/25/13 13:07	08/01/13 17:21	10
Diallate	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
Dibenz(a,h)anthracene	29	U	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10
Dibenzofuran	13	U	130	13	ug/L		07/25/13 13:07	08/01/13 17:21	10
Di-n-butyl phthalate	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,2-Dichlorobenzene	50	U	130	50	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,3-Dichlorobenzene	16	U	130	16	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,4-Dichlorobenzene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
3,3'-Dichlorobenzidine	85	U	250	85	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4-Dichlorophenol	41	U	130	41	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,6-Dichlorophenol	30	U	130	30	ug/L		07/25/13 13:07	08/01/13 17:21	10

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
p-Dimethylamino azobenzene	20	U	130	20	ug/L		07/25/13 13:07	08/01/13 17:21	10
7,12-Dimethylbenz(a)anthracene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
3,3'-Dimethylbenzidine	85	U	250	85	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4-Dimethylphenol	48	U	130	48	ug/L		07/25/13 13:07	08/01/13 17:21	10
Dimethyl phthalate	16	U	130	16	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,3-Dinitrobenzene	38	U	630	38	ug/L		07/25/13 13:07	08/01/13 17:21	10
4,6-Dinitro-2-methylphenol	13	J U	630	13	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4-Dinitrophenol	39	U	630	39	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4-Dinitrotoluene	21	J U	130	21	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,6-Dinitrotoluene	26	J U	130	26	ug/L		07/25/13 13:07	08/01/13 17:21	10
Dinoseb	45	J U	130	45	ug/L		07/25/13 13:07	08/01/13 17:21	10
Di-n-octyl phthalate	25	U	130	25	ug/L		07/25/13 13:07	08/01/13 17:21	10
Ethyl methanesulfonate	33	U	130	33	ug/L		07/25/13 13:07	08/01/13 17:21	10
Fluoranthene	18	J U	130	18	ug/L		07/25/13 13:07	08/01/13 17:21	10
Fluorene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Hexachlorobenzene	13	U	130	13	ug/L		07/25/13 13:07	08/01/13 17:21	10
Hexachlorobutadiene	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
Hexachlorocyclopentadiene	26	U	130	26	ug/L		07/25/13 13:07	08/01/13 17:21	10
Hexachloroethane	56	U	130	56	ug/L		07/25/13 13:07	08/01/13 17:21	10
Hexachloropropene	21	U	130	21	ug/L		07/25/13 13:07	08/01/13 17:21	10
Indeno[1,2,3-cd]pyrene	30	J U	130	30	ug/L		07/25/13 13:07	08/01/13 17:21	10
Isophorone	**77**	**I**	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Isosafrole	28	U	130	28	ug/L		07/25/13 13:07	08/01/13 17:21	10
Kepone	63	U	250	63	ug/L		07/25/13 13:07	08/01/13 17:21	10
Methapyrilene	23	U	25000	23	ug/L		07/25/13 13:07	08/01/13 17:21	10
3-Methylcholanthrene	11	U	130	11	ug/L		07/25/13 13:07	08/01/13 17:21	10
Methyl methanesulfonate	29	U	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Methylnaphthalene	19	U	130	19	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Methylphenol	19	U	130	19	ug/L		07/25/13 13:07	08/01/13 17:21	10
3 & 4 Methylphenol	**1200**		130	30	ug/L		07/25/13 13:07	08/01/13 17:21	10
Naphthalene	**25**	**I**	130	18	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,4-Naphthoquinone	41	U	130	41	ug/L		07/25/13 13:07	08/01/13 17:21	10
1-Naphthylamine	25	U	130	25	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Naphthylamine	29	U	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Nitroaniline	14	U	630	14	ug/L		07/25/13 13:07	08/01/13 17:21	10
3-Nitroaniline	18	U	630	18	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Nitroaniline	15	J U	630	15	ug/L		07/25/13 13:07	08/01/13 17:21	10
Nitrobenzene	20	U	130	20	ug/L		07/25/13 13:07	08/01/13 17:21	10
2-Nitrophenol	12	J U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
4-Nitrophenol	26	U	630	26	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitro-o-toluidine	63	U	130	63	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosodiethylamine	34	U	130	34	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosodimethylamine	30	U	130	30	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosodi-n-butylamine	35	U	130	35	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosodi-n-propylamine	12	U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosodiphenylamine	7.8	U	130	7.8	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosomethylethylamine	50	U	130	50	ug/L		07/25/13 13:07	08/01/13 17:21	10
N-Nitrosopiperidine	23	U	130	23	ug/L		07/25/13 13:07	08/01/13 17:21	10

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosopyrrolidine	28	U	130	28	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,2'-oxybis[1-chloropropane]	14	U	130	14	ug/L		07/25/13 13:07	08/01/13 17:21	10
Pentachlorobenzene	25	U	130	25	ug/L		07/25/13 13:07	08/01/13 17:21	10
Pentachloronitrobenzene	33	U	130	33	ug/L		07/25/13 13:07	08/01/13 17:21	10
Pentachlorophenol	14	U	630	14	ug/L		07/25/13 13:07	08/01/13 17:21	10
Phenacetin	16	U	130	16	ug/L		07/25/13 13:07	08/01/13 17:21	10
Phenanthrene	18	J U	130	18	ug/L		07/25/13 13:07	08/01/13 17:21	10
Phenol	**120**	**I**	130	15	ug/L		07/25/13 13:07	08/01/13 17:21	10
p-Phenylene diamine	1500	U	25000	1500	ug/L		07/25/13 13:07	08/01/13 17:21	10
Pronamide	14	J U	130	14	ug/L		07/25/13 13:07	08/01/13 17:21	10
Pyrene	13	J U	130	13	ug/L		07/25/13 13:07	08/01/13 17:21	10
Safrole, Total	29	U	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,2,4,5-Tetrachlorobenzene	26	U	130	26	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,3,4,6-Tetrachlorophenol	28	J U	130	28	ug/L		07/25/13 13:07	08/01/13 17:21	10
o-Toluidine	19	U	130	19	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,2,4-Trichlorobenzene	12	U	130	12	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4,5-Trichlorophenol	24	U	130	24	ug/L		07/25/13 13:07	08/01/13 17:21	10
2,4,6-Trichlorophenol	15	J U	130	15	ug/L		07/25/13 13:07	08/01/13 17:21	10
o,o',o''-Triethylphosphorothioate	20	U	130	20	ug/L		07/25/13 13:07	08/01/13 17:21	10
1,3,5-Trinitrobenzene	29	U	130	29	ug/L		07/25/13 13:07	08/01/13 17:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*0*	*J*	*32 - 146*	*07/25/13 13:07*	*08/01/13 17:21*	*10*
2-Fluorobiphenyl	*0*	*J*	*34 - 141*	*07/25/13 13:07*	*08/01/13 17:21*	*10*
Terphenyl-d14	*0*	*J*	*10 - 160*	*07/25/13 13:07*	*08/01/13 17:21*	*10*
Phenol-d5	*0*	*J*	*18 - 110*	*07/25/13 13:07*	*08/01/13 17:21*	*10*
2-Fluorophenol	*0*	*J*	*17 - 110*	*07/25/13 13:07*	*08/01/13 17:21*	*10*
2,4,6-Tribromophenol	*0*	*J*	*37 - 118*	*07/25/13 13:07*	*08/01/13 17:21*	*10*

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0057	U	0.019	0.0057	ug/L		07/25/13 13:17	07/30/13 17:20	1
Ethylene Dibromide	0.0060	U	0.019	0.0060	ug/L		07/25/13 13:17	07/30/13 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*124*		*56 - 144*	*07/25/13 13:17*	*07/30/13 17:20*	*1*

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
4,4'-DDE	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
alpha-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
beta-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Chlordane (technical)	0.34	U	1.0	0.34	ug/L		07/31/13 10:41	08/01/13 16:09	1
delta-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Endosulfan I	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Endosulfan II	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Endosulfan sulfate	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Endrin aldehyde	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Chlorobenzilate	0.22	U	0.80	0.22	ug/L		07/31/13 10:41	08/01/13 16:09	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Isodrin	0.054	U	0.20	0.054	ug/L		07/31/13 10:41	08/01/13 16:09	1
Methoxychlor	0.013	U	0.50	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1016	0.25	U	1.0	0.25	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1221	0.68	U	2.0	0.68	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1232	0.15	U	1.0	0.15	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1242	0.39	U	1.0	0.39	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1248	0.14	U	1.0	0.14	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1254	0.14	U	1.0	0.14	ug/L		07/31/13 10:41	08/01/13 16:09	1
PCB-1260	0.13	U	1.0	0.13	ug/L		07/31/13 10:41	08/01/13 16:09	1
Toxaphene	0.68	U	5.0	0.68	ug/L		07/31/13 10:41	08/01/13 16:09	1
4,4'-DDT	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Aldrin	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Dieldrin	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Endrin	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
gamma-BHC (Lindane)	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1
Heptachlor	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*8*	*J*	*20 - 142*	*07/31/13 10:41*	*08/01/13 16:09*	*1*
Dibutylchlorendate	*13*	*J*	*25 - 137*	*07/31/13 10:41*	*08/01/13 16:09*	*1*
Tetrachloro-m-xylene	*39*		*22 - 134*	*07/31/13 10:41*	*08/01/13 16:09*	*1*

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethoate	0.32	U	2.0	0.32	ug/L		07/29/13 17:00	08/01/13 00:11	1
Disulfoton	0.12	U	2.0	0.12	ug/L		07/29/13 17:00	08/01/13 00:11	1
Famphur	0.11	U	2.0	0.11	ug/L		07/29/13 17:00	08/01/13 00:11	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		07/29/13 17:00	08/01/13 00:11	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		07/29/13 17:00	08/01/13 00:11	1
Phorate	0.16	U	1.0	0.16	ug/L		07/29/13 17:00	08/01/13 00:11	1
Thionazin	0.061	U	1.0	0.061	ug/L		07/29/13 17:00	08/01/13 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate (TPP)	*49*		*37 - 139*	*07/29/13 17:00*	*08/01/13 00:11*	*1*

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	3.5	U	48	3.5	ug/L		07/29/13 08:45	07/31/13 02:09	100
2,4,5-T	5.9	U	48	5.9	ug/L		07/29/13 08:45	07/31/13 02:09	100
Silvex (2,4,5-TP)	5.9	U	48	5.9	ug/L		07/29/13 08:45	07/31/13 02:09	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*0*		*52 - 151*	*07/29/13 08:45*	*07/31/13 02:09*	*100*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2800**		50	25	mg/L			08/04/13 02:20	100

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: COMP-1
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-3
Matrix: Water

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	PQL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	0.78	U	9.6	0.78	pg/L		07/31/13 12:15	08/02/13 04:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*41*		*40 - 135*	*07/31/13 12:15*	*08/02/13 04:31*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**59000**		50	24	ug/L		07/29/13 16:04	07/30/13 19:05	1
Sodium	**520**		10	2.8	mg/L		07/29/13 16:04	07/31/13 15:26	10

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**61**		5.0	2.3	ug/L		07/29/13 16:04	07/31/13 12:18	1
Arsenic	**250**		2.5	1.3	ug/L		07/29/13 16:04	07/31/13 12:18	1
Barium	**210**		5.0	1.3	ug/L		07/29/13 16:04	07/31/13 12:18	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/29/13 16:04	07/31/13 12:18	1
Cadmium	**0.52**		0.50	0.095	ug/L		07/29/13 16:04	07/31/13 12:18	1
Chromium	**350**		5.0	2.5	ug/L		07/29/13 16:04	07/31/13 12:18	1
Cobalt	**62**		0.50	0.15	ug/L		07/29/13 16:04	07/31/13 12:18	1
Copper	**15**		5.0	1.1	ug/L		07/29/13 16:04	07/31/13 12:18	1
Lead	**8.4**		1.5	0.20	ug/L		07/29/13 16:04	07/31/13 12:18	1
Nickel	**290**		5.0	2.0	ug/L		07/29/13 16:04	07/31/13 12:18	1
Selenium	**5.0**		2.5	1.0	ug/L		07/29/13 16:04	07/31/13 12:18	1
Silver	**0.38**	**I**	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 12:18	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 12:18	1
Tin	**150**		5.0	1.3	ug/L		07/29/13 16:04	07/31/13 12:18	1
Vanadium	**120**		10	3.8	ug/L		07/29/13 16:04	07/31/13 12:18	1
Zinc	**1200**		20	8.3	ug/L		07/29/13 16:04	07/31/13 12:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**	**I**	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 20:23	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	**1200**		50	26	mg/L			07/31/13 09:48	1000
Nitrate Nitrite as N	**0.19**		0.050	0.010	mg/L			07/27/13 10:57	1
Nitrate as N	**0.19**		0.010	0.0054	mg/L			08/05/13 08:00	1
Bicarbonate Alkalinity as CaCO3	**6300**		25	25	mg/L			08/02/13 19:02	5
Total Dissolved Solids	**12000**		250	250	mg/L			07/30/13 17:33	1
Cyanide, Total	**0.016**		0.010	0.0025	mg/L		07/29/13 08:30	07/29/13 12:46	1
Sulfide	**15**		10	10	mg/L			07/29/13 10:10	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.79**				SU			07/24/13 09:55	1
Field Temperature	**25.6**				Degrees C			07/24/13 09:55	1
Specific Conductance	**18810**				umhos/cm			07/24/13 09:55	1
Oxygen, Dissolved	**0.1**				mg/L			07/24/13 09:55	1
Color	**Black**				PCU			07/24/13 09:55	1
Sheen	**Yes**				NONE			07/24/13 09:55	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: Trip Blank 05
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-4
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/29/13 10:41	1
Acetonitrile	35	U	200	35	ug/L			07/29/13 10:41	1
Acrolein	7.5	U	20	7.5	ug/L			07/29/13 10:41	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/29/13 10:41	1
Benzene	0.13	U	1.0	0.13	ug/L			07/29/13 10:41	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/29/13 10:41	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/29/13 10:41	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/29/13 10:41	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/29/13 10:41	1
Carbon tetrachloride	0.18	J U	1.0	0.18	ug/L			07/29/13 10:41	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/29/13 10:41	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/29/13 10:41	1
2-Chloro-1,3-butadiene	0.14	U	1.0	0.14	ug/L			07/29/13 10:41	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/29/13 10:41	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/29/13 10:41	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/29/13 10:41	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/29/13 10:41	1
3-Chloro-1-propene	0.34	U	1.0	0.34	ug/L			07/29/13 10:41	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/29/13 10:41	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/29/13 10:41	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:41	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/29/13 10:41	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			07/29/13 10:41	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:41	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/29/13 10:41	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/29/13 10:41	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/29/13 10:41	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			07/29/13 10:41	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			07/29/13 10:41	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			07/29/13 10:41	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/29/13 10:41	1
Ethyl methacrylate	0.15	U	1.0	0.15	ug/L			07/29/13 10:41	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/29/13 10:41	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/29/13 10:41	1
Isobutyl alcohol	15	U	200	15	ug/L			07/29/13 10:41	1
Methacrylonitrile	1.2	U	20	1.2	ug/L			07/29/13 10:41	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/29/13 10:41	1
Methyl methacrylate	0.29	U	1.0	0.29	ug/L			07/29/13 10:41	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/29/13 10:41	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			07/29/13 10:41	1
o-Xylene	0.15	U	1.0	0.15	ug/L			07/29/13 10:41	1
Propionitrile	3.8	U	20	3.8	ug/L			07/29/13 10:41	1
Styrene	0.12	U	1.0	0.12	ug/L			07/29/13 10:41	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/29/13 10:41	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/29/13 10:41	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/29/13 10:41	1
Toluene	0.14	U	1.0	0.14	ug/L			07/29/13 10:41	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/29/13 10:41	1
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/29/13 10:41	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Client Sample ID: Trip Blank 05
Date Collected: 07/24/13 09:55
Date Received: 07/25/13 08:00

