



# REPORT

## SEMI-ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT AUGUST 2014 EVENT

Trail Ridge Landfill

5110 U.S. Highway 301

Duval County, Baldwin, Florida 32234

FDEP Permit Number 0013493-025-SO-01

WACS ID Number NED/16/00033628

**Submitted To:** Florida Department of Environmental Protection  
Northeast District Office  
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Jacksonville, Florida 32256-7590 USA

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2 Copies – Golder Associates Inc.

October 2014

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October 6, 2014

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Brian Durden  
Florida Department of Environmental Protection  
Northeast District Office  
8800 Baymeadows Way West, Suite 100  
Jacksonville, FL 32256-7590

**RE: SEMI-ANNUAL GROUNDWATER AND SURFACE WATER MONITORING REPORT  
FOR THE AUGUST 2014 MONITORING EVENT  
TRAIL RIDGE LANDFILL, DUVAL COUNTY, FLORIDA  
PERMIT NO. 0013493-025-SO-01**

Dear Mr. Durden:

Golder Associates Inc. (Golder) has prepared this report summarizing the August 2014 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 Permit Number 0013493-025-SO-01 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.**



Shannon George  
Staff Hydrogeologist



Richard W. Poff, P.G.  
Senior Hydrogeologist

cc: Trail Ridge Landfill  
Eric Parker, Waste Management of Florida  
Rachel Kirkman, Golder Associates (electronic)





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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 0013493-025-SO-01 issued June 16, 2014. 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 the Water Quality Monitoring Plan (Appendix 3) of the referenced permit. This report presents the methods and findings of the second 2014 semi-annual groundwater and surface water monitoring event conducted in August 19<sup>th</sup> and 20<sup>th</sup>, 2014. 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 the town of Baldwin 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 30<sup>th</sup>, and September 30<sup>th</sup> of each year. Figure 2 shows the Site layout and groundwater monitoring well and surface water sampling locations. The current Site groundwater monitoring system consists of twenty-two (22) groundwater monitoring wells screened at shallow (S) and intermediate (I) depths within the uppermost, surficial aquifer. These include:

- Thirteen (13) shallow wells: MWB-2(S), MWB-3(S), MWB-11(S), MWB-12(S), MWB-13(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); and
- Nine (9) intermediate wells: MWB-2(I), MWB-3(I), MWB-11(I), MWB-12(I), MWB-13(I), MWB-27(I), MWB-29(I), MWB-32(I), MWB-34(I)

In addition, the following deep (D) wells installed within the surficial aquifer are used to monitor groundwater levels at the Site:

- Nine (9) deep wells: MWB-7(D), MWB-12(D), MWB-14(D), MWB-25(D), MWB-27(D), MWB-29(D), MWB-31(D), MWB-32(D), and MWB-34(D)

Background wells MWB-2(S), MWB-3(S), MWB-2(I), and MWB-3(I) demonstrate background water quality for the facility because they are located upgradient from landfill waste. The remaining shallow and intermediate wells listed above are utilized for compliance or detection monitoring purposes associated with various phases of landfill development.

As indicated the Site Permit, 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 two surface water monitoring locations: SW-1 and SW-3. It was determined during a quality assurance audit by Waste Management that samples historically designated as SW-1 were not collected from the proper location. The FDEP was notified of this location correction on May 5, 2014 via telephone by Waste Management, and in a letter dated May 8, 2014. The corrected location for SW-1 is shown on Figure 2. Surface water monitoring location SW-1 is



located in a wetland approximately 200 feet south of the facility's stormwater retention basin. SW-3 is sampled at the discharge point if actively discharging or directly from the pond if there is no active discharge.



### 3.0 DATA COLLECTION METHODS

#### 3.1 Groundwater Elevation Measurements

ProTech field personnel measured water levels in Site monitoring wells on August 19, 2014 prior to purging and sampling activities in accordance with procedures described in the facility permit. Water levels were measured at 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 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 August 2014 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 twenty-two monitoring wells between August 19<sup>th</sup> and 20<sup>th</sup>, 2014. Groundwater monitoring wells were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Wells were purged using low-flow sampling methods; and a minimum of one well volume was purged prior to stabilization for wells where the water table is located within the well screen. 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. On August 20, 2014, surface water samples were collected from two surface water monitoring points using a dipper or laboratory-provided container. Field parameters including pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation-reduction potential, 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–Tallahassee (TestAmerica), a Florida-certified laboratory (NELAP certification ID E81005), analyzed groundwater and surface water samples collected in August 2014, for the parameters identified in Appendix 3 Section II and Section III, respectively, of the facility permit.



## **4.0 GROUNDWATER FLOW RATE AND DIRECTION EVALUATION**

### **4.1 Groundwater Elevations and Flow Direction**

Golder calculated groundwater elevations based on water levels measured on August 19, 2014, 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**

Input parameters and hydraulic gradient calculations for the August 2014 monitoring event shallow, intermediate, and deep wells within the surficial aquifer are shown in Appendix C. The shallow average horizontal hydraulic gradient was calculated between the 140-foot potentiometric contour and MWB-22(S) along a flow path oriented perpendicular to the potentiometric contours. The intermediate average horizontal hydraulic gradient was calculated between the 135-foot potentiometric contour and MWB-12(I) (Figure 4) along a flow path oriented perpendicular to the potentiometric contours. The deep average horizontal hydraulic gradient was calculated between the MWB-31(D) and 120-foot potentiometric contour and (Figure 5) along a flow path oriented perpendicular to the potentiometric contours. The average Site hydraulic gradient, calculated as the mean of the shallow, intermediate, and deep hydraulic gradients, is 0.009 ft/ft. The results are consistent with historical gradient values for the Site.



## 5.0 WATER QUALITY MONITORING RESULTS

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

ProTech field personnel collected one field blank during the August 2014 sampling event and submitted the samples with trip blanks in coolers containing volatile organic compound samples to TestAmerica for analysis. The samples were received in good condition, properly preserved, and at proper temperatures. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, laboratory control samples (LCS), and matrix spike/matrix spike duplicates (MS/MSD). The laboratory did not qualify data based on field detections. The QA/QC results for the laboratory reports associated with groundwater and surface water monitoring points from TestAmerica Laboratory Report 640-49932-1 are summarized below:

- Several analytes were detected between method detection limits (MDLs) and practical quantitation limits (PQLs); these detections were qualified with an “I.”
- LCS was biased high for acrylonitrile (batch 346586); associated results were qualified with a “J” or “UJ”, where results are non-detect.
- MS/MSD recoveries (batch 228490) were outside control limits; sample matrix interference and/or non-homogeneity are suspected because associated LCS/LSCD recoveries were within acceptance limits.
- Samples MWB-21(S), MWB-2(I), and MWB-2(S) were received outside of the 48-hour holding time for Nitrate-Nitrite (method 353.2); detected results were qualified “Q.”
- Samples MWB-3(I) and MWB-3(S) were received with minimal time remaining; in turn, the laboratory had insufficient time to preform analysis within the 48-hour holding time.

In addition, the subcontract laboratory (Diversified Environmental Laboratories, Inc.) qualified fecal coliform results for SW-3 results based on colony counts outside the acceptable range (B).

Other QA/QC issues were not identified; therefore, the remaining results from the August 2014 event are considered acceptable without qualification.

### 5.2 Laboratory Analysis Results

Tables 2A and 2B summarize laboratory analytical results for shallow and intermediate groundwater samples, respectively; and Table 3 summarizes surface water samples. 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.



### 5.3 Field Parameter Measurement Results

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

Groundwater field parameter readings and observations are consistent with those from previous semi-annual monitoring events. Historically, the average pH increases with depth between the shallow and intermediate zones of the aquifer. Turbidity values were lower than 20 nephelometric turbidity units (NTUs) with the exception of well MWB-2(S), which had a turbidity value of 85.22 NTUs. Surface water field parameter readings and observations are comparable to historical surface water measurements.



## 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. Permit 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 primary maximum contaminant levels (MCLs) and secondary maximum contaminant levels (SMCLs) 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 SMCL 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 August 2014 event met minimum criteria established under F.A.C. Chapter 62-520.400 and primary MCLs established under F.A.C. Chapter 62-550.310. SMCL exceedances were measured for iron and pH at one or more wells. These exceedances are summarized below.

##### **Iron (SMCL 0.3 mg/L)**

- Shallow wells: MWB-2(S), MWB-3(S), MWB-11(S), MWB-13(S), MWB-21(S), MWB-27(S), MWB-29(S), and MWB-32(S)
- Intermediate wells: MWB-2(I), MWB-3(I), MWB-11(IR), MWB-12(I), MWB-13(I), MWB-27(I), MWB-29(I), MWB-34(I)

**pH (SMCL 6.5 to 8.5)**

- Shallow wells: All measured background, compliance, and detection well values were below 6.5
- Intermediate wells: All background, compliance, and detection well values were below 6.5

Total lead concentration at background well MWB-2(S) exceeded the associated MCL. However, the laboratory measured dissolved lead at MWB-2(S) and the dissolved lead result was non-detect. Low-level lead detections have historically been measured at this location; and therefore entrained sediment, as evidenced by the elevated turbidity at this well is the likely source of the above-MCL lead concentration and the dissolved lead results are likely representative of groundwater conditions at this location. MWB-2(S) is a Site background monitoring well, and therefore it is highly unlikely that this location has been affected by activities at the landfill as it is upgradient with respect to the waste unit. It is recommended that the field sampling staff make efforts to reduce turbidity in this well at the time of sampling during the March 2015 sampling event so that total lead results are representative of groundwater conditions at that location. If elevated turbidity values are observed at MWB-2S during the March 2015 event, Waste Management will re-develop the well prior to sampling.