Lab Sample ID: 640-44431-4
Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/29/13 10:41	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/29/13 10:41	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:41	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/29/13 10:41	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/29/13 10:41	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/29/13 10:41	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/29/13 10:41	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/29/13 10:41	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/29/13 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/29/13 10:41*	*1*
Dibromofluoromethane	*93*		*81 - 113*		*07/29/13 10:41*	*1*
Toluene-d8 (Surr)	*105*		*87 - 112*		*07/29/13 10:41*	*1*

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(87-114)	(81-113)	(87-112)
640-44431-3	COMP-1	93	97	100
640-44431-4	Trip Blank 05	94	93	105
LCS 640-103400/7	Lab Control Sample	107	95	107
LCSD 640-103400/3	Lab Control Sample Dup	106	95	107
MB 640-103400/4	Method Blank	94	92	106

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	FBP	TPH	PHL	2FP	TBP
Lab Sample ID	Client Sample ID	(32-146)	(34-141)	(10-160)	(18-110)	(17-110)	(37-118)
640-44431-3	COMP-1	0 J	0 J	0 J	0 J	0 J	0 J
LCS 640-103337/2-A	Lab Control Sample	96	96	119	82	83	103
LCSD 640-103337/3-A	Lab Control Sample Dup	97	95	117	81	81	102
MB 640-103337/1-A	Method Blank	94	90	112	78	82	93

Surrogate Legend

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TPH = Terphenyl-d14
PHL = Phenol-d5
2FP = 2-Fluorophenol
TBP = 2,4,6-Tribromophenol

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

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

		Percent Surrogate Recovery (Acceptance Limits)
		TCEA1
Lab Sample ID	Client Sample ID	(56-144)
640-44431-3	COMP-1	124
LCS 640-103338/4-A	Lab Control Sample	105
LCSD 640-103338/5-A	Lab Control Sample Dup	102
MB 640-103338/3-A	Method Blank	102

Surrogate Legend

TCEA = 1,1,1,2-Tetrachloroethane

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCB1	DBC2	TCX1
Lab Sample ID	Client Sample ID	(20-142)	(25-137)	(22-134)
640-44431-3	COMP-1	8 J	13 J	39

Surrogate Legend

DCB = DCB Decachlorobiphenyl
DBC = Dibutylchlorendate
TCX = Tetrachloro-m-xylene

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCB1	DBC1	TCX1
Lab Sample ID	Client Sample ID	(20-142)	(25-137)	(22-134)
640-44431-3 MS	COMP-1	5 J	17 J	37
640-44431-3 MS	COMP-1	16 J	24 J	29
640-44431-3 MSD	COMP-1	6 J	22 J	52
640-44431-3 MSD	COMP-1	18 J	25	30
LCS 640-103459/2-A	Lab Control Sample	90	103	82
LCS 640-103459/6-A	Lab Control Sample	100	109	81
LCSD 640-103459/3-A	Lab Control Sample Dup	91	112	87
LCSD 640-103459/7-A	Lab Control Sample Dup	101	105	77

Surrogate Legend

DCB = DCB Decachlorobiphenyl
DBC = Dibutylchlorendate
TCX = Tetrachloro-m-xylene

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCB1	DBC2	TCX2
Lab Sample ID	Client Sample ID	(20-142)	(25-137)	(22-134)
MB 640-103459/1-A	Method Blank	82	85	54

Surrogate Legend

DCB = DCB Decachlorobiphenyl
DBC = Dibutylchlorendate
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

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

		Percent Surrogate Recovery (Acceptance Limits)
		TPP1
Lab Sample ID	Client Sample ID	(37-139)
640-44431-3	COMP-1	49
MB 640-103341/1-A	Method Blank	96

Surrogate Legend

TPP = Triphenylphosphate (TPP)

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

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

		Percent Surrogate Recovery (Acceptance Limits)
		TPP2
Lab Sample ID	Client Sample ID	(37-139)
640-44431-3 MS	COMP-1	61
640-44431-3 MSD	COMP-1	55
LCS 640-103341/2-A	Lab Control Sample	100
LCS 640-103341/6-A	Lab Control Sample	97
LCSD 640-103341/3-A	Lab Control Sample Dup	98
LCSD 640-103341/7-A	Lab Control Sample Dup	98

Surrogate Legend

TPP = Triphenylphosphate (TPP)

Method: 8151A - Herbicides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		DCPA1
Lab Sample ID	Client Sample ID	(52-151)
640-44431-3	COMP-1	0
LCS 680-286541/18-A	Lab Control Sample	78
MB 680-286541/17-A	Method Blank	97

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

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

Lab Sample ID: MB 640-103400/4
Matrix: Water
Analysis Batch: 103400

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.8	U	25	2.8	ug/L			07/29/13 10:17	1
Acetonitrile	35	U	200	35	ug/L			07/29/13 10:17	1
Acrolein	7.5	U	20	7.5	ug/L			07/29/13 10:17	1
Acrylonitrile	3.0	U	20	3.0	ug/L			07/29/13 10:17	1
Benzene	0.13	U	1.0	0.13	ug/L			07/29/13 10:17	1
Bromoform	0.18	U	1.0	0.18	ug/L			07/29/13 10:17	1
Bromomethane	0.51	U	1.0	0.51	ug/L			07/29/13 10:17	1
2-Butanone (MEK)	2.6	U	10	2.6	ug/L			07/29/13 10:17	1
Carbon disulfide	0.23	U	1.0	0.23	ug/L			07/29/13 10:17	1
Carbon tetrachloride	0.18	U	1.0	0.18	ug/L			07/29/13 10:17	1
Chlorobenzene	0.13	U	1.0	0.13	ug/L			07/29/13 10:17	1
Chlorobromomethane	0.21	U	1.0	0.21	ug/L			07/29/13 10:17	1
2-Chloro-1,3-butadiene	0.14	U	1.0	0.14	ug/L			07/29/13 10:17	1
Chlorodibromomethane	0.15	U	1.0	0.15	ug/L			07/29/13 10:17	1
Chloroethane	0.33	U	1.0	0.33	ug/L			07/29/13 10:17	1
Chloroform	0.12	U	1.0	0.12	ug/L			07/29/13 10:17	1
Chloromethane	0.18	U	1.0	0.18	ug/L			07/29/13 10:17	1
3-Chloro-1-propene	0.34	U	1.0	0.34	ug/L			07/29/13 10:17	1
cis-1,2-Dichloroethene	0.21	U	1.0	0.21	ug/L			07/29/13 10:17	1
cis-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/29/13 10:17	1
Dibromomethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:17	1
Dichlorobromomethane	0.17	U	1.0	0.17	ug/L			07/29/13 10:17	1
Dichlorodifluoromethane	0.28	U	1.0	0.28	ug/L			07/29/13 10:17	1
1,1-Dichloroethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:17	1
1,2-Dichloroethane	0.15	U	1.0	0.15	ug/L			07/29/13 10:17	1
1,1-Dichloroethene	0.23	U	1.0	0.23	ug/L			07/29/13 10:17	1
1,2-Dichloropropane	0.17	U	1.0	0.17	ug/L			07/29/13 10:17	1
1,3-Dichloropropane	0.13	U	1.0	0.13	ug/L			07/29/13 10:17	1
2,2-Dichloropropane	0.20	U	1.0	0.20	ug/L			07/29/13 10:17	1
1,1-Dichloropropene	0.13	U	1.0	0.13	ug/L			07/29/13 10:17	1
Ethylbenzene	0.16	U	1.0	0.16	ug/L			07/29/13 10:17	1
Ethyl methacrylate	0.15	U	1.0	0.15	ug/L			07/29/13 10:17	1
2-Hexanone	1.0	U	10	1.0	ug/L			07/29/13 10:17	1
Iodomethane	0.13	U	5.0	0.13	ug/L			07/29/13 10:17	1
Isobutyl alcohol	15	U	200	15	ug/L			07/29/13 10:17	1
Methacrylonitrile	1.2	U	20	1.2	ug/L			07/29/13 10:17	1
Methylene Chloride	0.21	U	5.0	0.21	ug/L			07/29/13 10:17	1
Methyl methacrylate	0.29	U	1.0	0.29	ug/L			07/29/13 10:17	1
4-Methyl-2-pentanone (MIBK)	1.5	U	10	1.5	ug/L			07/29/13 10:17	1
m-Xylene & p-Xylene	0.30	U	2.0	0.30	ug/L			07/29/13 10:17	1
o-Xylene	0.15	U	1.0	0.15	ug/L			07/29/13 10:17	1
Propionitrile	3.8	U	20	3.8	ug/L			07/29/13 10:17	1
Styrene	0.12	U	1.0	0.12	ug/L			07/29/13 10:17	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			07/29/13 10:17	1
1,1,2,2-Tetrachloroethane	0.11	U	1.0	0.11	ug/L			07/29/13 10:17	1
Tetrachloroethene	0.19	U	1.0	0.19	ug/L			07/29/13 10:17	1
Toluene	0.14	U	1.0	0.14	ug/L			07/29/13 10:17	1
trans-1,4-Dichloro-2-butene	0.43	U	2.0	0.43	ug/L			07/29/13 10:17	1

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

Lab Sample ID: MB 640-103400/4
Matrix: Water
Analysis Batch: 103400

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.26	U	1.0	0.26	ug/L			07/29/13 10:17	1
trans-1,3-Dichloropropene	0.14	U	1.0	0.14	ug/L			07/29/13 10:17	1
1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L			07/29/13 10:17	1
1,1,2-Trichloroethane	0.20	U	1.0	0.20	ug/L			07/29/13 10:17	1
Trichloroethene	0.16	U	1.0	0.16	ug/L			07/29/13 10:17	1
Trichlorofluoromethane	0.21	U	1.0	0.21	ug/L			07/29/13 10:17	1
1,2,3-Trichloropropane	0.23	U	1.0	0.23	ug/L			07/29/13 10:17	1
Vinyl acetate	0.38	U	2.0	0.38	ug/L			07/29/13 10:17	1
Vinyl chloride	0.22	U	1.0	0.22	ug/L			07/29/13 10:17	1
Xylenes, Total	0.44	U	2.0	0.44	ug/L			07/29/13 10:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*87 - 114*		*07/29/13 10:17*	*1*
Dibromofluoromethane	*92*		*81 - 113*		*07/29/13 10:17*	*1*
Toluene-d8 (Surr)	*106*		*87 - 112*		*07/29/13 10:17*	*1*

Lab Sample ID: LCS 640-103400/7
Matrix: Water
Analysis Batch: 103400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	300	269		ug/L		90	64 - 132
Acetonitrile	1500	1350		ug/L		90	43 - 150
Acrolein	600	427		ug/L		71	54 - 149
Acrylonitrile	600	553		ug/L		92	72 - 124
Benzene	30.0	30.2		ug/L		101	80 - 120
Bromoform	30.0	30.9		ug/L		103	64 - 132
Bromomethane	30.0	40.0		ug/L		133	37 - 146
2-Butanone (MEK)	300	326		ug/L		109	66 - 132
Carbon disulfide	30.0	33.5		ug/L		112	72 - 132
Carbon tetrachloride	30.0	37.3		ug/L		124	79 - 126
Chlorobenzene	30.0	26.4		ug/L		88	82 - 116
Chlorobromomethane	30.0	29.3		ug/L		98	72 - 124
2-Chloro-1,3-butadiene	30.0	32.7		ug/L		109	70 - 128
Chlorodibromomethane	30.0	29.2		ug/L		97	73 - 125
Chloroethane	30.0	32.4		ug/L		108	47 - 160
Chloroform	30.0	30.1		ug/L		100	81 - 120
Chloromethane	30.0	32.5		ug/L		108	61 - 136
3-Chloro-1-propene	30.0	30.5		ug/L		102	63 - 139
cis-1,2-Dichloroethene	30.0	29.6		ug/L		99	75 - 128
cis-1,3-Dichloropropene	30.0	32.8		ug/L		109	79 - 120
Dibromomethane	30.0	31.2		ug/L		104	80 - 119
Dichlorobromomethane	30.0	31.9		ug/L		106	82 - 120
Dichlorodifluoromethane	30.0	27.6		ug/L		92	57 - 170
1,1-Dichloroethane	30.0	29.4		ug/L		98	78 - 124
1,2-Dichloroethane	30.0	33.2		ug/L		111	82 - 123
1,1-Dichloroethene	30.0	30.8		ug/L		103	72 - 133
1,2-Dichloropropane	30.0	28.9		ug/L		96	78 - 121

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

Lab Sample ID: LCS 640-103400/7
Matrix: Water
Analysis Batch: 103400

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	30.0	30.5		ug/L		102	70 - 124
2,2-Dichloropropane	30.0	36.4		ug/L		121	76 - 132
1,1-Dichloropropene	30.0	32.2		ug/L		107	84 - 123
Ethylbenzene	30.0	29.0		ug/L		97	85 - 119
Ethyl methacrylate	30.0	35.0		ug/L		117	67 - 129
2-Hexanone	300	290		ug/L		97	54 - 132
Iodomethane	30.0	27.1		ug/L		90	32 - 169
Isobutyl alcohol	1500	1560		ug/L		104	45 - 135
Methacrylonitrile	300	308		ug/L		103	50 - 136
Methylene Chloride	30.0	29.5		ug/L		98	75 - 125
Methyl methacrylate	30.0	34.7		ug/L		116	66 - 131
4-Methyl-2-pentanone (MIBK)	300	307		ug/L		102	67 - 134
m-Xylene & p-Xylene	60.0	58.2		ug/L		97	86 - 123
o-Xylene	30.0	29.3		ug/L		98	85 - 123
Propionitrile	300	295		ug/L		98	68 - 126
Styrene	30.0	30.0		ug/L		100	86 - 121
1,1,1,2-Tetrachloroethane	30.0	29.0		ug/L		97	80 - 118
1,1,2,2-Tetrachloroethane	30.0	25.9		ug/L		86	78 - 118
Tetrachloroethene	30.0	27.7		ug/L		92	81 - 126
Toluene	30.0	31.1		ug/L		104	82 - 122
trans-1,4-Dichloro-2-butene	60.0	59.3		ug/L		99	76 - 128
trans-1,2-Dichloroethene	30.0	29.9		ug/L		100	77 - 128
trans-1,3-Dichloropropene	30.0	34.0		ug/L		113	76 - 122
1,1,1-Trichloroethane	30.0	34.9		ug/L		116	85 - 122
1,1,2-Trichloroethane	30.0	30.4		ug/L		101	76 - 122
Trichloroethene	30.0	31.6		ug/L		105	82 - 121
Trichlorofluoromethane	30.0	37.4		ug/L		125	84 - 139
1,2,3-Trichloropropane	30.0	28.8		ug/L		96	79 - 128
Vinyl acetate	60.0	59.1		ug/L		99	39 - 185
Vinyl chloride	30.0	34.6		ug/L		115	70 - 139
Xylenes, Total	90.0	87.5		ug/L		97	86 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*87 - 114*
Dibromofluoromethane	*95*		*81 - 113*
Toluene-d8 (Surr)	*107*		*87 - 112*

Lab Sample ID: LCSD 640-103400/3
Matrix: Water
Analysis Batch: 103400

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
Acetone	300	264		ug/L		88	64 - 132	2	28
Acetonitrile	1500	1350		ug/L		90	43 - 150	1	32
Acrolein	600	420		ug/L		70	54 - 149	2	38
Acrylonitrile	600	546		ug/L		91	72 - 124	1	40
Benzene	30.0	30.8		ug/L		103	80 - 120	2	20
Bromoform	30.0	30.7		ug/L		102	64 - 132	1	20

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

Lab Sample ID: LCSD 640-103400/3
Matrix: Water
Analysis Batch: 103400

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
Bromomethane	30.0	42.4		ug/L		141	37 - 146	6	38
2-Butanone (MEK)	300	320		ug/L		107	66 - 132	2	28
Carbon disulfide	30.0	34.7		ug/L		116	72 - 132	3	23
Carbon tetrachloride	30.0	38.2	J	ug/L		127	79 - 126	2	20
Chlorobenzene	30.0	26.8		ug/L		89	82 - 116	2	20
Chlorobromomethane	30.0	29.6		ug/L		99	72 - 124	1	20
2-Chloro-1,3-butadiene	30.0	33.3		ug/L		111	70 - 128	2	20
Chlorodibromomethane	30.0	28.7		ug/L		96	73 - 125	2	20
Chloroethane	30.0	34.0		ug/L		113	47 - 160	5	35
Chloroform	30.0	31.6		ug/L		105	81 - 120	5	20
Chloromethane	30.0	32.7		ug/L		109	61 - 136	1	20
3-Chloro-1-propene	30.0	30.4		ug/L		101	63 - 139	1	25
cis-1,2-Dichloroethene	30.0	30.0		ug/L		100	75 - 128	1	20
cis-1,3-Dichloropropene	30.0	33.5		ug/L		112	79 - 120	2	20
Dibromomethane	30.0	31.5		ug/L		105	80 - 119	1	20
Dichlorobromomethane	30.0	32.9		ug/L		110	82 - 120	3	20
Dichlorodifluoromethane	30.0	27.0		ug/L		90	57 - 170	2	39
1,1-Dichloroethane	30.0	29.8		ug/L		99	78 - 124	2	20
1,2-Dichloroethane	30.0	34.4		ug/L		115	82 - 123	3	20
1,1-Dichloroethene	30.0	32.0		ug/L		107	72 - 133	4	24
1,2-Dichloropropane	30.0	29.5		ug/L		98	78 - 121	2	20
1,3-Dichloropropane	30.0	31.1		ug/L		104	70 - 124	2	20
2,2-Dichloropropane	30.0	36.4		ug/L		121	76 - 132	0	20
1,1-Dichloropropene	30.0	32.3		ug/L		108	84 - 123	0	20
Ethylbenzene	30.0	28.9		ug/L		96	85 - 119	0	20
Ethyl methacrylate	30.0	36.4		ug/L		121	67 - 129	4	28
2-Hexanone	300	292		ug/L		97	54 - 132	1	32
Iodomethane	30.0	27.5		ug/L		92	32 - 169	2	40
Isobutyl alcohol	1500	1550		ug/L		104	45 - 135	1	48
Methacrylonitrile	300	309		ug/L		103	50 - 136	0	39
Methylene Chloride	30.0	30.2		ug/L		101	75 - 125	2	22
Methyl methacrylate	30.0	34.5		ug/L		115	66 - 131	0	28
4-Methyl-2-pentanone (MIBK)	300	306		ug/L		102	67 - 134	0	20
m-Xylene & p-Xylene	60.0	59.4		ug/L		99	86 - 123	2	20
o-Xylene	30.0	30.4		ug/L		101	85 - 123	4	20
Propionitrile	300	291		ug/L		97	68 - 126	1	24
Styrene	30.0	30.5		ug/L		102	86 - 121	2	20
1,1,1,2-Tetrachloroethane	30.0	28.6		ug/L		95	80 - 118	1	20
1,1,2,2-Tetrachloroethane	30.0	25.9		ug/L		86	78 - 118	0	20
Tetrachloroethene	30.0	28.7		ug/L		96	81 - 126	4	20
Toluene	30.0	31.2		ug/L		104	82 - 122	0	20
trans-1,4-Dichloro-2-butene	60.0	58.6		ug/L		98	76 - 128	1	26
trans-1,2-Dichloroethene	30.0	30.4		ug/L		101	77 - 128	2	22
trans-1,3-Dichloropropene	30.0	34.6		ug/L		115	76 - 122	2	20
1,1,1-Trichloroethane	30.0	35.6		ug/L		119	85 - 122	2	20
1,1,2-Trichloroethane	30.0	30.4		ug/L		101	76 - 122	0	20
Trichloroethene	30.0	32.0		ug/L		107	82 - 121	1	20
Trichlorofluoromethane	30.0	38.8		ug/L		129	84 - 139	4	20

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

Lab Sample ID: LCSD 640-103400/3
Matrix: Water
Analysis Batch: 103400

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
1,2,3-Trichloropropane			30.0	28.1		ug/L		94	79 - 128	2	20
Vinyl acetate			60.0	60.6		ug/L		101	39 - 185	2	27
Vinyl chloride			30.0	35.6		ug/L		119	70 - 139	3	20
Xylenes, Total			90.0	89.8		ug/L		100	86 - 123	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*87 - 114*
Dibromofluoromethane	*95*		*81 - 113*
Toluene-d8 (Surr)	*107*		*87 - 112*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 640-103337/1-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103337

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.2	U	10	1.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
Acenaphthylene	0.85	U	10	0.85	ug/L		07/25/13 13:07	08/01/13 15:52	1
Acetophenone	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Acetylaminofluorene	1.3	U	10	1.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Aminobiphenyl	2.4	U	10	2.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Anthracene	0.86	U	10	0.86	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzo[a]anthracene	0.88	U	10	0.88	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzo[b]fluoranthene	0.80	U	10	0.80	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzo[k]fluoranthene	0.86	U	10	0.86	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzo[g,h,i]perylene	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzo[a]pyrene	0.89	U	10	0.89	ug/L		07/25/13 13:07	08/01/13 15:52	1
Benzyl alcohol	1.5	U	10	1.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
Bis(2-chloroethoxy)methane	0.96	U	10	0.96	ug/L		07/25/13 13:07	08/01/13 15:52	1
Bis(2-chloroethyl)ether	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
Bis(2-ethylhexyl) phthalate	2.5	U	10	2.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Bromophenyl phenyl ether	0.97	U	10	0.97	ug/L		07/25/13 13:07	08/01/13 15:52	1
Butyl benzyl phthalate	0.98	U	10	0.98	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Chloroaniline	1.7	U	20	1.7	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Chloro-3-methylphenol	1.1	U	10	1.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Chloronaphthalene	1.4	U	10	1.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Chlorophenol	1.6	U	10	1.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Chlorophenyl phenyl ether	1.5	U	10	1.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
Chrysene	1.0	U	10	1.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Diallate	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
Dibenz(a,h)anthracene	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
Dibenzofuran	1.0	U	10	1.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Di-n-butyl phthalate	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,2-Dichlorobenzene	4.0	U	10	4.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,3-Dichlorobenzene	1.3	U	10	1.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,4-Dichlorobenzene	0.84	U	10	0.84	ug/L		07/25/13 13:07	08/01/13 15:52	1
3,3'-Dichlorobenzidine	6.8	U	20	6.8	ug/L		07/25/13 13:07	08/01/13 15:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 640-103337/1-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103337

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	3.3	U	10	3.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,6-Dichlorophenol	2.4	U	10	2.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Diethyl phthalate	0.90	U	10	0.90	ug/L		07/25/13 13:07	08/01/13 15:52	1
p-Dimethylamino azobenzene	1.6	U	10	1.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
7,12-Dimethylbenz(a)anthracene	0.90	U	10	0.90	ug/L		07/25/13 13:07	08/01/13 15:52	1
3,3'-Dimethylbenzidine	6.8	U	20	6.8	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,4-Dimethylphenol	3.8	U	10	3.8	ug/L		07/25/13 13:07	08/01/13 15:52	1
Dimethyl phthalate	1.3	U	10	1.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,3-Dinitrobenzene	3.0	U	50	3.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
4,6-Dinitro-2-methylphenol	1.0	U	50	1.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,4-Dinitrophenol	3.1	U	50	3.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,4-Dinitrotoluene	1.7	U	10	1.7	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,6-Dinitrotoluene	2.1	U	10	2.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
Dinoseb	3.6	U	10	3.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
Di-n-octyl phthalate	2.0	U	10	2.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Ethyl methanesulfonate	2.6	U	10	2.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
Fluoranthene	1.4	U	10	1.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Fluorene	0.90	U	10	0.90	ug/L		07/25/13 13:07	08/01/13 15:52	1
Hexachlorobenzene	1.0	U	10	1.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Hexachlorobutadiene	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
Hexachlorocyclopentadiene	2.1	U	10	2.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
Hexachloroethane	4.5	U	10	4.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
Hexachloropropene	1.7	U	10	1.7	ug/L		07/25/13 13:07	08/01/13 15:52	1
Indeno[1,2,3-cd]pyrene	2.4	U	10	2.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Isophorone	0.85	U	10	0.85	ug/L		07/25/13 13:07	08/01/13 15:52	1
Isosafrole	2.2	U	10	2.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
Kepone	5.0	U	20	5.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Methapyrilene	1.8	U	2000	1.8	ug/L		07/25/13 13:07	08/01/13 15:52	1
3-Methylcholanthrene	0.85	U	10	0.85	ug/L		07/25/13 13:07	08/01/13 15:52	1
Methyl methanesulfonate	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Methylnaphthalene	1.5	U	10	1.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Methylphenol	1.5	U	10	1.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
3 & 4 Methylphenol	2.4	U	10	2.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Naphthalene	1.4	U	10	1.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,4-Naphthoquinone	3.3	U	10	3.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
1-Naphthylamine	2.0	U	10	2.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Naphthylamine	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Nitroaniline	1.1	U	50	1.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
3-Nitroaniline	1.4	U	50	1.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Nitroaniline	1.2	U	50	1.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
Nitrobenzene	1.6	U	10	1.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
2-Nitrophenol	0.96	U	10	0.96	ug/L		07/25/13 13:07	08/01/13 15:52	1
4-Nitrophenol	2.1	U	50	2.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitro-o-toluidine	5.0	U	10	5.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosodiethylamine	2.7	U	10	2.7	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosodimethylamine	2.4	U	10	2.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosodi-n-butylamine	2.8	U	10	2.8	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosodi-n-propylamine	0.93	U	10	0.93	ug/L		07/25/13 13:07	08/01/13 15:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 640-103337/1-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103337

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	0.62	U	10	0.62	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosomethylethylamine	4.0	U	10	4.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosopiperidine	1.8	U	10	1.8	ug/L		07/25/13 13:07	08/01/13 15:52	1
N-Nitrosopyrrolidine	2.2	U	10	2.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,2'-oxybis[1-chloropropane]	1.1	U	10	1.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
Pentachlorobenzene	2.0	U	10	2.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Pentachloronitrobenzene	2.6	U	10	2.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
Pentachlorophenol	1.1	U	50	1.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
Phenacetin	1.3	U	10	1.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
Phenanthrene	1.4	U	10	1.4	ug/L		07/25/13 13:07	08/01/13 15:52	1
Phenol	1.2	U	10	1.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
p-Phenylene diamine	120	U	2000	120	ug/L		07/25/13 13:07	08/01/13 15:52	1
Pronamide	1.1	U	10	1.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
Pyrene	1.0	U	10	1.0	ug/L		07/25/13 13:07	08/01/13 15:52	1
Safrole, Total	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,2,4,5-Tetrachlorobenzene	2.1	U	10	2.1	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,3,4,6-Tetrachlorophenol	2.2	U	10	2.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
o-Toluidine	1.5	U	10	1.5	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,2,4-Trichlorobenzene	0.96	U	10	0.96	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,4,5-Trichlorophenol	1.9	U	10	1.9	ug/L		07/25/13 13:07	08/01/13 15:52	1
2,4,6-Trichlorophenol	1.2	U	10	1.2	ug/L		07/25/13 13:07	08/01/13 15:52	1
o,o',o''-Triethylphosphorothioate	1.6	U	10	1.6	ug/L		07/25/13 13:07	08/01/13 15:52	1
1,3,5-Trinitrobenzene	2.3	U	10	2.3	ug/L		07/25/13 13:07	08/01/13 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*32 - 146*	*07/25/13 13:07*	*08/01/13 15:52*	*1*
2-Fluorobiphenyl	*90*		*34 - 141*	*07/25/13 13:07*	*08/01/13 15:52*	*1*
Terphenyl-d14	*112*		*10 - 160*	*07/25/13 13:07*	*08/01/13 15:52*	*1*
Phenol-d5	*78*		*18 - 110*	*07/25/13 13:07*	*08/01/13 15:52*	*1*
2-Fluorophenol	*82*		*17 - 110*	*07/25/13 13:07*	*08/01/13 15:52*	*1*
2,4,6-Tribromophenol	*93*		*37 - 118*	*07/25/13 13:07*	*08/01/13 15:52*	*1*

Lab Sample ID: LCS 640-103337/2-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	100	93.4		ug/L		93	59 - 113
Acenaphthylene	100	88.9		ug/L		89	60 - 114
Acetophenone	100	80.3		ug/L		80	52 - 111
Anthracene	100	94.2		ug/L		94	69 - 108
Benzo[a]anthracene	100	99.6		ug/L		100	78 - 111
Benzo[b]fluoranthene	100	105		ug/L		105	58 - 129
Benzo[k]fluoranthene	100	97.9		ug/L		98	62 - 132
Benzo[g,h,i]perylene	100	96.6		ug/L		97	59 - 140
Benzo[a]pyrene	100	92.4		ug/L		92	59 - 133
Benzyl alcohol	100	81.7		ug/L		82	53 - 105
Bis(2-chloroethoxy)methane	100	83.4		ug/L		83	62 - 114

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 640-103337/2-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	100	80.2		ug/L		80	57 - 108
Bis(2-ethylhexyl) phthalate	100	99.3		ug/L		99	75 - 121
4-Bromophenyl phenyl ether	100	93.2		ug/L		93	56 - 127
Butyl benzyl phthalate	100	96.6		ug/L		97	74 - 119
4-Chloroaniline	100	61.5		ug/L		61	23 - 100
4-Chloro-3-methylphenol	100	86.8		ug/L		87	57 - 114
2-Chloronaphthalene	100	106		ug/L		106	47 - 114
2-Chlorophenol	100	80.8		ug/L		81	40 - 100
4-Chlorophenyl phenyl ether	100	92.7		ug/L		93	63 - 114
Chrysene	100	104		ug/L		104	76 - 111
Diallate	100	91.0		ug/L		91	40 - 110
Dibenz(a,h)anthracene	100	95.6		ug/L		96	62 - 139
Dibenzofuran	100	91.4		ug/L		91	59 - 110
Di-n-butyl phthalate	100	104		ug/L		104	68 - 118
1,2-Dichlorobenzene	100	69.3		ug/L		69	25 - 100
1,3-Dichlorobenzene	100	58.3		ug/L		58	19 - 100
1,4-Dichlorobenzene	100	62.5		ug/L		63	21 - 100
2,4-Dichlorophenol	100	87.4		ug/L		87	48 - 111
2,6-Dichlorophenol	100	87.8		ug/L		88	10 - 100
Diethyl phthalate	100	95.2		ug/L		95	48 - 134
7,12-Dimethylbenz(a)anthracene	100	90.7		ug/L		91	50 - 108
2,4-Dimethylphenol	100	64.8		ug/L		65	28 - 100
Dimethyl phthalate	100	94.0		ug/L		94	37 - 135
1,3-Dinitrobenzene	100	91.5		ug/L		92	50 - 121
4,6-Dinitro-2-methylphenol	100	122		ug/L		122	10 - 140
2,4-Dinitrophenol	100	113		ug/L		113	10 - 153
2,4-Dinitrotoluene	100	109		ug/L		109	72 - 118
2,6-Dinitrotoluene	100	114		ug/L		114	73 - 120
Dinoseb	100	130		ug/L		130	50 - 131
Di-n-octyl phthalate	100	98.0		ug/L		98	50 - 127
Ethyl methanesulfonate	100	74.8		ug/L		75	45 - 106
Fluoranthene	100	106		ug/L		106	72 - 113
Fluorene	100	94.2		ug/L		94	65 - 113
Hexachlorobenzene	100	91.5		ug/L		91	71 - 109
Hexachlorobutadiene	100	71.3		ug/L		71	10 - 100
Hexachlorocyclopentadiene	100	72.4		ug/L		72	10 - 100
Hexachloroethane	100	60.7		ug/L		61	10 - 100
Hexachloropropene	100	70.1		ug/L		70	30 - 135
Indeno[1,2,3-cd]pyrene	100	98.0		ug/L		98	61 - 136
Isophorone	100	79.4		ug/L		79	64 - 116
Isosafrole	100	79.8		ug/L		80	49 - 102
Kepone	100	108		ug/L		108	10 - 130
3-Methylcholanthrene	100	69.4		ug/L		69	50 - 111
Methyl methanesulfonate	100	80.1		ug/L		80	17 - 102
2-Methylnaphthalene	100	83.0		ug/L		83	38 - 106
2-Methylphenol	100	80.1		ug/L		80	46 - 101
3 & 4 Methylphenol	200	163		ug/L		81	23 - 138
Naphthalene	100	79.7		ug/L		80	41 - 100