Iron and pH have been historically detected at concentrations exceeding the applicable SMCL and reported to FDEP; no new exceedances require reporting under F.A.C. Chapter 62-701.510. Iron and pH have also been detected in background wells at concentrations greater than (or, in the case of pH, less than) the associated SMCL. These SMCL exceedances, therefore, appear to be related to natural subsurface conditions rather than landfill impacts. Further discussion regarding the natural occurrence of iron and low pH is provided in Section 7.0.

## **6.2 Surface Water**

### **6.2.1 Established Standards**

Facility permit Appendix 3 Section 1.4 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.

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 August 2014 met minimum criteria established under F.A.C. Chapter 62-302.500. The following 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):

- Ammonia Un-ionized ( $\text{NH}_3$ ) at SW-3
- Coliform Fecal at SW-1

The parameters above have been historically detected at concentrations exceeding the applicable SMCL in surface water samples at the Site and do not represent a likely landfill impact.



## 7.0 DISCUSSION AND RECOMMENDATIONS

During the August 2014 event, several analytes were detected in groundwater and/or surface water samples at concentrations exceeding applicable drinking water and/or surface water quality standards. These include iron, lead, and pH for groundwater; and unionized ammonia and coliform for surface water.

Total lead was detected above MCL at background well MWB-2(S) and is likely unrelated to landfill activities as it is located upgradient with respect to the waste unit. The dissolved lead result was non-detect. Low-level lead detections have historically been measured at this location, and therefore entrained sediment likely biased the total lead results high, resulting in an exceedance. It is recommended that the field sampling staff make efforts to reduce turbidity in this well at the time of sampling during the March 2015 sampling event so that total lead results are representative of groundwater conditions at that location. If elevated turbidity is observed at MWB-2S during the March 2015 event, Waste Management will re-develop the well prior to sampling.

Iron and pH have been historically detected at concentrations exceeding the applicable SMCL and reported to FDEP; no new exceedances require reporting under F.A.C. Chapter 62-701.510. Iron and pH have also been detected in background wells at concentrations greater than (or, in the case of pH, less than) the associated SMCL. These SMCL exceedances, therefore, appear to be related to natural subsurface conditions rather than landfill impacts.

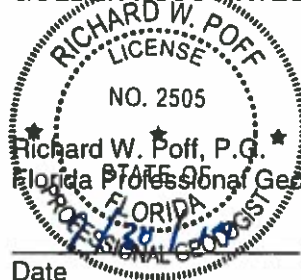
Analyte detections and standard exceedances observed during this event for both groundwater and surface water are consistent with historical conditions and/or background water quality. Based on these findings, Golder recommends continued semi-annual detection monitoring in accordance with F.A.C. Chapter 62-701 and the facility permit. The next groundwater and surface water monitoring event should be conducted prior to March 30, 2015.



## 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 geologist, 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.**



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

Florida Department of Environmental Protection, Notice of Permit, June 16, 2014, Permit Number 0013493-025-SO-01.

## TABLES

**TABLE 1**  
**Water Level Measurements**  
**Trail Ridge Landfill, Jacksonville, Florida**

| Well ID                   | TOC Elevation | Screened Interval | Depth to Water | Groundwater Elevation |
|---------------------------|---------------|-------------------|----------------|-----------------------|
|                           | (ft MSL)      | (ft BTOC)         | (ft BTOC)      | (ft MSL)              |
| <b>Shallow Wells</b>      |               |                   |                |                       |
| MWB-2(S)                  | 146.64        | 10.00 to 20.00    | 9.85           | 136.79                |
| MWB-3(S)                  | 154.38        | 10.00 to 20.00    | 8.60           | 145.78                |
| MWB-7(S)                  | 123.29        | 10.00 to 20.00    | 8.81           | 114.48                |
| MWB-11(S)                 | 120.81        | 9.50 to 19.50     | 12.40          | 108.41                |
| MWB-12(S)                 | 124.63        | 14.50 to 24.50    | 10.90          | 113.73                |
| MWB-13(S)                 | 126.05        | 16.56 to 26.56    | 16.72          | 109.33                |
| MWB-20(S)                 | 121.01        | 10.00 to 20.00    | 8.20           | 112.81                |
| MWB-21(S)                 | 122.84        | 13.00 to 18.00    | 10.90          | 111.94                |
| MWB-22(S)                 | 126.97        | 16.00 to 26.00    | 12.57          | 114.40                |
| MWB-27(S)                 | 128.42        | 10.50 to 15.50    | 7.15           | 121.27                |
| MWB-29(S)                 | 138.02        | 10.00 to 20.00    | 8.55           | 129.47                |
| MWB-32(S)                 | 124.64        | 14.90 to 19.90    | 8.86           | 115.78                |
| MWB-33(S)                 | 125.90        | 10.30 to 20.30    | 10.60          | 115.30                |
| MWB-34(S)                 | 125.78        | 13.36 to 18.36    | 9.87           | 115.91                |
| <b>Intermediate Wells</b> |               |                   |                |                       |
| MWB-2(I)                  | 145.73        | 51.50 to 61.50    | 11.48          | 134.25                |
| MWB-3(I)                  | 151.86        | 52.00 to 62.00    | 14.02          | 137.84                |
| MWB-7(I)                  | 121.53        | 55.00 to 65.00    | 4.40           | 117.13                |
| MWB-11(IR)                | 120.43        | 45.00 to 55.00    | 12.20          | 108.23                |
| MWB-12(I)                 | 124.62        | 61.50 to 71.50    | 7.98           | 116.64                |
| MWB-13(I)                 | 125.98        | 50.40 to 60.40    | 18.02          | 107.96                |
| MWB-27(I)                 | 128.63        | 52.50 to 62.50    | 6.62           | 122.01                |
| MWB-29(I)                 | 138.08        | 53.50 to 63.50    | 7.42           | 130.66                |
| MWB-32(I)                 | 124.79        | 54.56 to 64.56    | 7.77           | 117.02                |
| MWB-34(I)                 | 125.80        | 43.95 to 53.95    | 9.05           | 116.75                |
| <b>Deep Wells</b>         |               |                   |                |                       |
| MWB-7(D)                  | 121.65        | 107.00 to 117.00  | 1.93           | 119.72                |
| MWB-12(D)                 | 124.56        | 102.00 to 112.00  | 5.53           | 119.03                |
| MWB-27(D)                 | 128.88        | 110.00 to 110.00  | 7.00           | 121.88                |
| MWB-29(D)                 | 138.18        | 100.50 to 110.50  | 7.57           | 130.61                |
| MWB-31(D)                 | 156.15        | 119.00 to 129.00  | 18.89          | 137.26                |
| MWB-32(D)                 | 124.93        | 98.81 to 108.81   | 8.07           | 116.86                |
| MWB-34(D)                 | 125.92        | 90.78 to 100.78   | 9.26           | 116.66                |

*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 August 19, 2014. Top of casing elevations based on groundwater well survey data provided in October 2010 potentiometric maps (HDR Engineering).