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 640-103337/2-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Naphthoquinone	100	97.5		ug/L		98	10 - 135
2-Nitroaniline	100	102		ug/L		102	66 - 128
3-Nitroaniline	100	95.3		ug/L		95	50 - 111
4-Nitroaniline	100	98.5		ug/L		98	55 - 116
Nitrobenzene	100	90.9		ug/L		91	58 - 119
2-Nitrophenol	100	96.0		ug/L		96	43 - 116
4-Nitrophenol	100	114		ug/L		114	28 - 140
N-Nitrosodimethylamine	100	85.6		ug/L		86	45 - 111
N-Nitrosodi-n-propylamine	100	75.4		ug/L		75	58 - 108
N-Nitrosodiphenylamine	100	97.9		ug/L		98	68 - 114
2,2'-oxybis[1-chloropropane]	100	69.0		ug/L		69	44 - 109
Pentachlorobenzene	100	86.3		ug/L		86	30 - 100
Pentachloronitrobenzene	100	117		ug/L		117	30 - 135
Pentachlorophenol	100	117		ug/L		117	22 - 138
Phenacetin	100	94.4		ug/L		94	30 - 135
Phenanthrene	100	99.5		ug/L		100	72 - 110
Phenol	100	70.2		ug/L		70	40 - 109
Pronamide	100	102		ug/L		102	30 - 106
Pyrene	100	100		ug/L		100	73 - 114
Safrole, Total	100	84.2		ug/L		84	30 - 100
1,2,4,5-Tetrachlorobenzene	100	85.9		ug/L		86	30 - 100
2,3,4,6-Tetrachlorophenol	100	102		ug/L		102	56 - 108
1,2,4-Trichlorobenzene	100	75.3		ug/L		75	25 - 100
2,4,5-Trichlorophenol	100	97.8		ug/L		98	60 - 115
2,4,6-Trichlorophenol	100	94.4		ug/L		94	57 - 115
o,o',o''-Triethylphosphorothioate	100	78.4		ug/L		78	34 - 137
1,3,5-Trinitrobenzene	100	120		ug/L		120	25 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*96*		*32 - 146*
2-Fluorobiphenyl	*96*		*34 - 141*
Terphenyl-d14	*119*		*10 - 160*
Phenol-d5	*82*		*18 - 110*
2-Fluorophenol	*83*		*17 - 110*
2,4,6-Tribromophenol	*103*		*37 - 118*

Lab Sample ID: LCSD 640-103337/3-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103337

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	100	108		ug/L		108	59 - 113	14	28
Acenaphthylene	100	101		ug/L		101	60 - 114	13	32
Acetophenone	100	86.6		ug/L		87	52 - 111	8	20
Anthracene	100	107		ug/L		107	69 - 108	13	20
Benzo[a]anthracene	100	114	J	ug/L		114	78 - 111	14	21
Benzo[b]fluoranthene	100	116		ug/L		116	58 - 129	11	20
Benzo[k]fluoranthene	100	115		ug/L		115	62 - 132	16	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 640-103337/3-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103337

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	100	114		ug/L		114	59 - 140	16	20
Benzo[a]pyrene	100	110		ug/L		110	59 - 133	17	20
Benzyl alcohol	100	95.3		ug/L		95	53 - 105	15	30
Bis(2-chloroethoxy)methane	100	107		ug/L		107	62 - 114	24	30
Bis(2-chloroethyl)ether	100	92.3		ug/L		92	57 - 108	14	30
Bis(2-ethylhexyl) phthalate	100	115		ug/L		115	75 - 121	14	23
4-Bromophenyl phenyl ether	100	103		ug/L		103	56 - 127	10	40
Butyl benzyl phthalate	100	112		ug/L		112	74 - 119	15	24
4-Chloroaniline	100	73.0		ug/L		73	23 - 100	17	56
4-Chloro-3-methylphenol	100	105		ug/L		105	57 - 114	19	41
2-Chloronaphthalene	100	125	J	ug/L		125	47 - 114	17	28
2-Chlorophenol	100	95.3		ug/L		95	40 - 100	16	47
4-Chlorophenyl phenyl ether	100	105		ug/L		105	63 - 114	12	30
Chrysene	100	123	J	ug/L		123	76 - 111	16	20
Diallate	100	97.4		ug/L		97	40 - 110	7	40
Dibenz(a,h)anthracene	100	114		ug/L		114	62 - 139	18	20
Dibenzofuran	100	106		ug/L		106	59 - 110	15	33
Di-n-butyl phthalate	100	116		ug/L		116	68 - 118	11	22
1,2-Dichlorobenzene	100	67.0		ug/L		67	25 - 100	3	28
1,3-Dichlorobenzene	100	60.4		ug/L		60	19 - 100	3	33
1,4-Dichlorobenzene	100	61.0		ug/L		61	21 - 100	2	33
2,4-Dichlorophenol	100	106		ug/L		106	48 - 111	19	46
2,6-Dichlorophenol	100	98.7		ug/L		99	10 - 100	12	26
Diethyl phthalate	100	114		ug/L		114	48 - 134	18	23
7,12-Dimethylbenz(a)anthracene	100	98.2		ug/L		98	50 - 108	8	40
2,4-Dimethylphenol	100	84.0		ug/L		84	28 - 100	26	33
Dimethyl phthalate	100	111		ug/L		111	37 - 135	16	25
1,3-Dinitrobenzene	100	106		ug/L		106	50 - 121	15	40
4,6-Dinitro-2-methylphenol	100	141	J	ug/L		141	10 - 140	15	40
2,4-Dinitrophenol	100	137		ug/L		137	10 - 153	19	40
2,4-Dinitrotoluene	100	135	J	ug/L		135	72 - 118	21	32
2,6-Dinitrotoluene	100	132	J	ug/L		132	73 - 120	14	26
Dinoseb	100	133	J	ug/L		133	50 - 131	2	40
Di-n-octyl phthalate	100	118		ug/L		118	50 - 127	18	21
Ethyl methanesulfonate	100	78.9		ug/L		79	45 - 106	5	20
Fluoranthene	100	117	J	ug/L		117	72 - 113	10	20
Fluorene	100	111		ug/L		111	65 - 113	16	29
Hexachlorobenzene	100	109		ug/L		109	71 - 109	17	20
Hexachlorobutadiene	100	71.8		ug/L		72	10 - 100	1	30
Hexachlorocyclopentadiene	100	83.6		ug/L		84	10 - 100	14	50
Hexachloroethane	100	52.8		ug/L		53	10 - 100	14	50
Hexachloropropene	100	62.4		ug/L		62	30 - 135	12	40
Indeno[1,2,3-cd]pyrene	100	121	J	ug/L		121	61 - 136	21	20
Isophorone	100	92.7		ug/L		93	64 - 116	15	21
Isosafrole	100	85.7		ug/L		86	49 - 102	7	44
Kepone	100	117		ug/L		117	10 - 130	7	50
3-Methylcholanthrene	100	77.3		ug/L		77	50 - 111	11	40
Methyl methanesulfonate	100	86.5		ug/L		87	17 - 102	8	50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 640-103337/3-A
Matrix: Water
Analysis Batch: 103531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103337

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene			100	95.1		ug/L		95	38 - 106	14	32
2-Methylphenol			100	92.1		ug/L		92	46 - 101	14	40
3 & 4 Methylphenol			200	183		ug/L		91	23 - 138	12	44
Naphthalene			100	88.1		ug/L		88	41 - 100	10	28
1,4-Naphthoquinone			100	108		ug/L		108	10 - 135	10	40
2-Nitroaniline			100	125		ug/L		125	66 - 128	20	24
3-Nitroaniline			100	110		ug/L		110	50 - 111	14	31
4-Nitroaniline			100	118	J	ug/L		118	55 - 116	18	28
Nitrobenzene			100	108		ug/L		108	58 - 119	17	25
2-Nitrophenol			100	119	J	ug/L		119	43 - 116	21	50
4-Nitrophenol			100	135		ug/L		135	28 - 140	17	50
N-Nitrosodimethylamine			100	98.9		ug/L		99	45 - 111	14	38
N-Nitrosodi-n-propylamine			100	92.6		ug/L		93	58 - 108	20	28
N-Nitrosodiphenylamine			100	112		ug/L		112	68 - 114	14	23
2,2'-oxybis[1-chloropropane]			100	81.3		ug/L		81	44 - 109	16	30
Pentachlorobenzene			100	99.6		ug/L		100	30 - 100	14	40
Pentachloronitrobenzene			100	125		ug/L		125	30 - 135	6	40
Pentachlorophenol			100	137		ug/L		137	22 - 138	15	40
Phenacetin			100	103		ug/L		103	30 - 135	8	40
Phenanthrene			100	112	J	ug/L		112	72 - 110	12	20
Phenol			100	90.3		ug/L		90	40 - 109	25	50
Pronamide			100	108	J	ug/L		108	30 - 106	6	40
Pyrene			100	118	J	ug/L		118	73 - 114	16	40
Safrole, Total			100	85.4		ug/L		85	30 - 100	1	40
1,2,4,5-Tetrachlorobenzene			100	93.0		ug/L		93	30 - 100	8	40
2,3,4,6-Tetrachlorophenol			100	121	J	ug/L		121	56 - 108	16	43
1,2,4-Trichlorobenzene			100	79.8		ug/L		80	25 - 100	6	29
2,4,5-Trichlorophenol			100	113		ug/L		113	60 - 115	15	37
2,4,6-Trichlorophenol			100	119	J	ug/L		119	57 - 115	23	35
o,o',o''-Triethylphosphorothioate			100	95.6		ug/L		96	34 - 137	20	40
1,3,5-Trinitrobenzene			100	131		ug/L		131	25 - 149	8	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*97*		*32 - 146*
2-Fluorobiphenyl	*95*		*34 - 141*
Terphenyl-d14	*117*		*10 - 160*
Phenol-d5	*81*		*18 - 110*
2-Fluorophenol	*81*		*17 - 110*
2,4,6-Tribromophenol	*102*		*37 - 118*

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

Lab Sample ID: MB 640-103338/3-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103338

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	0.0058	U	0.019	0.0058	ug/L		07/25/13 13:17	07/30/13 13:54	1

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

Lab Sample ID: MB 640-103338/3-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103338

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	0.0061	U	0.019	0.0061	ug/L		07/25/13 13:17	07/30/13 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,1,1,2-Tetrachloroethane	*102*		*56 - 144*	*07/25/13 13:17*	*07/30/13 13:54*	*1*

Lab Sample ID: LCS 640-103338/4-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103338

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.236	0.260		ug/L		110	89 - 132
Ethylene Dibromide	0.236	0.250		ug/L		106	85 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane	*105*		*56 - 144*

Lab Sample ID: LCSD 640-103338/5-A
Matrix: Water
Analysis Batch: 103438

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103338

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.236	0.258		ug/L		109	89 - 132	1	11
Ethylene Dibromide	0.236	0.255		ug/L		108	85 - 118	2	12

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,1,1,2-Tetrachloroethane	*102*		*56 - 144*

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Lab Sample ID: MB 640-103459/1-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103459

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
4,4'-DDE	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
alpha-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
beta-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Chlordane (technical)	0.34	U	1.0	0.34	ug/L		07/31/13 10:41	08/01/13 13:28	1
delta-BHC	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Endosulfan I	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Endosulfan II	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Endosulfan sulfate	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Endrin aldehyde	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Chlorobenzilate	0.22	U	0.80	0.22	ug/L		07/31/13 10:41	08/01/13 13:28	1
Heptachlor epoxide	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography (Continued)

Lab Sample ID: MB 640-103459/1-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103459

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isodrin	0.054	U	0.20	0.054	ug/L		07/31/13 10:41	08/01/13 13:28	1
Methoxychlor	0.013	U	0.50	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1016	0.25	U	1.0	0.25	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1221	0.68	U	2.0	0.68	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1232	0.15	U	1.0	0.15	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1242	0.39	U	1.0	0.39	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1248	0.14	U	1.0	0.14	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1254	0.14	U	1.0	0.14	ug/L		07/31/13 10:41	08/01/13 13:28	1
PCB-1260	0.13	U	1.0	0.13	ug/L		07/31/13 10:41	08/01/13 13:28	1
Toxaphene	0.68	U	5.0	0.68	ug/L		07/31/13 10:41	08/01/13 13:28	1
4,4'-DDT	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Aldrin	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Dieldrin	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Endrin	0.013	U	0.10	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
gamma-BHC (Lindane)	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1
Heptachlor	0.013	U	0.050	0.013	ug/L		07/31/13 10:41	08/01/13 13:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*20 - 142*	*07/31/13 10:41*	*08/01/13 13:28*	*1*
Dibutylchlorendate	*85*		*25 - 137*	*07/31/13 10:41*	*08/01/13 13:28*	*1*
Tetrachloro-m-xylene	*54*		*22 - 134*	*07/31/13 10:41*	*08/01/13 13:28*	*1*

Lab Sample ID: LCS 640-103459/2-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.270	0.260		ug/L		96	50 - 130
4,4'-DDE	0.270	0.258		ug/L		95	50 - 130
alpha-BHC	0.270	0.253		ug/L		94	47 - 130
beta-BHC	0.270	0.277		ug/L		103	50 - 142
delta-BHC	0.270	0.248		ug/L		92	54 - 124
Endosulfan I	0.270	0.276		ug/L		102	44 - 130
Endosulfan II	0.270	0.271		ug/L		100	47 - 130
Endosulfan sulfate	0.270	0.149		ug/L		55	50 - 139
Endrin aldehyde	0.270	0.301		ug/L		111	49 - 143
Heptachlor epoxide	0.270	0.270		ug/L		100	50 - 130
Methoxychlor	0.270	0.255	I	ug/L		94	48 - 144
4,4'-DDT	0.270	0.187		ug/L		69	36 - 140
Aldrin	0.270	0.230		ug/L		85	25 - 135
Dieldrin	0.270	0.285		ug/L		105	30 - 146
Endrin	0.270	0.294		ug/L		109	38 - 140
gamma-BHC (Lindane)	0.270	0.266		ug/L		99	36 - 135
Heptachlor	0.270	0.258		ug/L		95	26 - 131

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography (Continued)

Lab Sample ID: LCS 640-103459/2-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103459

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	90		20 - 142
Dibutylchlorendate	103		25 - 137
Tetrachloro-m-xylene	82		22 - 134

Lab Sample ID: LCS 640-103459/6-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103459

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			6.76	7.58		ug/L		112	37 - 133		
PCB-1260			6.76	7.11		ug/L		105	51 - 131		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	100		20 - 142
Dibutylchlorendate	109		25 - 137
Tetrachloro-m-xylene	81		22 - 134

Lab Sample ID: LCSD 640-103459/3-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103459

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			0.270	0.273		ug/L		101	50 - 130	5	30
4,4'-DDE			0.270	0.264		ug/L		98	50 - 130	2	30
alpha-BHC			0.270	0.268		ug/L		99	47 - 130	6	30
beta-BHC			0.270	0.291		ug/L		108	50 - 142	5	30
delta-BHC			0.270	0.252		ug/L		93	54 - 124	2	30
Endosulfan I			0.270	0.281		ug/L		104	44 - 130	2	30
Endosulfan II			0.270	0.282		ug/L		104	47 - 130	4	30
Endosulfan sulfate			0.270	0.157		ug/L		58	50 - 139	5	30
Endrin aldehyde			0.270	0.314		ug/L		116	49 - 143	4	30
Heptachlor epoxide			0.270	0.288		ug/L		107	50 - 130	6	30
Methoxychlor			0.270	0.256	I	ug/L		95	48 - 144	0	30
4,4'-DDT			0.270	0.196		ug/L		73	36 - 140	5	24
Aldrin			0.270	0.245		ug/L		91	25 - 135	6	30
Dieldrin			0.270	0.295		ug/L		109	30 - 146	3	30
Endrin			0.270	0.300		ug/L		111	38 - 140	2	32
gamma-BHC (Lindane)			0.270	0.280		ug/L		104	36 - 135	5	34
Heptachlor			0.270	0.261		ug/L		97	26 - 131	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	91		20 - 142
Dibutylchlorendate	112		25 - 137
Tetrachloro-m-xylene	87		22 - 134

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography (Continued)

Lab Sample ID: LCSD 640-103459/7-A
Matrix: Water
Analysis Batch: 103528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103459

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			6.76	6.10		ug/L		90	37 - 133	22	28
PCB-1260			6.76	5.90		ug/L		87	51 - 131	19	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*101*		*20 - 142*
Dibutylchlorendate	*105*		*25 - 137*
Tetrachloro-m-xylene	*77*		*22 - 134*

Lab Sample ID: 640-44431-3 MS
Matrix: Water
Analysis Batch: 103528

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103459

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.013	U	0.270	0.0688	I J	ug/L		25	50 - 130
4,4'-DDE	0.013	U	0.270	0.0261	I J	ug/L		10	50 - 130
alpha-BHC	0.013	U	0.270	0.252		ug/L		93	47 - 130
beta-BHC	0.013	U	0.270	0.260		ug/L		96	50 - 142
delta-BHC	0.013	U	0.270	0.277		ug/L		102	54 - 124
Endosulfan I	0.013	U	0.270	0.208		ug/L		77	44 - 130
Endosulfan II	0.013	U	0.270	0.230		ug/L		85	47 - 130
Endosulfan sulfate	0.013	U	0.270	0.166		ug/L		62	50 - 139
Endrin aldehyde	0.013	U	0.270	0.0994	I J	ug/L		37	49 - 143
Heptachlor epoxide	0.013	U	0.270	0.273		ug/L		101	50 - 130
Methoxychlor	0.013	U	0.270	0.234	I	ug/L		87	48 - 144
4,4'-DDT	0.013	U	0.270	0.0172	I J	ug/L		6	36 - 140
Aldrin	0.013	U	0.270	0.0396	I J	ug/L		15	25 - 135
Dieldrin	0.013	U	0.270	0.165		ug/L		61	30 - 146
Endrin	0.013	U	0.270	0.202		ug/L		75	38 - 140
gamma-BHC (Lindane)	0.013	U	0.270	0.256		ug/L		95	36 - 135
Heptachlor	0.013	U	0.270	0.0819		ug/L		30	26 - 131

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*5*	*J*	*20 - 142*
Dibutylchlorendate	*17*	*J*	*25 - 137*
Tetrachloro-m-xylene	*37*		*22 - 134*

Lab Sample ID: 640-44431-3 MS
Matrix: Water
Analysis Batch: 103528

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103459

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.25	U	6.76	3.49		ug/L		52	15 - 139
PCB-1260	0.13	U	6.76	0.915	I J	ug/L		14	24 - 154

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*16*	*J*	*20 - 142*

Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography (Continued)

Lab Sample ID: 640-44431-3 MS
Matrix: Water
Analysis Batch: 103528

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103459

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibutylchlorendate	*24*	*J*	*25 - 137*
Tetrachloro-m-xylene	*29*		*22 - 134*

Lab Sample ID: 640-44431-3 MSD
Matrix: Water
Analysis Batch: 103528

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103459

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.013	U	0.270	0.130	J	ug/L		48	50 - 130	62	30
4,4'-DDE	0.013	U	0.270	0.0287	I J	ug/L		11	50 - 130	10	30
alpha-BHC	0.013	U	0.270	0.407	J	ug/L		151	47 - 130	47	30
beta-BHC	0.013	U	0.270	0.401	J	ug/L		148	50 - 142	43	30
delta-BHC	0.013	U	0.270	0.446	J	ug/L		165	54 - 124	47	30
Endosulfan I	0.013	U	0.270	0.264		ug/L		98	44 - 130	24	30
Endosulfan II	0.013	U	0.270	0.322	J	ug/L		119	47 - 130	34	30
Endosulfan sulfate	0.013	U	0.270	0.203		ug/L		75	50 - 139	20	30
Endrin aldehyde	0.013	U	0.270	0.142	J	ug/L		53	49 - 143	36	30
Heptachlor epoxide	0.013	U	0.270	0.398	J	ug/L		147	50 - 130	37	30
Methoxychlor	0.013	U	0.270	0.430	I J	ug/L		159	48 - 144	59	30
4,4'-DDT	0.013	U	0.270	0.0330	I J	ug/L		12	36 - 140	63	24
Aldrin	0.013	U	0.270	0.0396	I J	ug/L		15	25 - 135	0	30
Dieldrin	0.013	U	0.270	0.199		ug/L		74	30 - 146	19	30
Endrin	0.013	U	0.270	0.239		ug/L		88	38 - 140	17	32
gamma-BHC (Lindane)	0.013	U	0.270	0.640	J	ug/L		237	36 - 135	86	34
Heptachlor	0.013	U	0.270	0.126	J	ug/L		47	26 - 131	43	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	*6*	*J*	*20 - 142*
Dibutylchlorendate	*22*	*J*	*25 - 137*
Tetrachloro-m-xylene	*52*		*22 - 134*

Lab Sample ID: 640-44431-3 MSD
Matrix: Water
Analysis Batch: 103528

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103459

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.25	U	6.76	3.87		ug/L		57	15 - 139	10	38
PCB-1260	0.13	U	6.76	1.01	J	ug/L		15	24 - 154	10	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	*18*	*J*	*20 - 142*
Dibutylchlorendate	*25*		*25 - 137*
Tetrachloro-m-xylene	*30*		*22 - 134*

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique

Lab Sample ID: MB 640-103341/1-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 103341

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethoate	0.32	U	2.0	0.32	ug/L		07/29/13 17:00	07/31/13 18:41	1
Disulfoton	0.12	U	2.0	0.12	ug/L		07/29/13 17:00	07/31/13 18:41	1
Famphur	0.11	U	2.0	0.11	ug/L		07/29/13 17:00	07/31/13 18:41	1
Methyl parathion	0.12	U	0.50	0.12	ug/L		07/29/13 17:00	07/31/13 18:41	1
Ethyl Parathion	0.080	U	1.0	0.080	ug/L		07/29/13 17:00	07/31/13 18:41	1
Phorate	0.16	U	1.0	0.16	ug/L		07/29/13 17:00	07/31/13 18:41	1
Thionazin	0.061	U	1.0	0.061	ug/L		07/29/13 17:00	07/31/13 18:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Triphenylphosphate (TPP)	*96*		*37 - 139*	*07/29/13 17:00*	*07/31/13 18:41*	*1*

Lab Sample ID: LCS 640-103341/2-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Famphur			2.50	2.47		ug/L		99	50 - 130		
Methyl parathion			2.50	2.64		ug/L		106	43 - 140		
Ethyl Parathion			2.50	2.99		ug/L		120	49 - 134		
Phorate			2.50	2.34		ug/L		94	50 - 130		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate (TPP)			*100*		*37 - 139*

Lab Sample ID: LCS 640-103341/6-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 103341

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dimethoate			1.00	0.648	I	ug/L		65	50 - 130		
Disulfoton			1.00	0.849	I	ug/L		85	50 - 130		
Thionazin			1.00	0.879	I	ug/L		88	47 - 134		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
Triphenylphosphate (TPP)			*97*		*37 - 139*

Lab Sample ID: LCSD 640-103341/3-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Famphur			2.50	2.53		ug/L		101	50 - 130	2	30
Methyl parathion			2.50	2.59		ug/L		104	43 - 140	2	30
Ethyl Parathion			2.50	2.89		ug/L		116	49 - 134	3	30
Phorate			2.50	2.20		ug/L		88	50 - 130	6	30

Method: 8141B - Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique (Continued)

Lab Sample ID: LCSD 640-103341/3-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103341

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Triphenylphosphate (TPP)	*98*		*37 - 139*

Lab Sample ID: LCSD 640-103341/7-A
Matrix: Water
Analysis Batch: 103479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 103341

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dimethoate			1.00	0.855	I	ug/L		86	50 - 130	28	30
Disulfoton			1.00	0.942	I	ug/L		94	50 - 130	10	30
Thionazin			1.00	0.979	I	ug/L		98	47 - 134	11	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Triphenylphosphate (TPP)	*98*		*37 - 139*

Lab Sample ID: 640-44431-3 MS
Matrix: Water
Analysis Batch: 103479

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethoate	0.32	U	1.00	0.674	I	ug/L		67	50 - 130
Disulfoton	0.12	U	1.00	4.05	J	ug/L		405	50 - 130
Thionazin	0.061	U	1.00	1.48		ug/L		148	30 - 155

Surrogate	MS %Recovery	MS Qualifier	Limits
Triphenylphosphate (TPP)	*61*		*37 - 139*

Lab Sample ID: 640-44431-3 MSD
Matrix: Water
Analysis Batch: 103479

Client Sample ID: COMP-1
Prep Type: Total/NA
Prep Batch: 103341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dimethoate	0.32	U	1.00	0.552	I	ug/L		55	50 - 130	20	30
Disulfoton	0.12	U	1.00	3.29	J	ug/L		329	50 - 130	21	30
Thionazin	0.061	U	1.00	1.41		ug/L		141	30 - 155	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Triphenylphosphate (TPP)	*55*		*37 - 139*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 680-286541/17-A
Matrix: Water
Analysis Batch: 286865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286541

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	0.037	U	0.50	0.037	ug/L		07/29/13 08:45	07/30/13 18:38	1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 680-286541/17-A
Matrix: Water
Analysis Batch: 286865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286541

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.062	U	0.50	0.062	ug/L		07/29/13 08:45	07/30/13 18:38	1
Silvex (2,4,5-TP)	0.062	U	0.50	0.062	ug/L		07/29/13 08:45	07/30/13 18:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*97*		*52 - 151*	*07/29/13 08:45*	*07/30/13 18:38*	*1*

Lab Sample ID: LCS 680-286541/18-A
Matrix: Water
Analysis Batch: 286865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286541

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-D	2.00	1.66		ug/L		83	63 - 130
2,4,5-T	2.00	1.44		ug/L		72	59 - 130
Silvex (2,4,5-TP)	2.00	1.43		ug/L		71	64 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*78*		*52 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-287754/70
Matrix: Water
Analysis Batch: 287754

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			08/03/13 20:57	1

Lab Sample ID: LCS 680-287754/35
Matrix: Water
Analysis Batch: 287754

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.96		mg/L		100	90 - 110

Lab Sample ID: LCSD 680-287754/36
Matrix: Water
Analysis Batch: 287754

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	10.0	9.97		mg/L		100	90 - 110	0	30

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-21924/1-A
Matrix: Water
Analysis Batch: 22155

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21924

Analyte	MB Result	MB Qualifier	PQL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	0.17	U	10	0.17	pg/L		07/31/13 12:15	08/02/13 08:55	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*93*		*40 - 135*	*07/31/13 12:15*	*08/02/13 08:55*	*1*

Lab Sample ID: LCS 320-21924/2-A
Matrix: Water
Analysis Batch: 22155

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	204		pg/L		102	72 - 144

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*88*		*40 - 135*

Lab Sample ID: LCSD 320-21924/3-A
Matrix: Water
Analysis Batch: 22155

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD	200	197		pg/L		98	72 - 144	3	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*88*		*40 - 135*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 680-286673/1-A
Matrix: Water
Analysis Batch: 286963

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 286673

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	24	U	50	24	ug/L		07/29/13 16:04	07/30/13 18:51	1
Sodium	0.28	U	1.0	0.28	mg/L		07/29/13 16:04	07/30/13 18:51	1

Lab Sample ID: LCS 680-286673/2-A
Matrix: Water
Analysis Batch: 286963

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	5000	5000		ug/L		100	75 - 125
Sodium	5.00	4.84		mg/L		97	75 - 125

Lab Sample ID: LCSD 680-286673/3-A
Matrix: Water
Analysis Batch: 286963

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 286673

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	5000	5290		ug/L		106	75 - 125	6	20

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

Lab Sample ID: LCSD 680-286673/3-A
Matrix: Water
Analysis Batch: 286963

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 286673

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	5.00	4.72		mg/L		94	75 - 125	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-286672/1-A
Matrix: Water
Analysis Batch: 287467

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3	U	5.0	2.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Arsenic	1.3	U	2.5	1.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Barium	1.3	U	5.0	1.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Beryllium	0.25	U	0.50	0.25	ug/L		07/29/13 16:04	07/31/13 10:55	1
Cadmium	0.095	U	0.50	0.095	ug/L		07/29/13 16:04	07/31/13 10:55	1
Chromium	2.5	U	5.0	2.5	ug/L		07/29/13 16:04	07/31/13 10:55	1
Cobalt	0.15	U	0.50	0.15	ug/L		07/29/13 16:04	07/31/13 10:55	1
Copper	1.1	U	5.0	1.1	ug/L		07/29/13 16:04	07/31/13 10:55	1
Lead	0.20	U	1.5	0.20	ug/L		07/29/13 16:04	07/31/13 10:55	1
Nickel	2.0	U	5.0	2.0	ug/L		07/29/13 16:04	07/31/13 10:55	1
Selenium	1.0	U	2.5	1.0	ug/L		07/29/13 16:04	07/31/13 10:55	1
Silver	0.25	U	1.0	0.25	ug/L		07/29/13 16:04	07/31/13 10:55	1
Thallium	0.50	U	1.0	0.50	ug/L		07/29/13 16:04	07/31/13 10:55	1
Tin	1.3	U	5.0	1.3	ug/L		07/29/13 16:04	07/31/13 10:55	1
Vanadium	3.8	U	10	3.8	ug/L		07/29/13 16:04	07/31/13 10:55	1
Zinc	8.3	U	20	8.3	ug/L		07/29/13 16:04	07/31/13 10:55	1

Lab Sample ID: LCS 680-286672/2-A
Matrix: Water
Analysis Batch: 287467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	53.9		ug/L		108	75 - 125
Arsenic	100	102		ug/L		102	75 - 125
Barium	100	102		ug/L		102	75 - 125
Beryllium	50.0	51.0		ug/L		102	75 - 125
Cadmium	50.0	50.7		ug/L		101	75 - 125
Chromium	100	101		ug/L		101	75 - 125
Cobalt	50.0	48.4		ug/L		97	75 - 125
Copper	100	100		ug/L		100	75 - 125
Lead	50.0	49.6		ug/L		99	75 - 125
Nickel	100	98.7		ug/L		99	75 - 125
Selenium	100	101		ug/L		101	75 - 125
Silver	50.0	52.3		ug/L		105	75 - 125
Thallium	40.0	40.6		ug/L		101	75 - 125
Tin	200	200		ug/L		100	75 - 125
Vanadium	100	96.0		ug/L		96	75 - 125
Zinc	100	96.3		ug/L		96	75 - 125

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

Lab Sample ID: LCSD 680-286672/3-A
Matrix: Water
Analysis Batch: 287467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 286672

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	50.0	55.8		ug/L		112	75 - 125	3	20
Arsenic	100	105		ug/L		105	75 - 125	3	20
Barium	100	104		ug/L		104	75 - 125	2	20
Beryllium	50.0	52.1		ug/L		104	75 - 125	2	20
Cadmium	50.0	51.8		ug/L		104	75 - 125	2	20
Chromium	100	103		ug/L		103	75 - 125	2	20
Cobalt	50.0	49.1		ug/L		98	75 - 125	1	20
Copper	100	103		ug/L		103	75 - 125	3	20
Lead	50.0	50.9		ug/L		102	75 - 125	3	20
Nickel	100	103		ug/L		103	75 - 125	4	20
Selenium	100	102		ug/L		102	75 - 125	1	20
Silver	50.0	53.8		ug/L		108	75 - 125	3	20
Thallium	40.0	41.2		ug/L		103	75 - 125	1	20
Tin	200	204		ug/L		102	75 - 125	2	20
Vanadium	100	99.1		ug/L		99	75 - 125	3	20
Zinc	100	97.4		ug/L		97	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-286433/1-A
Matrix: Water
Analysis Batch: 286834

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286433

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091	U	0.20	0.091	ug/L		07/27/13 08:35	07/29/13 19:20	1