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

| Parameter                         | Unit | MCL   | SMCL | MWB-2S    | MWB-3S    | MWB-11S   | MWB-12S  | MWB-13S      | MWB-20S   | MWB-21S         |
|-----------------------------------|------|-------|------|-----------|-----------|-----------|----------|--------------|-----------|-----------------|
| <b>Laboratory Method EPA 8260</b> |      |       |      |           |           |           |          |              |           |                 |
| 1,1,1,2-Tetrachloroethane         | ug/L |       |      | < 0.33    | < 0.33    | < 0.33    | < 0.33   | < 0.33       | < 0.33    | < 0.33          |
| 1,1,1-Trichloroethane             | ug/L | 200   |      | < 0.5     | < 0.5     | < 0.5     | < 0.5    | < 0.5        | < 0.5     | < 0.5           |
| 1,1,2,2-Tetrachloroethane         | ug/L |       |      | < 0.18    | < 0.18    | < 0.18    | < 0.18   | < 0.18       | < 0.18    | < 0.18          |
| 1,1,2-Trichloroethane             | ug/L | 5     |      | < 0.13    | < 0.13    | < 0.13    | < 0.13   | < 0.13       | < 0.13    | < 0.13          |
| 1,1-Dichloroethane                | ug/L |       |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| 1,1-Dichloroethene                | ug/L | 7     |      | < 0.11    | < 0.11    | < 0.11    | < 0.11   | < 0.11       | < 0.11    | < 0.11          |
| 1,2,3-Trichloropropane            | ug/L |       |      | < 0.41    | < 0.41    | < 0.41    | < 0.41   | < 0.41       | < 0.41    | < 0.41          |
| 1,2-Dibromo-3-Chloropropane       | ug/L | 0.2   |      | < 0.44    | < 0.44    | < 0.44    | < 0.44   | < 0.44       | < 0.44    | < 0.44          |
| 1,2-Dibromoethane                 | ug/L | 0.02  |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| 1,2-Dichlorobenzene               | ug/L | 600   |      | < 0.21    | < 0.21    | < 0.21    | < 0.21   | < 0.21       | < 0.21    | < 0.21          |
| 1,2-Dichloroethane                | ug/L | 3     |      | < 0.1     | < 0.1     | < 0.1     | < 0.1    | < 0.1        | < 0.1     | < 0.1           |
| 1,2-Dichloropropane               | ug/L | 5     |      | < 0.13    | < 0.13    | < 0.13    | < 0.13   | < 0.13       | < 0.13    | < 0.13          |
| 1,4-Dichlorobenzene               | ug/L | 75    |      | < 0.28    | < 0.28    | < 0.28    | < 0.28   | < 0.28       | < 0.28    | < 0.28          |
| 2-Butanone                        | ug/L |       |      | < 1       | < 1       | < 1       | < 1      | < 1          | < 1       | < 1             |
| 2-Hexanone                        | ug/L |       |      | < 1       | < 1       | < 1       | < 1      | < 1          | < 1       | < 1             |
| 4-Methyl-2-pentanone              | ug/L |       |      | < 1       | < 1       | < 1       | < 1      | < 1          | < 1       | < 1             |
| Acetone                           | ug/L |       |      | < 5       | < 5       | < 5       | < 5      | <b>5.1 I</b> | < 5       | < 5             |
| Acrylonitrile                     | ug/L |       |      | < 7.2 UJ  | < 7.2 UJ  | < 7.2 UJ  | < 7.2    | < 7.2        | < 7.2 UJ  | < 7.2 UJ        |
| Benzene                           | ug/L | 1     |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| Bromochloromethane                | ug/L |       |      | < 0.14    | < 0.14    | < 0.14    | < 0.14   | < 0.14       | < 0.14    | < 0.14          |
| Bromodichloromethane              | ug/L |       |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| Bromoform                         | ug/L |       |      | < 0.5     | < 0.5     | < 0.5     | < 0.5    | < 0.5        | < 0.5     | < 0.5           |
| Bromomethane                      | ug/L |       |      | < 2       | < 2       | < 2       | < 2      | < 2          | < 2       | < 2             |
| Carbon disulfide                  | ug/L |       |      | < 0.6     | < 0.6     | < 0.6     | < 0.6    | < 0.6        | < 0.6     | < 0.6           |
| Carbon tetrachloride              | ug/L | 3     |      | < 0.5     | < 0.5     | < 0.5     | < 0.5    | < 0.5        | < 0.5     | < 0.5           |
| Chlorobenzene                     | ug/L | 100   |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| Chloroethane                      | ug/L |       |      | < 2       | < 2       | < 2       | < 2      | < 2          | < 2       | < 2             |
| Chloroform                        | ug/L |       |      | < 0.14    | < 0.14    | < 0.14    | < 0.14   | < 0.14       | < 0.14    | < 0.14          |
| Chloromethane                     | ug/L |       |      | < 0.33    | < 0.33    | < 0.33    | < 0.33   | < 0.33       | < 0.33    | < 0.33          |
| cis-1,2-Dichloroethene            | ug/L | 70    |      | < 0.15    | < 0.15    | < 0.15    | < 0.15   | < 0.15       | < 0.15    | < 0.15          |
| cis-1,3-Dichloropropene           | ug/L |       |      | < 0.11    | < 0.11    | < 0.11    | < 0.11   | < 0.11       | < 0.11    | < 0.11          |
| Dibromochloromethane              | ug/L |       |      | < 0.1     | < 0.1     | < 0.1     | < 0.1    | < 0.1        | < 0.1     | < 0.1           |
| Dibromomethane                    | ug/L |       |      | < 0.2     | < 0.2     | < 0.2     | < 0.2    | < 0.2        | < 0.2     | < 0.2           |
| Ethylbenzene                      | ug/L | 700   |      | < 0.11    | < 0.11    | < 0.11    | < 0.11   | < 0.11       | < 0.11    | < 0.11          |
| Iodomethane                       | ug/L |       |      | < 1       | < 1       | < 1       | < 1      | < 1          | < 1       | < 1             |
| Methylene chloride                | ug/L | 5     |      | < 1       | < 1       | < 1       | < 1      | < 1          | < 1       | < 1             |
| Styrene                           | ug/L | 100   |      | < 0.11    | < 0.11    | < 0.11    | < 0.11   | < 0.11       | < 0.11    | < 0.11          |
| Tetrachloroethene                 | ug/L | 3     |      | < 0.15    | < 0.15    | < 0.15    | < 0.15   | < 0.15       | < 0.15    | < 0.15          |
| Toluene                           | ug/L | 1000  |      | < 0.33    | < 0.33    | < 0.33    | < 0.33   | < 0.33       | < 0.33    | < 0.33          |
| trans-1,2-Dichloroethene          | ug/L | 100   |      | < 0.2     | < 0.2     | < 0.2     | < 0.2    | < 0.2        | < 0.2     | < 0.2           |
| trans-1,3-Dichloropropene         | ug/L |       |      | < 0.21    | < 0.21    | < 0.21    | < 0.21   | < 0.21       | < 0.21    | < 0.21          |
| trans-1,4-Dichloro-2-butene       | ug/L |       |      | < 0.5     | < 0.5     | < 0.5     | < 0.5    | < 0.5        | < 0.5     | < 0.5           |
| Trichloroethene                   | ug/L | 3     |      | < 0.13    | < 0.13    | < 0.13    | < 0.13   | < 0.13       | < 0.13    | < 0.13          |
| Trichlorofluoromethane            | ug/L |       |      | < 0.25    | < 0.25    | < 0.25    | < 0.25   | < 0.25       | < 0.25    | < 0.25          |
| Vinyl acetate                     | ug/L |       |      | < 0.28 UJ | < 0.28 UJ | < 0.28 UJ | < 0.28   | < 0.28       | < 0.28 UJ | < 0.28 UJ       |
| Vinyl chloride                    | ug/L | 1     |      | < 0.18    | < 0.18    | < 0.18    | < 0.18   | < 0.18       | < 0.18    | < 0.18          |
| Xylenes, Total                    | ug/L | 10000 |      | < 0.2     | < 0.2     | < 0.2     | < 0.2    | < 0.2        | < 0.2     | < 0.2           |
| <b>Laboratory Method EPA 8011</b> |      |       |      |           |           |           |          |              |           |                 |
| 1,2-Dibromo-3-Chloropropane       | ug/L | 0.2   |      | < 0.0054  | < 0.0054  | < 0.0054  | < 0.0053 | < 0.0052     | < 0.0052  | <b>0.0079 I</b> |
| 1,2-Dibromoethane                 | ug/L | 0.02  |      | < 0.0024  | < 0.0024  | < 0.0024  | < 0.0023 | < 0.0023     | < 0.0023  | < 0.0022        |

**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; Greyed cells indicate an MCL/SMCL exceedance.

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

| Parameter                         | Unit | MCL   | SMCL | MWB-22S  | MWB-27S  | MWB-29S  | MWB-32S   | MWB-33S   | MWB-34S   |
|-----------------------------------|------|-------|------|----------|----------|----------|-----------|-----------|-----------|
| <b>Laboratory Method EPA 8260</b> |      |       |      |          |          |          |           |           |           |
| 1,1,1,2-Tetrachloroethane         | ug/L |       |      | < 0.33   | < 0.33   | < 0.33   | < 0.33    | < 0.33    | < 0.33    |
| 1,1,1-Trichloroethane             | ug/L | 200   |      | < 0.5    | < 0.5    | < 0.5    | < 0.5     | < 0.5     | < 0.5     |
| 1,1,2,2-Tetrachloroethane         | ug/L |       |      | < 0.18   | < 0.18   | < 0.18   | < 0.18    | < 0.18    | < 0.18    |
| 1,1,2-Trichloroethane             | ug/L | 5     |      | < 0.13   | < 0.13   | < 0.13   | < 0.13    | < 0.13    | < 0.13    |
| 1,1-Dichloroethane                | ug/L |       |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| 1,1-Dichloroethene                | ug/L | 7     |      | < 0.11   | < 0.11   | < 0.11   | < 0.11    | < 0.11    | < 0.11    |
| 1,2,3-Trichloropropane            | ug/L |       |      | < 0.41   | < 0.41   | < 0.41   | < 0.41    | < 0.41    | < 0.41    |
| 1,2-Dibromo-3-Chloropropane       | ug/L | 0.2   |      | < 0.44   | < 0.44   | < 0.44   | < 0.44    | < 0.44    | < 0.44    |
| 1,2-Dibromoethane                 | ug/L | 0.02  |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| 1,2-Dichlorobenzene               | ug/L | 600   |      | < 0.21   | < 0.21   | < 0.21   | < 0.21    | < 0.21    | < 0.21    |
| 1,2-Dichloroethane                | ug/L | 3     |      | < 0.1    | < 0.1    | < 0.1    | < 0.1     | < 0.1     | < 0.1     |
| 1,2-Dichloropropane               | ug/L | 5     |      | < 0.13   | < 0.13   | < 0.13   | < 0.13    | < 0.13    | < 0.13    |
| 1,4-Dichlorobenzene               | ug/L | 75    |      | < 0.28   | < 0.28   | < 0.28   | < 0.28    | < 0.28    | < 0.28    |
| 2-Butanone                        | ug/L |       |      | < 1      | < 1      | < 1      | < 1       | < 1       | < 1       |
| 2-Hexanone                        | ug/L |       |      | < 1      | < 1      | < 1      | < 1       | < 1       | < 1       |
| 4-Methyl-2-pentanone              | ug/L |       |      | < 1      | < 1      | < 1      | < 1       | < 1       | < 1       |
| Acetone                           | ug/L |       |      | < 5      | < 5      | < 5      | < 5       | < 5       | < 5       |
| Acrylonitrile                     | ug/L |       |      | < 7.2    | < 7.2    | < 7.2    | < 7.2 UJ  | < 7.2 UJ  | < 7.2 UJ  |
| Benzene                           | ug/L | 1     |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| Bromochloromethane                | ug/L |       |      | < 0.14   | < 0.14   | < 0.14   | < 0.14    | < 0.14    | < 0.14    |
| Bromodichloromethane              | ug/L |       |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| Bromoform                         | ug/L |       |      | < 0.5    | < 0.5    | < 0.5    | < 0.5     | < 0.5     | < 0.5     |
| Bromomethane                      | ug/L |       |      | < 2      | < 2      | < 2      | < 2       | < 2       | < 2       |
| Carbon disulfide                  | ug/L |       |      | < 0.6    | < 0.6    | < 0.6    | < 0.6     | < 0.6     | < 0.6     |
| Carbon tetrachloride              | ug/L | 3     |      | < 0.5    | < 0.5    | < 0.5    | < 0.5     | < 0.5     | < 0.5     |
| Chlorobenzene                     | ug/L | 100   |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| Chloroethane                      | ug/L |       |      | < 2      | < 2      | < 2      | < 2       | < 2       | < 2       |
| Chloroform                        | ug/L |       |      | < 0.14   | < 0.14   | < 0.14   | < 0.14    | < 0.14    | < 0.14    |
| Chloromethane                     | ug/L |       |      | < 0.33   | < 0.33   | < 0.33   | < 0.33    | < 0.33    | < 0.33    |
| cis-1,2-Dichloroethene            | ug/L | 70    |      | < 0.15   | < 0.15   | < 0.15   | < 0.15    | < 0.15    | < 0.15    |
| cis-1,3-Dichloropropene           | ug/L |       |      | < 0.11   | < 0.11   | < 0.11   | < 0.11    | < 0.11    | < 0.11    |
| Dibromochloromethane              | ug/L |       |      | < 0.1    | < 0.1    | < 0.1    | < 0.1     | < 0.1     | < 0.1     |
| Dibromomethane                    | ug/L |       |      | < 0.2    | < 0.2    | < 0.2    | < 0.2     | < 0.2     | < 0.2     |
| Ethylbenzene                      | ug/L | 700   |      | < 0.11   | < 0.11   | < 0.11   | < 0.11    | < 0.11    | < 0.11    |
| Iodomethane                       | ug/L |       |      | < 1      | < 1      | < 1      | < 1       | < 1       | < 1       |
| Methylene chloride                | ug/L | 5     |      | < 1      | < 1      | < 1      | < 1       | < 1       | < 1       |
| Styrene                           | ug/L | 100   |      | < 0.11   | < 0.11   | < 0.11   | < 0.11    | < 0.11    | < 0.11    |
| Tetrachloroethene                 | ug/L | 3     |      | < 0.15   | < 0.15   | < 0.15   | < 0.15    | < 0.15    | < 0.15    |
| Toluene                           | ug/L | 1000  |      | < 0.33   | < 0.33   | < 0.33   | < 0.33    | < 0.33    | < 0.33    |
| trans-1,2-Dichloroethene          | ug/L | 100   |      | < 0.2    | < 0.2    | < 0.2    | < 0.2     | < 0.2     | < 0.2     |
| trans-1,3-Dichloropropene         | ug/L |       |      | < 0.21   | < 0.21   | < 0.21   | < 0.21    | < 0.21    | < 0.21    |
| trans-1,4-Dichloro-2-butene       | ug/L |       |      | < 0.5    | < 0.5    | < 0.5    | < 0.5     | < 0.5     | < 0.5     |
| Trichloroethene                   | ug/L | 3     |      | < 0.13   | < 0.13   | < 0.13   | < 0.13    | < 0.13    | < 0.13    |
| Trichlorofluoromethane            | ug/L |       |      | < 0.25   | < 0.25   | < 0.25   | < 0.25    | < 0.25    | < 0.25    |
| Vinyl acetate                     | ug/L |       |      | < 0.28   | < 0.28   | < 0.28   | < 0.28 UJ | < 0.28 UJ | < 0.28 UJ |
| Vinyl chloride                    | ug/L | 1     |      | < 0.18   | < 0.18   | < 0.18   | < 0.18    | < 0.18    | < 0.18    |
| Xylenes, Total                    | ug/L | 10000 |      | < 0.2    | < 0.2    | < 0.2    | < 0.2     | < 0.2     | < 0.2     |
| <b>Laboratory Method EPA 8011</b> |      |       |      |          |          |          |           |           |           |
| 1,2-Dibromo-3-Chloropropane       | ug/L | 0.2   |      | < 0.0053 | < 0.0054 | < 0.0052 | < 0.0053  | < 0.0052  | < 0.0051  |
| 1,2-Dibromoethane                 | ug/L | 0.02  |      | < 0.0023 | < 0.0024 | < 0.0023 | < 0.0023  | < 0.0023  | < 0.0022  |