Lab Sample ID: LCS 680-286433/2-A
Matrix: Water
Analysis Batch: 286834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.58		ug/L		103	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-286965/9
Matrix: Water
Analysis Batch: 286965

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	0.026	U	0.050	0.026	mg/L			07/30/13 18:00	1

Lab Sample ID: LCS 680-286965/8
Matrix: Water
Analysis Batch: 286965

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)	1.00	0.970		mg/L		97	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-286469/13
Matrix: Water
Analysis Batch: 286469

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.010	U	0.050	0.010	mg/L			07/27/13 10:41	1

Lab Sample ID: LCS 680-286469/14
Matrix: Water
Analysis Batch: 286469

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	0.997	1.00		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-286469/42
Matrix: Water
Analysis Batch: 286469

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	0.997	0.995		mg/L		100	90 - 110	1	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-287647/5
Matrix: Water
Analysis Batch: 287647

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			08/02/13 18:13	1

Lab Sample ID: LCS 680-287647/6
Matrix: Water
Analysis Batch: 287647

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	250	241		mg/L		96	80 - 120

Lab Sample ID: LCSD 680-287647/33
Matrix: Water
Analysis Batch: 287647

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
Alkalinity as CaCO3	250	235		mg/L		94	80 - 120	3	30

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

Lab Sample ID: MB 660-139915/1
Matrix: Water
Analysis Batch: 139915

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			07/30/13 17:33	1

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

Lab Sample ID: LCS 660-139915/2
Matrix: Water
Analysis Batch: 139915

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	10000	9990		mg/L		100	80 - 120

Method: SM 4500 CN E - Cyanide, Total

Lab Sample ID: MB 680-286549/1-A
Matrix: Water
Analysis Batch: 286626

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 286549

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0025	U	0.010	0.0025	mg/L		07/29/13 08:30	07/29/13 12:33	1

Lab Sample ID: LCS 680-286549/2-A
Matrix: Water
Analysis Batch: 286626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 286549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0502		mg/L		100	90 - 110

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 680-286577/1
Matrix: Water
Analysis Batch: 286577

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	1.0	mg/L			07/29/13 10:10	1

Lab Sample ID: LCS 680-286577/2
Matrix: Water
Analysis Batch: 286577

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	11.3		mg/L		113	75 - 125

Lab Sample ID: LCSD 680-286577/3
Matrix: Water
Analysis Batch: 286577

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
Sulfide	10.0	9.74		mg/L		97	75 - 125	15	30

Lab Sample ID: 640-44431-3 DU
Matrix: Water
Analysis Batch: 286577

Client Sample ID: COMP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	15		17.1		mg/L		15	30

GC/MS VOA

Analysis Batch: 103400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8260C	
640-44431-4	Trip Blank 05	Total/NA	Water	8260C	
LCS 640-103400/7	Lab Control Sample	Total/NA	Water	8260C	
LCSD 640-103400/3	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 640-103400/4	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 103337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	3520C	
LCS 640-103337/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 640-103337/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 640-103337/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 103531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8270D	103337
LCS 640-103337/2-A	Lab Control Sample	Total/NA	Water	8270D	103337
LCSD 640-103337/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	103337
MB 640-103337/1-A	Method Blank	Total/NA	Water	8270D	103337

GC Semi VOA

Prep Batch: 103338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8011	
LCS 640-103338/4-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 640-103338/5-A	Lab Control Sample Dup	Total/NA	Water	8011	
MB 640-103338/3-A	Method Blank	Total/NA	Water	8011	

Prep Batch: 103341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	3520C	
640-44431-3 MS	COMP-1	Total/NA	Water	3520C	
640-44431-3 MSD	COMP-1	Total/NA	Water	3520C	
LCS 640-103341/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 640-103341/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 640-103341/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 640-103341/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 640-103341/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 103438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8011	103338
LCS 640-103338/4-A	Lab Control Sample	Total/NA	Water	8011	103338
LCSD 640-103338/5-A	Lab Control Sample Dup	Total/NA	Water	8011	103338
MB 640-103338/3-A	Method Blank	Total/NA	Water	8011	103338

GC Semi VOA (Continued)

Prep Batch: 103459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	3511	
640-44431-3 MS	COMP-1	Total/NA	Water	3511	
640-44431-3 MS	COMP-1	Total/NA	Water	3511	
640-44431-3 MSD	COMP-1	Total/NA	Water	3511	
640-44431-3 MSD	COMP-1	Total/NA	Water	3511	
LCS 640-103459/2-A	Lab Control Sample	Total/NA	Water	3511	
LCS 640-103459/6-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 640-103459/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
LCSD 640-103459/7-A	Lab Control Sample Dup	Total/NA	Water	3511	
MB 640-103459/1-A	Method Blank	Total/NA	Water	3511	

Analysis Batch: 103479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8141B	103341
640-44431-3 MS	COMP-1	Total/NA	Water	8141B	103341
640-44431-3 MSD	COMP-1	Total/NA	Water	8141B	103341
LCS 640-103341/2-A	Lab Control Sample	Total/NA	Water	8141B	103341
LCS 640-103341/6-A	Lab Control Sample	Total/NA	Water	8141B	103341
LCSD 640-103341/3-A	Lab Control Sample Dup	Total/NA	Water	8141B	103341
LCSD 640-103341/7-A	Lab Control Sample Dup	Total/NA	Water	8141B	103341
MB 640-103341/1-A	Method Blank	Total/NA	Water	8141B	103341

Analysis Batch: 103528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8081B/8082A	103459
640-44431-3 MS	COMP-1	Total/NA	Water	8081B/8082A	103459
640-44431-3 MS	COMP-1	Total/NA	Water	8081B/8082A	103459
640-44431-3 MSD	COMP-1	Total/NA	Water	8081B/8082A	103459
640-44431-3 MSD	COMP-1	Total/NA	Water	8081B/8082A	103459
LCS 640-103459/2-A	Lab Control Sample	Total/NA	Water	8081B/8082A	103459
LCS 640-103459/6-A	Lab Control Sample	Total/NA	Water	8081B/8082A	103459
LCSD 640-103459/3-A	Lab Control Sample Dup	Total/NA	Water	8081B/8082A	103459
LCSD 640-103459/7-A	Lab Control Sample Dup	Total/NA	Water	8081B/8082A	103459
MB 640-103459/1-A	Method Blank	Total/NA	Water	8081B/8082A	103459

Prep Batch: 286541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8151A	
LCS 680-286541/18-A	Lab Control Sample	Total/NA	Water	8151A	
MB 680-286541/17-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 286865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-286541/18-A	Lab Control Sample	Total/NA	Water	8151A	286541
MB 680-286541/17-A	Method Blank	Total/NA	Water	8151A	286541

Analysis Batch: 286868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8151A	286541

HPLC/IC

Analysis Batch: 287754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	300.0	
LCS 680-287754/35	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-287754/36	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-287754/70	Method Blank	Total/NA	Water	300.0	

Specialty Organics

Prep Batch: 21924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8290	
LCS 320-21924/2-A	Lab Control Sample	Total/NA	Water	8290	
LCSD 320-21924/3-A	Lab Control Sample Dup	Total/NA	Water	8290	
MB 320-21924/1-A	Method Blank	Total/NA	Water	8290	

Analysis Batch: 22155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	8290	21924
LCS 320-21924/2-A	Lab Control Sample	Total/NA	Water	8290	21924
LCSD 320-21924/3-A	Lab Control Sample Dup	Total/NA	Water	8290	21924
MB 320-21924/1-A	Method Blank	Total/NA	Water	8290	21924

Metals

Prep Batch: 286433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	7470A	
LCS 680-286433/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-286433/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 286672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total Recoverable	Water	3005A	
LCS 680-286672/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-286672/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 680-286672/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 286673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total Recoverable	Water	3005A	
LCS 680-286673/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-286673/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 680-286673/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 286834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	7470A	286433
LCS 680-286433/2-A	Lab Control Sample	Total/NA	Water	7470A	286433
MB 680-286433/1-A	Method Blank	Total/NA	Water	7470A	286433

Metals (Continued)

Analysis Batch: 286963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total Recoverable	Water	6010B	286673
LCS 680-286673/2-A	Lab Control Sample	Total Recoverable	Water	6010B	286673
LCSD 680-286673/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	286673
MB 680-286673/1-A	Method Blank	Total Recoverable	Water	6010B	286673

Analysis Batch: 287225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total Recoverable	Water	6010B	286673

Analysis Batch: 287467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total Recoverable	Water	6020	286672
LCS 680-286672/2-A	Lab Control Sample	Total Recoverable	Water	6020	286672
LCSD 680-286672/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020	286672
MB 680-286672/1-A	Method Blank	Total Recoverable	Water	6020	286672

General Chemistry

Analysis Batch: 103562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	Nitrate by calc	

Analysis Batch: 139915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	SM 2540C	
LCS 660-139915/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-139915/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 286469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	353.2	
LCS 680-286469/14	Lab Control Sample	Total/NA	Water	353.2	
LCSD 680-286469/42	Lab Control Sample Dup	Total/NA	Water	353.2	
MB 680-286469/13	Method Blank	Total/NA	Water	353.2	

Prep Batch: 286549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	Distill/CN	
LCS 680-286549/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	
MB 680-286549/1-A	Method Blank	Total/NA	Water	Distill/CN	

Analysis Batch: 286577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	SM 4500 S2 F	
640-44431-3 DU	COMP-1	Total/NA	Water	SM 4500 S2 F	
LCS 680-286577/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCSD 680-286577/3	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 F	
MB 680-286577/1	Method Blank	Total/NA	Water	SM 4500 S2 F	

General Chemistry (Continued)

Analysis Batch: 286626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	SM 4500 CN E	286549
LCS 680-286549/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN E	286549
MB 680-286549/1-A	Method Blank	Total/NA	Water	SM 4500 CN E	286549

Analysis Batch: 286965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	350.1	
LCS 680-286965/8	Lab Control Sample	Total/NA	Water	350.1	
MB 680-286965/9	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 287647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	SM 2320B	
LCS 680-287647/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-287647/33	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-287647/5	Method Blank	Total/NA	Water	SM 2320B	

Field Service / Mobile Lab

Analysis Batch: 103372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44431-3	COMP-1	Total/NA	Water	Field Sampling	

Client Sample ID: COMP-1

Lab Sample ID: 640-44431-3

Date Collected: 07/24/13 09:55

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	103400	07/29/13 17:17	LKS	TAL TAL
Total/NA	Prep	3520C			103337	07/25/13 13:07	JCS	TAL TAL
Total/NA	Analysis	8270D		10	103531	08/01/13 17:21	VHW	TAL TAL
Total/NA	Prep	8011			103338	07/25/13 13:17	AMR	TAL TAL
Total/NA	Analysis	8011		1	103438	07/30/13 17:20	AMR	TAL TAL
Total/NA	Prep	3520C			103341	07/29/13 17:00	JCS	TAL TAL
Total/NA	Analysis	8141B		1	103479	08/01/13 00:11	MLT	TAL TAL
Total/NA	Analysis	8081B/8082A		1	103528	08/01/13 16:09	MLT	TAL TAL
Total/NA	Prep	3511			103459	07/31/13 10:41	JCS	TAL TAL
Total/NA	Prep	8151A			286541	07/29/13 08:45	CTR	TAL SAV
Total/NA	Analysis	8151A		100	286868	07/31/13 02:09	JEM	TAL SAV
Total/NA	Analysis	300.0		100	287754	08/04/13 02:20	PAT	TAL SAV
Total/NA	Prep	8290			21924	07/31/13 12:15	CCC	TAL SAC
Total/NA	Analysis	8290		1	22155	08/02/13 04:31	MEG	TAL SAC
Total/NA	Prep	7470A			286433	07/27/13 08:35	DAS	TAL SAV
Total/NA	Analysis	7470A		1	286834	07/29/13 20:23	BCB	TAL SAV
Total Recoverable	Prep	3005A			286673	07/29/13 16:04	BJB	TAL SAV
Total Recoverable	Analysis	6010B		1	286963	07/30/13 19:05	BCB	TAL SAV
Total Recoverable	Analysis	6010B		10	287225	07/31/13 15:26	BCB	TAL SAV
Total Recoverable	Prep	3005A			286672	07/29/13 16:04	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	287467	07/31/13 12:18	BWR	TAL SAV
Total/NA	Analysis	Nitrate by calc		1	103562	08/05/13 08:00	TJW	TAL TAL
Total/NA	Analysis	SM 2540C		1	139915	07/30/13 17:33	TKO	TAL TAM
Total/NA	Analysis	353.2		1	286469	07/27/13 10:57	CRW	TAL SAV
Total/NA	Analysis	SM 4500 S2 F		1	286577	07/29/13 10:10	TF1	TAL SAV
Total/NA	Prep	Distill/CN			286549	07/29/13 08:30	DAM	TAL SAV
Total/NA	Analysis	SM 4500 CN E		1	286626	07/29/13 12:46	DAM	TAL SAV
Total/NA	Analysis	350.1		1000	286965	07/31/13 09:48	JME	TAL SAV
Total/NA	Analysis	SM 2320B		5	287647	08/02/13 19:02	TAR	TAL SAV
Total/NA	Analysis	Field Sampling		1	103372	07/24/13 09:55	FDS	TAL TAL

Client Sample ID: Trip Blank 05

Lab Sample ID: 640-44431-4

Date Collected: 07/24/13 09:55

Matrix: Water

Date Received: 07/25/13 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	103400	07/29/13 10:41	LKS	TAL TAL

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14
New Jersey	NELAP	2	FL012	06-30-14
Texas	NELAP	6	T104704459-11-2	03-31-14
USDA	Federal		P330-08-00158	08-05-14

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-14
Arkansas DEQ	State Program	6	88-0691	07-30-13 *
California	NELAP	9	1119CA	01-31-14
Colorado	State Program	8	N/A	08-31-13
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-14
Guam	State Program	9	N/A	08-31-13
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Michigan	State Program	5	9947	01-31-14
Nebraska	State Program	7	NE-OS-22-13	01-31-14
New Jersey	NELAP	2	CA005	06-30-14
New York	NELAP	2	11666	04-01-14
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14
Pennsylvania	NELAP	3	68-01272	03-31-14
South Carolina	State Program	4	87014	06-30-14
Texas	NELAP	6	T104704399-08-TX	05-31-14
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14
Washington	State Program	10	C581	05-05-14
West Virginia	State Program	3	9930C	12-31-13
Wyoming	State Program	8	8TMS-Q	01-31-14

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-13 *
Arkansas DEQ	State Program	6	88-0692	02-01-14 *
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-13
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-14
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13 *
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	09-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13 *

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-14
Florida	NELAP	4	E84282	06-30-14
Georgia	State Program	4	905	06-30-13 *
USDA	Federal		P330-11-00177	04-20-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL TAL
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL TAL
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL TAL
8081B/8082A	Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography	SW846	TAL TAL
8141B	Organophosphorous Compounds by Gas Chromatography, Capillary Column Technique	SW846	TAL TAL
8151A	Herbicides (GC)	SW846	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
8290	Dioxins and Furans (HRGC/HRMS)	SW846	TAL SAC
6010B	Metals (ICP)	SW846	TAL SAV
6020	Metals (ICP/MS)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL TAL
SM 2320B	Alkalinity	SM	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 4500 CN E	Cyanide, Total	SM	TAL SAV
SM 4500 S2 F	Sulfide, Total	SM	TAL SAV
Field Sampling	Field Sampling	EPA	TAL TAL

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 SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44431-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-44431-3	COMP-1	Water	07/24/13 09:55	07/25/13 08:00
640-44431-4	Trip Blank 05	Water	07/24/13 09:55	07/25/13 08:00

TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Phone (850) 878-3994 Fax (850) 878-9504

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/13/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):	COC No: 640-40348-7750.1
Client Contact: Mr. Mike Smilley	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com		Page: Page 1 of 2
Company: Golder Associates Inc.				Job #: 640-44431
Address: 3730 Chamblee Tucker Road	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30341				
Phone: 770-492-8105(Tel)	PO #: PO105298:4			
Email: michael_smilley@golder.com	WO #:			
Project Name: Trail Ridge Landfill - Leachate Event Desc: Annual Leachate	Project #: 64005280			
Site: Florida	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)	350.1 - Ammonia	2320B, SM4500_NO2_B	8141B - App II OP Pests	8270D - Appendix II SVOCs	2540C - Total Dissolved Solids	8011 - EDB, DBCP	8260C - App II VOCs	353.2 - Nitrate Nitrite as N	300.0_28D - Chloride	6020 - 7470A-App II Metals + Na,Fe,Hg	8151A - App II Herbicides	SM4500_S2_F - Sulfide	4500_CN_E - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				S	N	N	N	N	R	N	S	N	D	N	CB	B		
LCS	7-24	0955	C	W	N		1	2	4	2	1	3	3	1	1	1	2	2	1		
LDSS	9-24	—																			INSUFFICIENT
TRIP													✓								LIQUID - NO SAMPLE

640-44431 Chain of Custody

Page 54 of 56

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		7-24-13 1300	PROJECT		7/24/13 1304	
2		7/24/13 1700			7/25/13 0800	TAT
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.8°C

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: LCS	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA	PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA		TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	OD
0955	NA	NA	NA	NA	7.79	25.6	18810	0.1	262.6	-260	BLACK	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.8
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.0

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Speci

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PAD-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA	TUBING Y N (replaced)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
Sheen Present: (YES) NO LCS - LEACHATE SAMPLE COMPOSIT OF TANKS #1 - #5

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAILRIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: LDSS	SAMPLE ID:		DATE: 7-24-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA		PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA		

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA		TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1035	NA	NA	NA	NA								
		INSUFFICIENT LIQUIDS IN TANK #6 FOR SAMPLING.										
		NO LIQUIDS AT SAMPLE PORT.										
		NO SAMPLE COLLECTED										

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
*	SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET								

REMARKS:
Sheen Present: YES NO LDSS – LEACHATE SAMPLE FROM TANK #6

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tallahassee
2846 Industrial Plaza Drive
Tallahassee, FL 32301
Tel: (850)878-3994

TestAmerica Job ID: 640-44914-1
Client Project/Site: Trail Ridge Landfill
Sampling Event: Semi-Annual Surface Water

For:
Golder Associates Inc.
3730 Chamblee Tucker Road
Atlanta, Georgia 30341

Attn: Mr. Mike Smilley

Noël Savoie

Authorized for release by:
9/18/2013 10:49:33 AM
Noel Savoie, Project Manager I
noel.savoie@testamericainc.com

Designee for

Amy Marks, Project Manager II
amy.marks@testamericainc.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC and 2009 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

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 640-44914-1

Laboratory: TestAmerica Tallahassee

Narrative

Job Narrative
640-44914-1

Comments
No additional comments.

Receipt
The samples were received on 9/4/2013 at 9:10 AM. The samples arrived in good condition, properly preserved, and on ice. The temperature of the cooler at receipt was 3.6º C.

Metals
No analytical or quality issues were noted.

Field Service / Mobile Lab
Field data collected and provided by Professional Technical Services.

Subcontract Work
Method SM 9222D - Fecal Coliform: This method was subcontracted to Diversified Environmental Laboratories. Their report is attached in full as received by TestAmerica.

Detection Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Client Sample ID: SW-1 — Lab Sample ID: 640-44914-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3000		100	33	ug/L	1		6020	Total Recoverable
Lead	2.5		1.5	0.20	ug/L	1		6020	Total Recoverable
Hardness as calcium carbonate	10		3.3	3.3	mg/L	1		SM 2340B	Total/NA
Color	Yellow Tint				PCU	1		Field Sampling	Total/NA
Field pH	3.93				SU	1		Field Sampling	Total/NA
Field Temperature	24.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.4				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	87				umhos/cm	1		Field Sampling	Total/NA
Turbidity	9.13				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-2 — Lab Sample ID: 640-44914-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.62		0.50	0.25	ug/L	1		6020	Total Recoverable
Iron	580		100	33	ug/L	1		6020	Total Recoverable
Color	Yellow Tint				PCU	1		Field Sampling	Total/NA
Field pH	3.81				SU	1		Field Sampling	Total/NA
Field Temperature	23.5				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.3				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	86				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.23				NTU	1		Field Sampling	Total/NA

Client Sample ID: SW-3 — Lab Sample ID: 640-44914-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	2.5	I	5.0	1.1	ug/L	1		6020	Total Recoverable
Hardness as calcium carbonate	150		3.3	3.3	mg/L	1		SM 2340B	Total/NA
Color	Brown				PCU	1		Field Sampling	Total/NA
Field pH	7.18				SU	1		Field Sampling	Total/NA
Field Temperature	28.3				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.0				mg/L	1		Field Sampling	Total/NA
Sheen	None				NONE	1		Field Sampling	Total/NA
Specific Conductance	332				umhos/cm	1		Field Sampling	Total/NA
Turbidity	87.13				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Client Sample ID: SW-1
Date Collected: 09/03/13 11:50
Date Received: 09/04/13 09:10

Lab Sample ID: 640-44914-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3000		100	33	ug/L		09/05/13 13:42	09/07/13 06:14	1
Lead	2.5		1.5	0.20	ug/L		09/05/13 13:42	09/07/13 06:14	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	10		3.3	3.3	mg/L			09/07/13 06:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	Yellow Tint				PCU			09/03/13 11:50	1
Field pH	3.93				SU			09/03/13 11:50	1
Field Temperature	24.5				Degrees C			09/03/13 11:50	1
Oxygen, Dissolved	5.4				mg/L			09/03/13 11:50	1
Sheen	None				NONE			09/03/13 11:50	1
Specific Conductance	87				umhos/cm			09/03/13 11:50	1
Turbidity	9.13				NTU			09/03/13 11:50	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Client Sample ID: SW-2
Date Collected: 09/03/13 12:15
Date Received: 09/04/13 09:10

Lab Sample ID: 640-44914-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.62		0.50	0.25	ug/L		09/05/13 13:42	09/07/13 06:21	1
Iron	580		100	33	ug/L		09/05/13 13:42	09/07/13 06:21	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	Yellow Tint				PCU			09/03/13 12:15	1
Field pH	3.81				SU			09/03/13 12:15	1
Field Temperature	23.5				Degrees C			09/03/13 12:15	1
Oxygen, Dissolved	5.3				mg/L			09/03/13 12:15	1
Sheen	None				NONE			09/03/13 12:15	1
Specific Conductance	86				umhos/cm			09/03/13 12:15	1
Turbidity	5.23				NTU			09/03/13 12:15	1

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Client Sample ID: SW-3
Date Collected: 09/03/13 11:20
Date Received: 09/04/13 09:10

Lab Sample ID: 640-44914-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.095	U	0.50	0.095	ug/L		09/05/13 13:42	09/07/13 06:29	1
Copper	**2.5**	**I**	5.0	1.1	ug/L		09/05/13 13:42	09/07/13 06:29	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**150**		3.3	3.3	mg/L			09/07/13 06:29	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Color	**Brown**				PCU			09/03/13 11:20	1
Field pH	**7.18**				SU			09/03/13 11:20	1
Field Temperature	**28.3**				Degrees C			09/03/13 11:20	1
Oxygen, Dissolved	**5.0**				mg/L			09/03/13 11:20	1
Sheen	**None**				NONE			09/03/13 11:20	1
Specific Conductance	**332**				umhos/cm			09/03/13 11:20	1
Turbidity	**87.13**				NTU			09/03/13 11:20	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-292353/1-A
Matrix: Water
Analysis Batch: 292813

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 292353

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.25	U	0.50	0.25	ug/L		09/05/13 13:42	09/07/13 02:53	1
Cadmium	0.095	U	0.50	0.095	ug/L		09/05/13 13:42	09/07/13 02:53	1
Copper	1.1	U	5.0	1.1	ug/L		09/05/13 13:42	09/07/13 02:53	1
Iron	33	U	100	33	ug/L		09/05/13 13:42	09/07/13 02:53	1
Lead	0.20	U	1.5	0.20	ug/L		09/05/13 13:42	09/07/13 02:53	1

Lab Sample ID: LCS 680-292353/2-A
Matrix: Water
Analysis Batch: 292813

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 292353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50.0	45.8		ug/L		92	75 - 125
Cadmium	50.0	47.9		ug/L		96	75 - 125
Copper	100	102		ug/L		102	75 - 125
Iron	5000	5180		ug/L		104	75 - 125
Lead	50.0	48.9		ug/L		98	75 - 125
Calcium	5.00	5.20		mg/L		104	75 - 125
Magnesium	5.00	4.93		mg/L		99	75 - 125

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Lab Sample ID: MB 680-293705/1
Matrix: Water
Analysis Batch: 293705

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	3.3	U	3.3	3.3	mg/L			09/07/13 02:53	1

Metals

Prep Batch: 292353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44914-1	SW-1	Total Recoverable	Water	3005A	
640-44914-2	SW-2	Total Recoverable	Water	3005A	
640-44914-3	SW-3	Total Recoverable	Water	3005A	
LCS 680-292353/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 680-292353/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 292813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44914-1	SW-1	Total Recoverable	Water	6020	292353
640-44914-2	SW-2	Total Recoverable	Water	6020	292353
640-44914-3	SW-3	Total Recoverable	Water	6020	292353
LCS 680-292353/2-A	Lab Control Sample	Total Recoverable	Water	6020	292353
MB 680-292353/1-A	Method Blank	Total Recoverable	Water	6020	292353

Analysis Batch: 293705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44914-1	SW-1	Total/NA	Water	SM 2340B	
640-44914-3	SW-3	Total/NA	Water	SM 2340B	
MB 680-293705/1	Method Blank	Total/NA	Water	SM 2340B	

Field Service / Mobile Lab

Analysis Batch: 104271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-44914-1	SW-1	Total/NA	Water	Field Sampling	
640-44914-2	SW-2	Total/NA	Water	Field Sampling	
640-44914-3	SW-3	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Client Sample ID: SW-1

Lab Sample ID: 640-44914-1

Date Collected: 09/03/13 11:50

Matrix: Water

Date Received: 09/04/13 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			292353	09/05/13 13:42	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	292813	09/07/13 06:14	CME	TAL SAV
Total/NA	Analysis	SM 2340B		1	293705	09/07/13 06:14	BCB	TAL SAV
Total/NA	Analysis	Field Sampling		1	104271	09/03/13 11:50	FDS	TAL TAL

Client Sample ID: SW-2

Lab Sample ID: 640-44914-2

Date Collected: 09/03/13 12:15

Matrix: Water

Date Received: 09/04/13 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			292353	09/05/13 13:42	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	292813	09/07/13 06:21	CME	TAL SAV
Total/NA	Analysis	Field Sampling		1	104271	09/03/13 12:15	FDS	TAL TAL

Client Sample ID: SW-3

Lab Sample ID: 640-44914-3

Date Collected: 09/03/13 11:20

Matrix: Water

Date Received: 09/04/13 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			292353	09/05/13 13:42	BJB	TAL SAV
Total Recoverable	Analysis	6020		1	292813	09/07/13 06:29	CME	TAL SAV
Total/NA	Analysis	SM 2340B		1	293705	09/07/13 06:29	BCB	TAL SAV
Total/NA	Analysis	Field Sampling		1	104271	09/03/13 11:20	FDS	TAL TAL

Laboratory References:

= Diversified Environmental Laboratories, 3653 Regent Blvd. Suite 509, Jacksonville, FL 32224

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Laboratory: TestAmerica Tallahassee

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E81005	06-30-14
Georgia	State Program	4	N/A	06-30-08 *
Georgia	State Program	4	835	06-30-09 *
Georgia	State Program	4		06-30-14
Louisiana	NELAP	6	30663	06-30-14
New Jersey	NELAP	2	FL012	06-30-14
Texas	NELAP	6	T104704459-11-2	03-31-14
USDA	Federal		P330-08-00158	08-05-14

Laboratory: Diversified Environmental Laboratories

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
N/A	N/A	N/A	None on record.	

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	07-31-14
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-14
Arkansas DEQ	State Program	6	88-0692	02-01-14 *
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-14
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-14
Georgia	State Program	4	803	06-30-14
Guam	State Program	9	09-005r	06-17-14
Hawaii	State Program	9	N/A	06-30-14
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-14
Iowa	State Program	7	353	07-01-15
Kentucky	State Program	4	90084	12-31-13
Kentucky (UST)	State Program	4	18	06-30-14
Louisiana	NELAP	6	30690	06-30-14
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-14
Michigan	State Program	5	9925	06-30-14
Mississippi	State Program	4	N/A	06-30-14
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-14
New Jersey	NELAP	2	GA769	06-30-14
New Mexico	State Program	6	N/A	06-30-14
New York	NELAP	2	10842	04-01-14
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9984	08-31-13 *
Pennsylvania	NELAP	3	68-00474	06-30-14
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13 *
Tennessee	State Program	4	TN02961	06-30-14
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-14
Washington	State Program	10	C1794	06-10-14
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	09-30-13 *
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAV
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL SAV
Field Sampling	Field Sampling	EPA	TAL TAL
9222D Fecal Coliform (Diversified)	SM 9222D Fecal Coliform by MF	NONE	

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:

= Diversified Environmental Laboratories, 3653 Regent Blvd. Suite 509, Jacksonville, FL 32224

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994

Sample Summary

Client: Golder Associates Inc.
Project/Site: Trail Ridge Landfill

TestAmerica Job ID: 640-44914-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
640-44914-1	SW-1	Water	09/03/13 11:50	09/04/13 09:10
640-44914-2	SW-2	Water	09/03/13 12:15	09/04/13 09:10
640-44914-3	SW-3	Water	09/03/13 11:20	09/04/13 09:10

Diversified Environmental Laboratories, Inc.

Amy Marks
Test America
2846 Industrial Plaza Dr
Tallahassee, FL 32301

September 6, 2013

Re:
DELI Project Number: **130903.03**
Client Project Description: **Trail Ridge Landfill**
Client PO Number:

Dear Ms. Marks:

Enclosed is the report of laboratory analysis for the following samples:

Sample Number	Sample Description	Date/Time Collected	Date/Time Received
25319	SW-2	09/03/13 12:15	09/03/13 14:14

If you have any questions or comments concerning this laboratory report, please do not hesitate to contact us.

Sincerely,

Franklin A. Risk, Jr.
Laboratory Director

Enclosures

This laboratory report consists of a cover page, case narrative page and report page. There may be multiple pages of each. The pages are numbered accordingly. The report may also contain chain of custody forms, project log in forms, QA/QC reports and client worksheets if applicable. The results herein relate only to the items tested or to the samples as received by the laboratory. The report shall not be reproduced except in full, without the written approval of the laboratory. All samples will be disposed of within 30 days of receipt, unless a written request to retain the samples longer is received. All samples referenced in this laboratory report are considered to be environmental samples. The case narrative will contain comments and or notes regarding the samples and analyses.

NELAP #E821059

Diversified Environmental Laboratories, Inc.
3653 Regent Boulevard
Suite 509
Jacksonville, FL 32224

Phone 904.807.9625
Fax 904.807.9627
Email info@delilab.com
Website www.delilab.com

Diversified Environmental Laboratories, Inc

Case Narrative

September 6, 2013

Test America
Amy Marks

Re: DELI Project Number: **130903.03**
Client Project Description: **Trail Ridge Landfill**

Enclosed is the case narrative for the above referenced project:

There is nothing to report in the case narrative section of the laboratory report.

Unless otherwise noted and where applicable:
These samples were received at the proper temperature and with the proper preservation. The samples were analyzed as received, unless otherwise noted. All results in the Quality Control section are labeled appropriately. All results meet the requirements of the NELAP standards, unless otherwise noted. Footnotes are given at the end of the report.

Narrative Page 1 of 1

NELAP #E821059

Diversified Environmental Laboratories, Inc.
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Phone 904.807.9625
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Email info@delilab.com
Website www.delilab.com

Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130903.03	Project Description: Trail Ridge Landfill

Report Date: September 6, 2013

DELI Sample Number	25319	Matrix	Non Potable Water
Sample Designation	SW-2	Date/Time Collected	09/03/13 12:15

Parameters	Method	Results	Footnote	Units	DF	MDL	PQL	Prep Date/Time	Analyst	Analysis Date/Time
Coliform, Fecal	SM 9222 D	**108**		cfu/100mL	4	4	4		ADA	09/03/13 14:46

NELAP #E821059

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Website www.delilab.com

Diversified Environmental Laboratories, Inc.