**Notes:**

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

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

Bold values indicate detections above the laboratory detection limit; Greyed cells indicate an MCL/SMCL exceedance.

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

| Parameter                                        | Unit | MCL    | SMCL | MWB-2S  | MWB-3S   | MWB-11S   | MWB-12S | MWB-13S | MWB-20S   | MWB-21S  |
|--------------------------------------------------|------|--------|------|---------|----------|-----------|---------|---------|-----------|----------|
| <b>Laboratory Method EPA 300.0</b>               |      |        |      |         |          |           |         |         |           |          |
| Chloride                                         | mg/L |        | 250  | 12      | 10       | 20        | 60      | 25      | 8         | 6        |
| <b>Laboratory Method EPA 350.1</b>               |      |        |      |         |          |           |         |         |           |          |
| Ammonia (N)                                      | ug/L |        |      | 180     | 120      | 120       | < 26    | 710     | 270       | 150      |
| <b>Laboratory Method EPA 353.2 (Nitrate (N))</b> |      |        |      |         |          |           |         |         |           |          |
| Nitrate (N)                                      | mg/L | 10     |      | 0.03 IQ | < 0.01 Q | < 0.01 UJ | 0.1     | 0.42    | < 0.01 UJ | < 0.01 Q |
| <b>Laboratory Method EPA 6020</b>                |      |        |      |         |          |           |         |         |           |          |
| Antimony                                         | ug/L | 6      |      | < 2.3   | < 2.3    | < 2.3     | < 2.3   | < 2.3   | < 2.3     | < 2.3    |
| Arsenic                                          | ug/L | 10     |      | 3.1     | < 1.3    | < 1.3     | < 1.3   | < 1.3   | < 1.3     | < 1.3    |
| Barium                                           | ug/L | 2000   |      | 80      | 15       | 69        | 2.3 I   | 5       | 11        | 16       |
| Beryllium                                        | ug/L | 4      |      | 0.79    | < 0.25   | < 0.25    | < 0.25  | < 0.25  | < 0.25    | < 0.25   |
| Cadmium                                          | ug/L | 5      |      | < 0.095 | < 0.095  | < 0.095   | < 0.095 | 0.2 I   | < 0.095   | < 0.095  |
| Chromium                                         | ug/L | 100    |      | 20      | < 2.5    | < 2.5     | < 2.5   | < 2.5   | < 2.5     | < 2.5    |
| Cobalt                                           | ug/L |        |      | 3.3     | < 0.15   | 0.56      | < 0.15  | < 0.15  | < 0.15 I  | < 0.15   |
| Copper                                           | ug/L |        | 1000 | 7.2     | < 1.1    | < 1.1     | < 1.1   | 11      | 1.3 I     | < 1.1    |
| Iron                                             | ug/L |        | 300  | 10000   | 3500     | 1700      | 79 I    | 600     | 180       | 590      |
| Lead                                             | ug/L | 15     |      | 16      | 0.25 I   | < 0.2     | < 0.2   | 0.36 I  | 0.48 I    | < 0.2    |
| Nickel                                           | ug/L | 100    |      | 8.6     | < 2      | < 2       | 3.9 I   | 2.8 I   | < 2       | < 2      |
| Selenium                                         | ug/L | 50     |      | 1.5 I   | < 1      | < 1       | 2.7     | 3       | < 1       | < 1      |
| Silver                                           | ug/L |        | 100  | < 0.25  | < 0.25   | < 0.25    | < 0.25  | < 0.25  | < 0.25    | < 0.25   |
| Sodium                                           | ug/L | 160000 |      | 7200    | 5800     | 12000     | 38000   | 23000   | 4300      | 3400     |
| Thallium                                         | ug/L | 2      |      | < 0.5   | < 0.5    | < 0.5     | < 0.5   | < 0.5   | < 0.5     | < 0.5    |
| Vanadium                                         | ug/L |        |      | 26      | < 3.8    | 7.5 I     | 48      | 31      | < 3.8     | < 3.8    |
| Zinc                                             | ug/L |        | 5000 | 16 I    | < 8.3    | < 8.3     | < 8.3   | 13 I    | < 8.3     | < 8.3    |
| <b>Laboratory Method EPA 6020</b>                |      |        |      |         |          |           |         |         |           |          |
| Antimony, dissolved                              | ug/L | 6      |      | < 2.3   | NA       | NA        | NA      | NA      | NA        | NA       |
| Arsenic, dissolved                               | ug/L | 10     |      | < 1.3   | NA       | NA        | NA      | NA      | NA        | NA       |
| Barium, dissolved                                | ug/L | 2000   |      | 11      | NA       | NA        | NA      | NA      | NA        | NA       |
| Beryllium, dissolved                             | ug/L | 4      |      | < 0.25  | NA       | NA        | NA      | NA      | NA        | NA       |
| Cadmium, dissolved                               | ug/L | 5      |      | < 0.095 | NA       | NA        | NA      | NA      | NA        | NA       |
| Chromium, dissolved                              | ug/L | 100    |      | < 2.5   | NA       | NA        | NA      | NA      | NA        | NA       |
| Cobalt, dissolved                                | ug/L |        |      | 0.21 I  | NA       | NA        | NA      | NA      | NA        | NA       |
| Copper, dissolved                                | ug/L |        | 1000 | < 1.1   | NA       | NA        | NA      | NA      | NA        | NA       |
| Iron, dissolved                                  | ug/L |        | 300  | 180     | NA       | NA        | NA      | NA      | NA        | NA       |
| Lead, dissolved                                  | ug/L | 15     |      | < 0.2   | NA       | NA        | NA      | NA      | NA        | NA       |
| Nickel, dissolved                                | ug/L | 100    |      | < 2.0   | NA       | NA        | NA      | NA      | NA        | NA       |
| Selenium, dissolved                              | ug/L | 50     |      | < 1.0   | NA       | NA        | NA      | NA      | NA        | NA       |
| Silver, dissolved                                | ug/L |        | 100  | < 0.25  | NA       | NA        | NA      | NA      | NA        | NA       |
| Sodium, dissolved                                | ug/L | 160000 |      | 5.9     | NA       | NA        | NA      | NA      | NA        | NA       |
| Thallium, dissolved                              | ug/L | 2      |      | < 0.5   | NA       | NA        | NA      | NA      | NA        | NA       |
| Vanadium, dissolved                              | ug/L |        |      | < 3.8   | NA       | NA        | NA      | NA      | NA        | NA       |
| Zinc, dissolved                                  | ug/L |        | 5000 | < 8.3   | NA       | NA        | NA      | NA      | NA        | NA       |
| <b>Laboratory Method EPA 7470</b>                |      |        |      |         |          |           |         |         |           |          |
| Mercury                                          | ug/L | 2      |      | < 0.091 | < 0.091  | < 0.091   | < 0.091 | < 0.091 | < 0.091   | < 0.091  |
| <b>Laboratory Method SM18 2540 C</b>             |      |        |      |         |          |           |         |         |           |          |
| Residues- Filterable (TDS)                       | mg/L |        | 500  | 70      | 31       | 100       | 270     | 230     | 60        | 36       |

**Notes:**

ug/L - micrograms per liter; mg/L - milligrams per liter; NA - not analyzed

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; Q - sample held

Bold values indicate detections above the laboratory detection limit; Greyed cells indicate an MCL/SMCL exceedance.

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

| Parameter                                        | Unit | MCL    | SMCL | MWB-22S | MWB-27S | MWB-29S | MWB-32S   | MWB-33S   | MWB-34S |
|--------------------------------------------------|------|--------|------|---------|---------|---------|-----------|-----------|---------|
| <b>Laboratory Method EPA 300.0</b>               |      |        |      |         |         |         |           |           |         |
| Chloride                                         | mg/L |        | 250  | 12      | 22      | 5.9     | 27        | 7.8       | 63      |
| <b>Laboratory Method EPA 350.1</b>               |      |        |      |         |         |         |           |           |         |
| Ammonia (N)                                      | ug/L |        |      | 290     | 210     | 49 I    | 850       | 1200      | 3300    |
| <b>Laboratory Method EPA 353.2 (Nitrate (N))</b> |      |        |      |         |         |         |           |           |         |
| Nitrate (N)                                      | mg/L | 10     |      | < 0.01  | < 0.01  | < 0.01  | < 0.01 UJ | < 0.01 UJ | 0.083 J |
| <b>Laboratory Method EPA 6020</b>                |      |        |      |         |         |         |           |           |         |
| 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   |      | 5.5     | 26      | 13      | 43        | 6.9       | 4.3 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     | 2.7 I   |
| Cobalt                                           | ug/L |        |      | < 0.15  | 0.22 I  | 0.22 I  | 0.5       | < 0.15    | 0.83    |
| Copper                                           | ug/L |        | 1000 | 1.2 I   | < 1.1   | < 1.1   | < 1.1     | < 1.1     | 3.8 I   |
| Iron                                             | ug/L |        | 300  | 140     | 740     | 610     | 1100      | 95 I      | 290     |
| Lead                                             | ug/L | 15     |      | < 0.2   | < 0.2   | < 0.2   | 0.39 I    | < 0.2     | 0.21 I  |
| Nickel                                           | ug/L | 100    |      | < 2     | 2.7 I   | < 2     | < 2       | < 2       | 5.2     |
| 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 |      | 9600    | 13000   | 3700    | 17000     | 8000      | 89000   |
| 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     | 6 I       | 11      |
| Zinc                                             | ug/L |        | 5000 | 9.6 I   | < 8.3   | < 8.3   | < 8.3     | < 8.3     | 45      |
| <b>Laboratory Method EPA 6020</b>                |      |        |      |         |         |         |           |           |         |
| Antimony                                         | ug/L | 6      |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Arsenic                                          | ug/L | 10     |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Barium                                           | ug/L | 2000   |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Beryllium                                        | ug/L | 4      |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Cadmium                                          | ug/L | 5      |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Chromium                                         | ug/L | 100    |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Cobalt                                           | ug/L |        |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Copper                                           | ug/L |        | 1000 | NA      | NA      | NA      | NA        | NA        | NA      |
| Iron                                             | ug/L |        | 300  | NA      | NA      | NA      | NA        | NA        | NA      |
| Lead                                             | ug/L | 15     |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Nickel                                           | ug/L | 100    |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Selenium                                         | ug/L | 50     |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Silver                                           | ug/L |        | 100  | NA      | NA      | NA      | NA        | NA        | NA      |
| Sodium                                           | ug/L | 160000 |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Thallium                                         | ug/L | 2      |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Vanadium                                         | ug/L |        |      | NA      | NA      | NA      | NA        | NA        | NA      |
| Zinc                                             | ug/L |        | 5000 | NA      | NA      | NA      | NA        | NA        | NA      |
| <b>Laboratory Method EPA 7470</b>                |      |        |      |         |         |         |           |           |         |
| Mercury                                          | ug/L | 2      |      | < 0.091 | < 0.091 | < 0.091 | < 0.091   | < 0.091   | < 0.091 |
| <b>Laboratory Method SM18 2540 C</b>             |      |        |      |         |         |         |           |           |         |
| Residues- Filterable (TDS)                       | mg/L |        | 500  | 190     | 140     | 34      | 110       | 150       | 420     |

**Notes:**

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

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

Bold values indicate detections above the laboratory detection limit; Greyed cells indicate an MCL/SMCL exceedance.

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

| Parameter                                        | Unit | MCL    | SMCL | MWB2I  | MWB3I  | MWB11I(R) | MWB12I | MWB13I | MWB27I  | MWB29I  | MWB32I    | MWB34I    |
|--------------------------------------------------|------|--------|------|--------|--------|-----------|--------|--------|---------|---------|-----------|-----------|
| <b>Laboratory Method EPA 300.0</b>               |      |        |      |        |        |           |        |        |         |         |           |           |
| Chloride                                         | mg/L |        | 250  | 7.8    | 6.4    | 5.3       | 5.2    | 5.3    | 5.3     | 6.1     | 5.2       | 5.4       |
| <b>Laboratory Method EPA 350.1</b>               |      |        |      |        |        |           |        |        |         |         |           |           |
| Ammonia (N)                                      | ug/L |        |      | 31 I   | < 26   | 47 I      | 52     | 56     | 68      | 56      | 41 I      | 67        |
| <b>Laboratory Method EPA 353.2 (Nitrate (N))</b> |      |        |      |        |        |           |        |        |         |         |           |           |
| Nitrate (N)                                      | mg/L | 10     |      | < 0.01 | < 0.01 | < 0.01 UJ | < 0.01 | < 0.01 | 0.016 I | < 0.01  | < 0.01 UJ | < 0.01 UJ |
| <b>Laboratory Method EPA 6020</b>                |      |        |      |        |        |           |        |        |         |         |           |           |
| Antimony                                         | ug/L | 6      |      | --     | --     | --        | --     | --     | --      | < 2.3   | --        | --        |
| Arsenic                                          | ug/L | 10     |      | --     | --     | --        | --     | --     | --      | < 1.3   | --        | --        |
| Barium                                           | ug/L | 2000   |      | --     | --     | --        | --     | --     | --      | 43      | --        | --        |
| Beryllium                                        | ug/L | 4      |      | --     | --     | --        | --     | --     | --      | < 0.25  | --        | --        |
| Cadmium                                          | ug/L | 5      |      | --     | --     | --        | --     | --     | --      | < 0.095 | --        | --        |
| Chromium                                         | ug/L | 100    |      | --     | --     | --        | --     | --     | --      | < 2.5   | --        | --        |
| Cobalt                                           | ug/L |        |      | --     | --     | --        | --     | --     | --      | < 0.15  | --        | --        |
| Copper                                           | ug/L |        | 1000 | --     | --     | --        | --     | --     | --      | < 1.1   | --        | --        |
| Iron                                             | ug/L |        | 300  | 410    | 820    | 390       | 370    | 410    | 490     | 510     | 150       | 430       |
| Lead                                             | ug/L | 15     |      | --     | --     | --        | --     | --     | --      | 0.64 I  | --        | --        |
| Nickel                                           | ug/L | 100    |      | --     | --     | --        | --     | --     | --      | < 2     | --        | --        |
| Selenium                                         | ug/L | 50     |      | --     | --     | --        | --     | --     | --      | < 1     | --        | --        |
| Silver                                           | ug/L |        | 100  | --     | --     | --        | --     | --     | --      | < 0.25  | --        | --        |
| Sodium                                           | ug/L | 160000 |      | 5100   | 4100   | 3500      | 3400   | 3500   | 3400    | 4300    | 3500      | 3600      |
| Thallium                                         | ug/L | 2      |      | --     | --     | --        | --     | --     | --      | < 0.5   | --        | --        |
| Vanadium                                         | ug/L |        |      | --     | --     | --        | --     | --     | --      | < 3.8   | --        | --        |
| Zinc                                             | ug/L |        | 5000 | --     | --     | --        | --     | --     | --      | < 8.3   | --        | --        |
| <b>Laboratory Method SM18 2540 C</b>             |      |        |      |        |        |           |        |        |         |         |           |           |
| Residues- Filterable (TDS)                       | mg/L |        | 500  | 36     | 25     | 46        | 42     | 34     | 68      | 39      | 33        | 34        |