Report of Laboratory Analysis

DELI Project Number	Test America
130903.03	Project Description: Trail Ridge Landfill

Report Date: September 6, 2013

Footnotes

NA	Not Applicable
ND	Not Detected/None Detected

NELAP #E821059

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Diversified Environmental Laboratories Inc.

Quality Control Data

Date Printed: September 6, 2013
QCData for Project Number 130903.03

Batch No: **B5431**
TestCode: **Coli Fec (MF) 9222D**

Associated Samples: 25319

Compound	Blank	LCS Spike	LCS %Rec	LCSD %Rec	RPD %	---QC Limits--- RPD	LCS	MS Spike	MS %Rec	MSD %Rec	RPD %	---QC Limits--- RPD	MS	Dup RPD	Qualifiers
Parent Sample Number															
Coliform, Fecal	<1 U														
Parent Sample Number															
Coliform, Fecal	<1 U														

* Indicates value is outside control limits for %Recovery or greater than acceptance criteria for RPD

Footnotes

U Compound was analyzed for, but not detected.

NELAP #E821059

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TestAmerica Jacksonville
8933 Western Way Suite 1
Jacksonville, FL 32256
Phone (904) 519-9551 Fax (904) 519-9552

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/18/2013

Client Information	Sampler: DAN ARMOUR	Lab PM: Marks, Amy	Carrier Tracking No(s):
Client Contact: Ms. Chris Paul	Phone: 225.907.4060	E-Mail: amy.marks@testamericainc.com	COC No: 640-40889-11017.1
Company: Golder Associates Inc.			Page: Page 1 of 1
Address: 3730 Chamblee Tucker Road	Due Date Requested:	Analysis Requested	Job #: 640-44914
City: Atlanta	TAT Requested (days):		Preservation Codes:
State, Zip: GA, 30341			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)
Phone: 770-492-8105(Tel)	PO #: PO105298:22		
Email: cpaul@golder.com	WO #:		Other:
Project Name: Trail Ridge Landfill	Project #: 64005280		
Site: Florida	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	6020 - Iron, Lead /2340B - Hardness	6020 - Iron, Beryllium	SUBCONTRACT - 9222D Fecal Coliform (Diversified)	6020 - Cadmium, Copper /2340B - Hardness	Total Number of containers	Special Instructions/Note:
			Preservation Code:			D	D	R	D		
SW-1	9-3	1150	G	W	N	1					
SW-2	9-3	1215	G	W	N		1	1			
SW-3	9-3	1120	G	W	N				1		

640-44914 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: 9-3-13 1250	Company: PRO-TECH	Received by:	Date/Time: 9/3/13 1250	Company: TA		
Relinquished by:	Date/Time: 9/3/13 1600	Company: TA	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 09/04/13 0990	Company: TA-SAV		

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6°C

640-

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE | SITE LOCATION: JACKSONVILLE, FL

WELL NO: SW-1 | SAMPLE ID: | DATE: 9-3-13

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
NA	NA		NA	NA

WELL ELEVATION TOC (ft NGVD): NA | GROUNDWATER ELEVATION (ft NGVD): NA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons)
NA	NA	NA	NA	NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1150	NA	NA	NA	NA	3.93	24.5	87	5.4	9.13	178	YELLOW TINT	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FT.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
DAN ARMOUR / PRO-TECH		1150	NR

PUMP OR TUBING DEPTH IN WELL (feet): NA | TUBING MATERIAL CODE: NA | FIELD-FILTERED: Y (N) µm | FILTER SIZE: | Filtration Equipment Type:

FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PE	250	HNO3	-	-	METALS HARD	NA	DIPPER BAILER

REMARKS:

Sheen Present: YES (NO) SW-1 = SURFACE WATER POINT

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-2	SAMPLE ID:		DATE: 9-3-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA	PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA	TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1215	NA	NA	NA	NA	3.81	23.5	86	5.3	5.23	192	YELLOW	TINT

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1215	SAMPLING ENDED AT: NA
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	1	PE	250	HNO3	–	–	METALS	NA	DIPPER BOTTLE
	1	PE/STER	100	NaThio	–	–	FECAL COLIFORM	NA	"

REMARKS:
Sheen Present: YES (NO) SW-2 = SURFACE WATER POINT

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: TRAIL RIDGE		SITE LOCATION: JACKSONVILLE, FL	
WELL NO: SW-3	SAMPLE ID:		DATE: 9-3-13

PURGING DATA

WELL DIAMETER (inches): NA	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA	PURGE PUMP TYPE OR BAILER: NA
WELL ELEVATION TOC (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)

= (feet - feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: NA	PURGING ENDED AT: NA	TOTAL VOLUME PURGED (gallons): NA

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	ORP (mV)	COLOR	ODOR
1120	NA	NA	NA	NA	7.18	28.3	332	5.0	87.13	48	BROWN	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DAN ARMOUR / PRO-TECH	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1120	SAMPLING ENDED AT: NR
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	FIELD-FILTERED: Y (N) µm Filtration Equipment Type:	FILTER SIZE:
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)	SAMPLING EQUIPMENT CODE
	1	PE	250	HNO_3	-	-	METALS / HAND	-	DIPPER BAILER

REMARKS:

Sheen Present: YES (NO) SW-3 = SURFACE WATER POINT

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A SATURATED AIR

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	100% SAT	100%	-	YES	INIT	DA

Table FS 2200-2
Dissolved Oxygen Saturation

TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L	TEMP	D.O.	mg/L
deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%	deg C	SAT.	20%
15.0	10.084	2.017	19.0	9.276	1.855	23.0	8.578	1.716	27.0	7.968	1.594
15.1	10.062	2.012	19.1	9.258	1.852	23.1	8.562	1.712	27.1	7.954	1.591
15.2	10.040	2.008	19.2	9.239	1.848	23.2	8.546	1.709	27.2	7.940	1.588
15.3	10.019	2.004	19.3	9.220	1.844	23.3	8.530	1.706	27.3	7.926	1.585
15.4	9.997	1.999	19.4	9.202	1.840	23.4	8.514	1.703	27.4	7.912	1.582
15.5	9.976	1.995	19.5	9.184	1.837	23.5	8.498	1.700	27.5	7.898	1.580
15.6	9.955	1.991	19.6	9.165	1.833	23.6	8.482	1.696	27.6	7.884	1.577
15.7	9.934	1.987	19.7	9.147	1.829	23.7	8.466	1.693	27.7	7.870	1.574
15.8	9.912	1.982	19.8	9.129	1.826	23.8	8.450	1.690	27.8	7.856	1.571
15.9	9.891	1.978	19.9	9.111	1.822	23.9	8.434	1.687	27.9	7.842	1.568
16.0	9.870	1.974	20.0	9.092	1.818	24.0	8.418	1.684	28.0	7.828	1.566
16.1	9.849	1.970	20.1	9.074	1.815	24.1	8.403	1.681	28.1	7.814	1.563
16.2	9.829	1.966	20.2	9.056	1.811	24.2	8.387	1.677	28.2	7.800	1.560
16.3	9.808	1.962	20.3	9.039	1.808	24.3	8.371	1.674	28.3	7.786	1.557
16.4	9.787	1.957	20.4	9.021	1.804	24.4	8.356	1.671	28.4	7.773	1.555
16.5	9.767	1.953	20.5	9.003	1.801	24.5	8.340	1.668	28.5	7.759	1.552
16.6	9.746	1.949	20.6	8.985	1.797	24.6	8.325	1.665	28.6	7.745	1.549
16.7	9.726	1.945	20.7	8.968	1.794	24.7	8.309	1.662	28.7	7.732	1.546
16.8	9.705	1.941	20.8	8.950	1.790	24.8	8.294	1.659	28.8	7.718	1.544
16.9	9.685	1.937	20.9	8.932	1.786	24.9	8.279	1.656	28.9	7.705	1.541
17.0	9.665	1.933	21.0	8.915	1.783	25.0	8.263	1.653	29.0	7.691	1.538
17.1	9.645	1.929	21.1	8.898	1.780	25.1	8.248	1.650	29.1	7.678	1.536
17.2	9.625	1.925	21.2	8.880	1.776	25.2	8.233	1.647	29.2	7.664	1.533
17.3	9.605	1.921	21.3	8.863	1.773	25.3	8.218	1.644	29.3	7.651	1.530
17.4	9.585	1.917	21.4	8.846	1.769	25.4	8.203	1.641	29.4	7.638	1.528
17.5	9.565	1.913	21.5	8.829	1.766	25.5	8.188	1.638	29.5	7.625	1.525
17.6	9.545	1.909	21.6	8.812	1.762	25.6	8.173	1.635	29.6	7.611	1.522
17.7	9.526	1.905	21.7	8.794	1.759	25.7	8.158	1.632	29.7	7.598	1.520
17.8	9.506	1.901	21.8	8.777	1.755	25.8	8.143	1.629	29.8	7.585	1.517
17.9	9.486	1.897	21.9	8.761	1.752	25.9	8.128	1.626	29.9	7.572	1.514
18.0	9.467	1.893	22.0	8.744	1.749	26.0	8.114	1.623	30.0	7.559	1.512
18.1	9.448	1.890	22.1	8.727	1.745	26.1	8.099	1.620	30.1	7.546	1.509
18.2	9.428	1.886	22.2	8.710	1.742	26.2	8.084	1.617	30.2	7.533	1.507
18.3	9.409	1.882	22.3	8.693	1.739	26.3	8.070	1.614	30.3	7.520	1.504
18.4	9.390	1.878	22.4	8.677	1.735	26.4	8.055	1.611	30.4	7.507	1.501
18.5	9.371	1.874	22.5	8.660	1.732	26.5	8.040	1.608	30.5	7.494	1.499
18.6	9.352	1.870	22.6	8.644	1.729	26.6	8.026	1.605	30.6	7.481	1.496
18.7	9.333	1.867	22.7	8.627	1.725	26.7	8.012	1.602	30.7	7.468	1.494
18.8	9.314	1.863	22.8	8.611	1.722	26.8	7.997	1.599	30.8	7.456	1.491
18.9	9.295	1.859	22.9	8.595	1.719	26.9	7.983	1.597	30.9	7.443	1.489

Derived using the formula in Standard Methods for the Examination of Water and Wastewater, Page 4-101, 18th Edition, 1992

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 INSTRUMENT # 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 84 mS/cm PINE ENVIRONMENTAL: EXP - 10/2013 LOT# ZAJ359

Standard B 1413 µS/cm PINE ENVIRONMENTAL: EXP - 10/2017 LOT# 5102

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	84	AUTO CAL	-	YES	INIT	DK
"	"	B	1413	"	-	YES	INIT	DK

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HF SCIENTIFIC MICRO TPI INSTRUMENT # 108080

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A 1000 NTU HF SCIENTIFIC LOT# 11014 EXP: OCT 2013
Standard B 10.0 NTU HF SCIENTIFIC LOT# 11013 EXP: OCT 2013
Standard C 0.02 NTU HF SCIENTIFIC LOT# 11004 EXP: OCT 2013

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	1000	AUTO CAL	-	YES	INIT	DA
"	"	B	10.0	"	-	YES	INIT	DA
"	"	C	0.02	"	-	YES	INIT	DA

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9828 **INSTRUMENT #** 725490

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A PINE ENVIRONMENTAL 7.01 (STD) EXP: 03/2014

Standard B PINE ENVIRONMENTAL 4.01 (STD) EXP: 03/2014

Standard C PINE ENVIRONMENTAL 10.01 (STD) EXP: 03/2014

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
13/09/03	1045	A	7.01	AUTO CAL	-	YES	INIT	DA
"	"	B	4.01	"	-	YES	INIT	DA
"	"	C	10.01	"	-	YES	INIT	DA

APPENDIX C
HYDRAULIC GRADIENT CALCULATIONS

Appendix C
Hydraulic Gradient Calculations
Trail Ridge Landfill, Jacksonville, Florida
FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628

Made by: SSG
Checked by: MJS
Reviewd by: RWP

Purpose: To determine groundwater flow direction and calculate horizontal hydraulic gradients for shallow, intermediate, and deep portions of the surficial aquifer at the Trail Ridge Landfill.

Method for Determination of Horizontal Hydraulic Gradient:

$$i = \frac{\Delta h}{\Delta s} = \frac{GWE_A - GWE_B}{\underline{AB}}$$

Where:

i	Hydraulic gradient (dimensionless)
Δh	Difference of hydraulic head
Δs	Horizontal distance between two points
$GWE_{A, B}$	Groundwater elevation of points A and B (in feet)
$\underline{AB}$	The horizontal distance between points A and B (in feet), where AB is perpendicular to potentiometric contours

Using the following groundwater elevation data:

	GWE_A	GWE_B
Shallow	140' contour	MWB-22(S)
Intermediate	135' contour	MWB-12(I)
Deep	MWB-31(D)	120' contour

	GWE (feet)	ft
MWB-22(S)	115.06	
MWB-12(I)	117.90	
MWB-31(D)	138.93	

Appendix C
Hydraulic Gradient Calculations
Trail Ridge Landfill, Jacksonville, Florida
FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628

Made by: SSG
Checked by: MJS
Reviewd by: RWP

Goal: Calculate the hydraulic gradient for the surficial aquifer - shallow depth

Condition: Static

$$i = \frac{\Delta h}{\Delta s} = \frac{GWE_A - GWE_B}{AB}$$

Shallow gradient:

$$i = \frac{\text{140' contour - MWB-22(S)}}{\text{2500'}} = \frac{\text{140' - 115.06'}}{\text{2500'}}$$

$$i = 0.010 \text{ ft/ft}$$

Intermediate gradient:

$$i = \frac{\text{135' contour - MWB-12(I)}}{\text{2000'}} = \frac{\text{135' - 117.90'}}{\text{2000'}}$$

$$i = 0.0086 \text{ ft/ft}$$

Deep gradient:

$$i = \frac{\text{MWB-31(D) -120' contour}}{\text{2600'}} = \frac{\text{138.93' - 120'}}{\text{2600}}$$

$$i = 0.0073 \text{ ft/ft}$$

Average gradient:

$$i = 0.0086 \text{ ft/ft}$$

Appendix C
Hydraulic Gradient Calculations
Trail Ridge Landfill, Jacksonville, Florida
FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628

Made by:	SSG
Checked by:	MJS
Reviewd by:	RWP

Horizontal Hydraulic Gradients:

Shallow horizontal gradient is	0.010	ft/ft
Intermediate horizontal gradient is	0.0086	ft/ft
Deep horizontal gradient is	0.0073	ft/ft
Average horizontal gradient is	0.0086	ft/ft

Groundwater Flow Direction:

Groundwater flow is to the east, moving perpendicular to potentiometric contours from high to low hydraulic head values.

APPENDIX D
ADAPT DATA PACKAGE
(NOT INCLUDED IN PDF)

APPENDIX E
GROUND WATER MONITORING REPORT CERTIFICATION

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(31), F.A.C
Form Title: Water Quality Monitoring Certification
Effective Date: January 6, 2010
Incorporated in Rule 62-701.510(9), F.A.C.

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION

(1) Facility Name Trail Ridge Landfill, Inc.

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number (850)474-8846

(2) WACS Facility ID NED/16/00033628

(3) DEP Permit Number 0013495-017-SO

(4) Authorized Representative's Name Eric Parker Title Env. Protection Manager

Address 5110 U.S. Highway 301

City Baldwin, FL Zip 32234 County Duval

Telephone Number (904)289-9100 Ex. 212

Email address (if available) EParker1@wm.com

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

10/14/2013
(Date)

(Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Professional Tech. Support Services (ProTech)

Analytical Lab NELAC / HRS Certification # Florida E81005

Lab Name Test America, Inc.

Address 2846 Industrial Plaza Drive, Tallahassee, FL 32301

Phone Number (850)878-3994

Email address (if available) amy.marks@testamaricainc.com

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

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Golder Associates

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