**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; Greyed cells indicate an MCL/SMCL exceedance.

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

| Parameter                                                | Unit       | ClassIWQS | ClassIIIWQS | SW-1           | SW-3           |
|----------------------------------------------------------|------------|-----------|-------------|----------------|----------------|
| <b>Laboratory Method EPA 1631</b>                        |            |           |             |                |                |
| Mercury                                                  | ug/L       | 0.012     | 0.012       | <b>0.0043</b>  | < 0.001        |
| <b>Laboratory Method EPA 353.2 (Nitrate (N))</b>         |            |           |             |                |                |
| Nitrate (N)                                              | mg/L       | 10        |             | <b>0.047 I</b> | <b>0.055</b>   |
| <b>Laboratory Method EPA 353.2 (Nitrate-Nitrite (N))</b> |            |           |             |                |                |
| Nitrate-Nitrite (N)                                      | mg/L       |           |             | <b>0.18</b>    | <b>0.047 I</b> |
| <b>Laboratory Method EPA 365.4</b>                       |            |           |             |                |                |
| Phosphorus- Total                                        | mg/L       |           |             | <b>0.042 I</b> | < 0.041        |
| <b>Laboratory Method EPA 6020</b>                        |            |           |             |                |                |
| Antimony                                                 | ug/L       | 14        | 4300        | < 2.3          | < 2.3          |
| Arsenic                                                  | ug/L       | 10        | 50          | < 1.3 I        | <b>1.6 I</b>   |
| Barium                                                   | ug/L       | 1000      |             | <b>33</b>      | <b>19</b>      |
| Beryllium                                                | ug/L       | 0.0077    | 0.13        | < 0.25         | < 0.25         |
| Cadmium                                                  | ug/L       | Calc      | Calc        | < 0.095        | < 0.095        |
| Chromium                                                 | ug/L       | Calc      | Calc        | < 2.5          | < 2.5          |
| Cobalt                                                   | ug/L       |           |             | <b>0.24 I</b>  | <b>0.16 I</b>  |
| Copper                                                   | ug/L       | Calc      | Calc        | <b>2 I</b>     | < 1.1 I        |
| Iron                                                     | ug/L       | 1000      | 1000        | <b>700</b>     | <b>120</b>     |
| Lead                                                     | ug/L       | Calc      | Calc        | <b>0.91 I</b>  | <b>1.1 I</b>   |
| Nickel                                                   | ug/L       | Calc      | Calc        | < 2            | <b>2.2 I</b>   |
| Selenium                                                 | ug/L       | 5         | 5           | < 1            | < 1            |
| Silver                                                   | ug/L       | 0.07      | 0.07        | < 0.25         | < 0.25         |
| Thallium                                                 | ug/L       | 1.7       | 6.3         | < 0.5          | < 0.5          |
| Vanadium                                                 | ug/L       |           |             | < 3.8          | <b>4.6 I</b>   |
| Zinc                                                     | ug/L       | Calc      | Calc        | <b>19 I</b>    | < 8.3          |
| <b>Laboratory Method FDEP DEP-SOP</b>                    |            |           |             |                |                |
| Ammonia- Un-ionized (NH3)                                | ug/L       | 20        | 20          | <b>1.7</b>     | <b>25</b>      |
| <b>Laboratory Method SM18 10200 H</b>                    |            |           |             |                |                |
| Chlorophyll a                                            | ug/L       |           |             | <b>0.67</b>    | <b>2.1</b>     |
| <b>Laboratory Method SM18 2340 B</b>                     |            |           |             |                |                |
| Hardness- Calculated                                     | mg/L       |           |             | <b>78</b>      | <b>140</b>     |
| <b>Laboratory Method SM18 2540 C</b>                     |            |           |             |                |                |
| Residues- Filterable (TDS)                               | mg/L       |           |             | <b>180</b>     | <b>270</b>     |
| <b>Laboratory Method SM18 2540 D</b>                     |            |           |             |                |                |
| Residues- Nonfilterable (TSS)                            | mg/L       |           |             | <b>13</b>      | <b>7.5</b>     |
| <b>Laboratory Method SM18 5210 B</b>                     |            |           |             |                |                |
| BOD                                                      | mg/L       |           |             | <b>10</b>      | <b>23</b>      |
| <b>Laboratory Method SM18 5220 D</b>                     |            |           |             |                |                |
| Chemical Oxygen Demand                                   | mg/L       |           |             | <b>48</b>      | <b>42</b>      |
| <b>Laboratory Method SM18 5310 C</b>                     |            |           |             |                |                |
| Carbon- Total Organic                                    | mg/L       |           |             | <b>21</b>      | <b>18</b>      |
| <b>Laboratory Method SM18 9222 D (MF)</b>                |            |           |             |                |                |
| Coliform Fecal                                           | CFU/100 mL | 800       | 800         | <b>1350</b>    | <b>158 B</b>   |
| <b>Laboratory Method Total Nitrogen</b>                  |            |           |             |                |                |
| Nitrogen- Total                                          | mg/L       |           |             | <b>0.87</b>    | <b>2.7</b>     |

**Notes:**

ug/L = micrograms per liter; mg/L = milligrams per liter; I = Reported value between method detection limit and practical quantitation limit; B = Results based upon colony counts outside the acceptable range.

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)

Greyed cell indicates a WQS exceedance.

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

| Parameter                         | Unit | ClassIWQS | ClassIIIWQS | SW-1          | SW-3          |
|-----------------------------------|------|-----------|-------------|---------------|---------------|
| <b>Laboratory Method EPA 8011</b> |      |           |             |               |               |
| 1,2-Dibromo-3-Chloropropane       | ug/L |           |             | < 0.0053      | < 0.0051      |
| 1,2-Dibromoethane                 | ug/L |           |             | < 0.0023      | < 0.0023      |
| <b>Laboratory Method EPA 8260</b> |      |           |             |               |               |
| 1,1,1,2-Tetrachloroethane         | ug/L |           |             | < 0.33        | < 0.33        |
| 1,1,1-Trichloroethane             | ug/L |           |             | < 0.5         | < 0.5         |
| 1,1,2,2-Tetrachloroethane         | ug/L | 0.17      | 10.8        | < 0.18        | < 0.18        |
| 1,1,2-Trichloroethane             | ug/L |           |             | < 0.13        | < 0.13        |
| 1,1-Dichloroethane                | ug/L |           |             | < 0.25        | < 0.25        |
| 1,1-Dichloroethene                | ug/L | 7         | 3.2         | < 0.11        | < 0.11        |
| 1,2,3-Trichloropropane            | ug/L |           |             | < 0.41        | < 0.41        |
| 1,2-Dibromo-3-Chloropropane       | ug/L |           |             | < 0.44        | < 0.44        |
| 1,2-Dibromoethane                 | ug/L |           |             | < 0.25        | < 0.25        |
| 1,2-Dichlorobenzene               | ug/L |           |             | < 0.21        | < 0.21        |
| 1,2-Dichloroethane                | ug/L |           |             | < 0.1         | < 0.1         |
| 1,2-Dichloropropane               | ug/L |           |             | < 0.13        | < 0.13        |
| 1,4-Dichlorobenzene               | ug/L |           |             | < 0.28        | < 0.28        |
| 2-Butanone                        | ug/L |           |             | < 1           | < 1           |
| 2-Hexanone                        | ug/L |           |             | < 1           | < 1           |
| 4-Methyl-2-pentanone              | ug/L |           |             | < 1           | < 1           |
| Acetone                           | ug/L |           |             | < 5           | < 5           |
| Acrylonitrile                     | ug/L |           |             | < 7.2         | < 7.2         |
| Benzene                           | ug/L | 1.18      | 71.28       | < 0.25        | < 0.25        |
| Bromochloromethane                | ug/L |           |             | < 0.14        | < 0.14        |
| Bromodichloromethane              | ug/L | 0.27      | 22          | < 0.25        | < 0.25        |
| Bromoform                         | ug/L | 4.3       | 360         | < 0.5         | < 0.5         |
| Bromomethane                      | ug/L |           |             | < 2           | < 2           |
| Carbon disulfide                  | ug/L |           |             | < 0.6         | < 0.6         |
| Carbon tetrachloride              | ug/L | 3         | 4.42        | < 0.5         | < 0.5         |
| Chlorobenzene                     | ug/L |           |             | < 0.25        | < 0.25        |
| Chloroethane                      | ug/L |           |             | < 2           | < 2           |
| Chloroform                        | ug/L | 5.67      | 470.8       | < 0.14        | < 0.14        |
| Chloromethane                     | ug/L | 5.67      | 470.8       | < 0.33        | < 0.33        |
| cis-1,2-Dichloroethene            | ug/L |           |             | <b>0.25 I</b> | <b>0.18 I</b> |
| cis-1,3-Dichloropropene           | ug/L |           |             | < 0.11        | < 0.11        |
| Dibromochloromethane              | ug/L | 0.41      | 34          | < 0.1         | < 0.1         |
| Dibromomethane                    | ug/L |           |             | < 0.2         | < 0.2         |
| Ethylbenzene                      | ug/L |           |             | < 0.11        | < 0.11        |
| Iodomethane                       | ug/L |           |             | < 1           | < 1           |
| Methylene chloride                | ug/L | 4.65      | 1580        | < 1           | < 1           |
| Styrene                           | ug/L |           |             | < 0.11        | < 0.11        |
| Tetrachloroethene                 | ug/L | 3         | 8.85        | <b>0.21 I</b> | <b>0.35 I</b> |
| Toluene                           | ug/L |           |             | < 0.33        | < 0.33        |
| trans-1,2-Dichloroethene          | ug/L |           |             | < 0.2         | < 0.2         |
| trans-1,3-Dichloropropene         | ug/L |           |             | < 0.21        | < 0.21        |
| trans-1,4-Dichloro-2-butene       | ug/L |           |             | < 0.5         | < 0.5         |
| Trichloroethene                   | ug/L | 3         | 80.7        | <b>0.26 I</b> | <b>0.45 I</b> |
| Trichlorofluoromethane            | ug/L |           |             | < 0.25        | < 0.25        |
| Vinyl acetate                     | ug/L |           |             | < 0.28        | < 0.28        |
| Vinyl chloride                    | ug/L |           |             | < 0.18        | < 0.18        |
| Xylenes, Total                    | ug/L |           |             | < 0.2         | < 0.2         |

**Notes:**

ug/L = micrograms per liter; mg/L = milligrams per liter; 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)

Greyed cell indicates a WQS exceedance.

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

| Well ID                                | pH          | Dissolved Oxygen | Specific Conductivity | Temperature | Turbidity | Color              | Sheen |
|----------------------------------------|-------------|------------------|-----------------------|-------------|-----------|--------------------|-------|
|                                        | (SU)        | (mg/L)           | (uS/cm)               | (°C)        | (NTU)     | (by observation)   |       |
| Drinking Water SMCL:                   | 6.5 to 8.5  | --               | --                    | --          | --        | --                 | --    |
| Class I/III WQS:                       | Vary 1 Unit | <5.0             | 1,275 or 50%          | --          | 29 > BG   | --                 | --    |
| <b>Shallow Wells</b>                   |             |                  |                       |             |           |                    |       |
| MWB-2(S)                               | 4.47        | 0.7              | 84                    | 25.3        | 85.22     | Brown              | None  |
| MWB-3(S)                               | 4.59        | 1.0              | 59                    | 21.9        | 3.88      | None               | None  |
| MWB-11(S)                              | 4.03        | 0.0              | 174                   | 23.2        | 2.52      | None               | None  |
| MWB-12(S)                              | 5.78        | 0.3              | 408                   | 25.6        | 5.23      | Slight Yellow Tint | None  |
| MWB-13(S)                              | 5.89        | 0.4              | 327                   | 16.5        | 9.41      | Yellow/Brown Tint  | None  |
| MWB-20(S)                              | 4.26        | 0.0              | 74                    | 26.0        | 6.11      | Brown Tint         | None  |
| MWB-21(S)                              | 5.16        | 0.0              | 43                    | 25.1        | 3.92      | None               | None  |
| MWB-22(S)                              | 5.98        | 0.1              | 274                   | 25.7        | 3.61      | None               | None  |
| MWB-27(S)                              | 5.15        | 0.0              | 205                   | 24.9        | 3.69      | None               | None  |
| MWB-29(S)                              | 4.44        | 0.3              | 45                    | 26.4        | 3.37      | None               | None  |
| MWB-32(S)                              | 5.15        | 0.4              | 175                   | 23.9        | 6.39      | Brown Tint         | None  |
| MWB-33(S)                              | 5.67        | 0.1              | 268                   | 24.2        | 1.78      | Slight Yellow Tint | None  |
| MWB-34(S)                              | 6.10        | 0.0              | 702                   | 25.0        | 1.31      | Yellow Tint        | None  |
| <b>Intermediate Wells</b>              |             |                  |                       |             |           |                    |       |
| MWB-2(I)                               | 4.82        | 0.3              | 41                    | 21.5        | 3.07      | None               | None  |
| MWB-3(I)                               | 4.83        | 0.0              | 40                    | 21.1        | 2.08      | None               | None  |
| MWB-11(IR)                             | 4.86        | 0.0              | 36                    | 24.4        | 3.97      | None               | None  |
| MWB-12(I)                              | 5.35        | 0.1              | 39                    | 25.8        | 3.71      | None               | None  |
| MWB-13(I)                              | 5.25        | 0.2              | 36                    | 25.8        | 3.71      | None               | None  |
| MWB-27(I)                              | 5.55        | 0.0              | 51                    | 21.9        | 4.59      | None               | None  |
| MWB-29(I)                              | 5.17        | 0.2              | 41                    | 23.5        | 3.30      | None               | None  |
| MWB-32(I)                              | 5.30        | 0.0              | 41                    | 22.0        | 9.02      | Slight White Tint  | None  |
| MWB-34(I)                              | 5.38        | 0.0              | 43                    | 25.7        | 3.44      | None               | None  |
| <b>Surface Water August 2014 Event</b> |             |                  |                       |             |           |                    |       |
| SW-1                                   | 7.11        | 5.3              | 245                   | 24.2        | 16.87     | Yellow Tint        | None  |
| SW-3                                   | 7.14        | 5.3              | 436                   | 29.1        | 14.12     | 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

Greyed cells indicate a WQS exceedance.

Measurements collected by ProTech in August 2014.

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

| Parameter | Units | WQS Class I & Class III                   | SW-1           |          | SW-3           |          |                             |
|-----------|-------|-------------------------------------------|----------------|----------|----------------|----------|-----------------------------|
|           |       |                                           | 78             |          | 140            |          | Total Hardness <sup>1</sup> |
|           |       |                                           | 4.36           |          | 4.94           |          | lnH <sup>2</sup>            |
|           |       |                                           | Result (total) | Standard | Result (total) | Standard |                             |
| Cadmium   | ug/L  | Measured $\leq e^{(0.7409[\ln H]-4.719)}$ | <0.095         | 0.2      | <0.095         | 0.3      |                             |
| Chromium  | ug/L  | Measured $\leq e^{(0.819[\ln H]+0.6848)}$ | <2.5           | 70       | <2.5           | 114      |                             |
| Copper    | ug/L  | Measured $\leq e^{(0.8545[\ln H]-1.702)}$ | <b>2.0 I</b>   | 7.5      | <1.1           | 12       |                             |
| Lead      | ug/L  | Measured $\leq e^{(1.273[\ln H]- 4.705)}$ | <b>0.91 I</b>  | 2.3      | <b>1.1 I</b>   | 4.9      |                             |
| Nickel    | ug/L  | Measured $\leq e^{(0.846[\ln H]+0.0584)}$ | <2             | 42       | <b>2.2 I</b>   | 69       |                             |
| Zinc      | ug/L  | Measured $\leq e^{(0.8473[\ln H]+0.884)}$ | <b>19 I</b>    | 97       | <8.3           | 159      |                             |

**Notes:**

ug/L - micrograms per liter

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

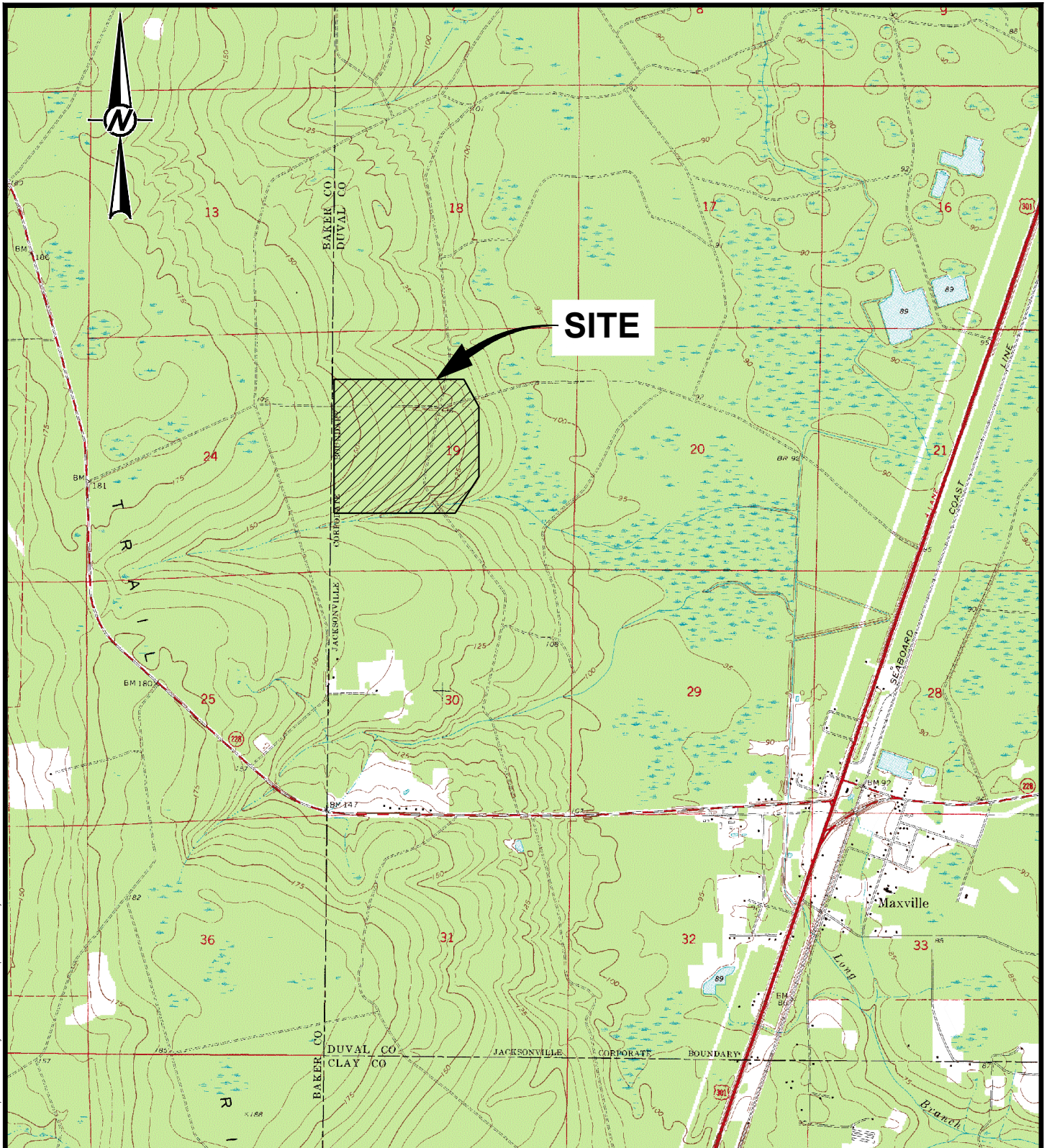
\*- According to FDEP Rule 62-302.530, if H is less than 25 than 25 shall be used in the calculations

<sup>1</sup> - Total measured total hardness (H) is reported in milligrams/L of CaCO<sub>3</sub> in the Test America laboratory report<sup>2</sup> - "ln H" means the natural logarithm of total hardness expressed as milligrams/L of CaCO<sub>3</sub>

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; greyed cells indicate a WQS exceedance.

## FIGURES



## REFERENCES

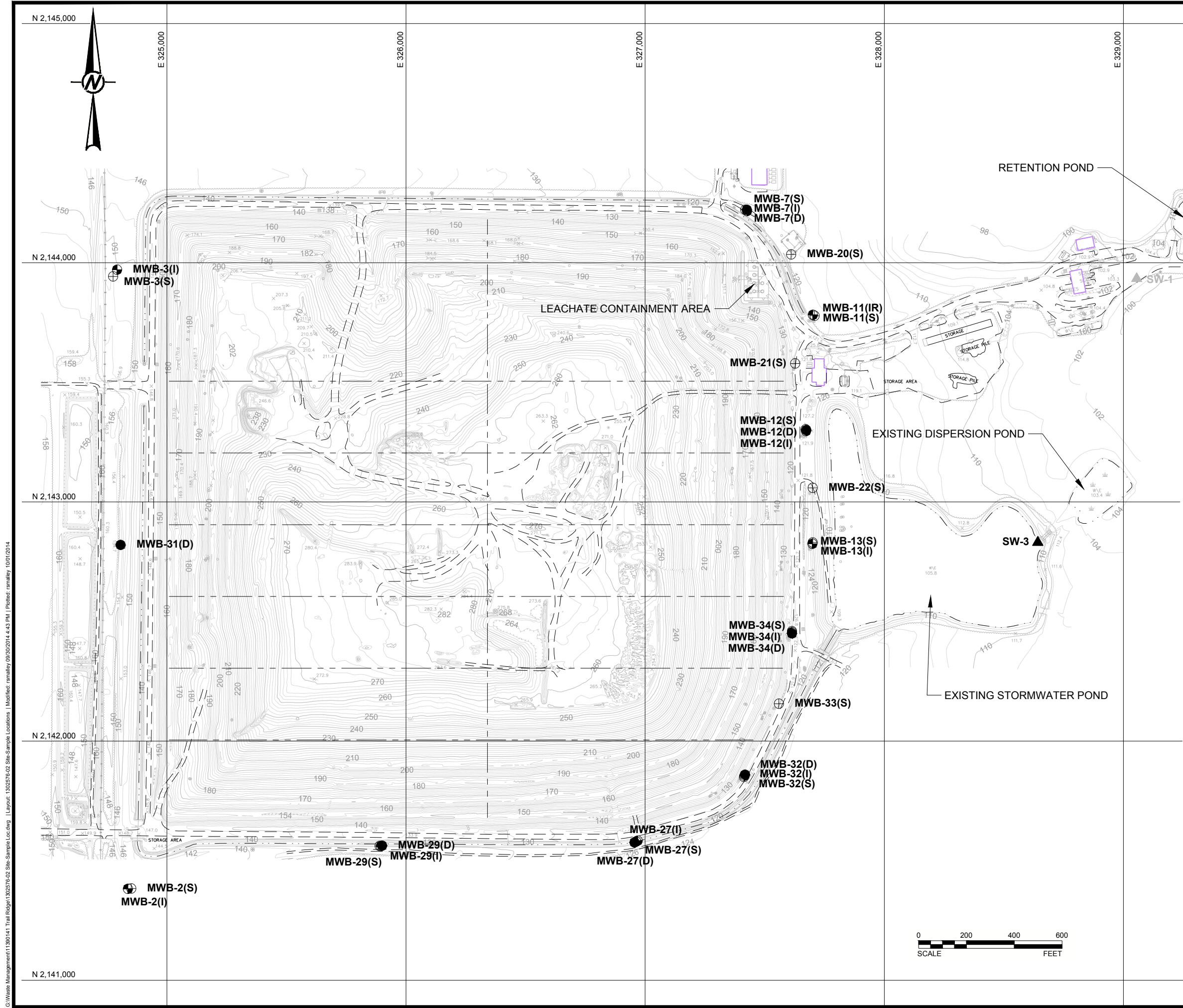
USGS 7.5 MINUTE QUADRANGLE; MAXVILLE, FL 1970  
(PHOTOINSPECTED 1984).

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COA No. 1670



| REV                                                         | DATE | REVISION DESCRIPTION | DES      | CADD | CHK                 | RWW |
|-------------------------------------------------------------|------|----------------------|----------|------|---------------------|-----|
| PROJECT                                                     |      |                      |          |      |                     |     |
| WASTE MANAGEMENT<br>TRAIL RIDGE LANDFILL / JACKSONVILLE, FL |      |                      |          |      |                     |     |
| TITLE                                                       |      |                      |          |      |                     |     |
| SITE LOCATION                                               |      |                      |          |      |                     |     |
| PROJECT No.                                                 |      | 1302576              | FILE No. |      | 1302576-01 Site Loc |     |
| DESIGN                                                      | -    |                      | SCALE    |      | AS SHOWN            |     |
| CADD                                                        | RJC  | 2014-09-25           | FIGURE   |      | 1                   |     |
| CHECK                                                       | SSG  | 2014-09-25           |          |      |                     |     |
| REVIEW                                                      | RWP  | 2014-09-25           |          |      |                     |     |





## 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
- ▲ SW-1 INACTIVE SURFACE WATER MONITORING POINT

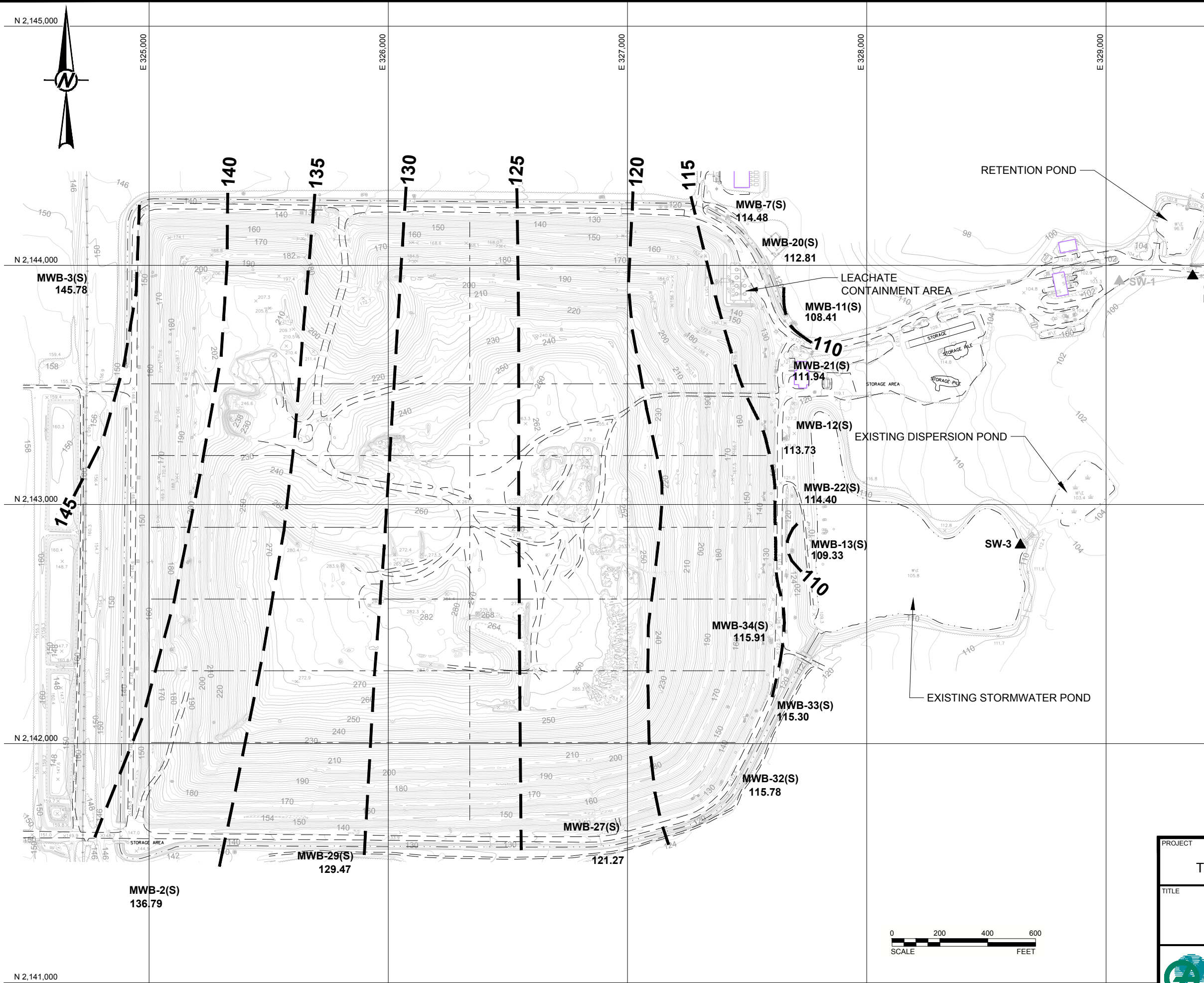
## REFERENCES

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<br>TRAIL RIDGE LANDFILL / JACKSONVILLE, FL |                            |
| TITLE                                                                                 |  | SITE LAYOUT AND<br>SAMPLING LOCATIONS                       |                            |
|  |  | PROJECT No.                                                 | 1302576                    |
|                                                                                       |  | DESIGN                                                      | -                          |
|                                                                                       |  | CADD                                                        | RJC                        |
|                                                                                       |  | CHECK                                                       | SSG                        |
|                                                                                       |  | FIGURE                                                      | 2                          |
|                                                                                       |  | SCALE                                                       | AS SHOWN                   |
|                                                                                       |  | REVIEW                                                      | RWP                        |
|                                                                                       |  | FILE No.                                                    | 1302576-02 Site-Sample Loc |

C:\Waste Management\1302576-03 Trail Ridge\Site\Annual Pot Map\2014-08\1302576-03 Shallow 2014-08.dwg | Layout: 1302576-03 Shallow 2014-08 | Modified: emaily 09/29/2014 4:43 PM | Plotted: emaily 10/01/2014



## LEGEND

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

## NOTES

1. WATER LEVELS MEASURED BY PROTECH ON AUGUST 19, 2014.

## REFERENCES

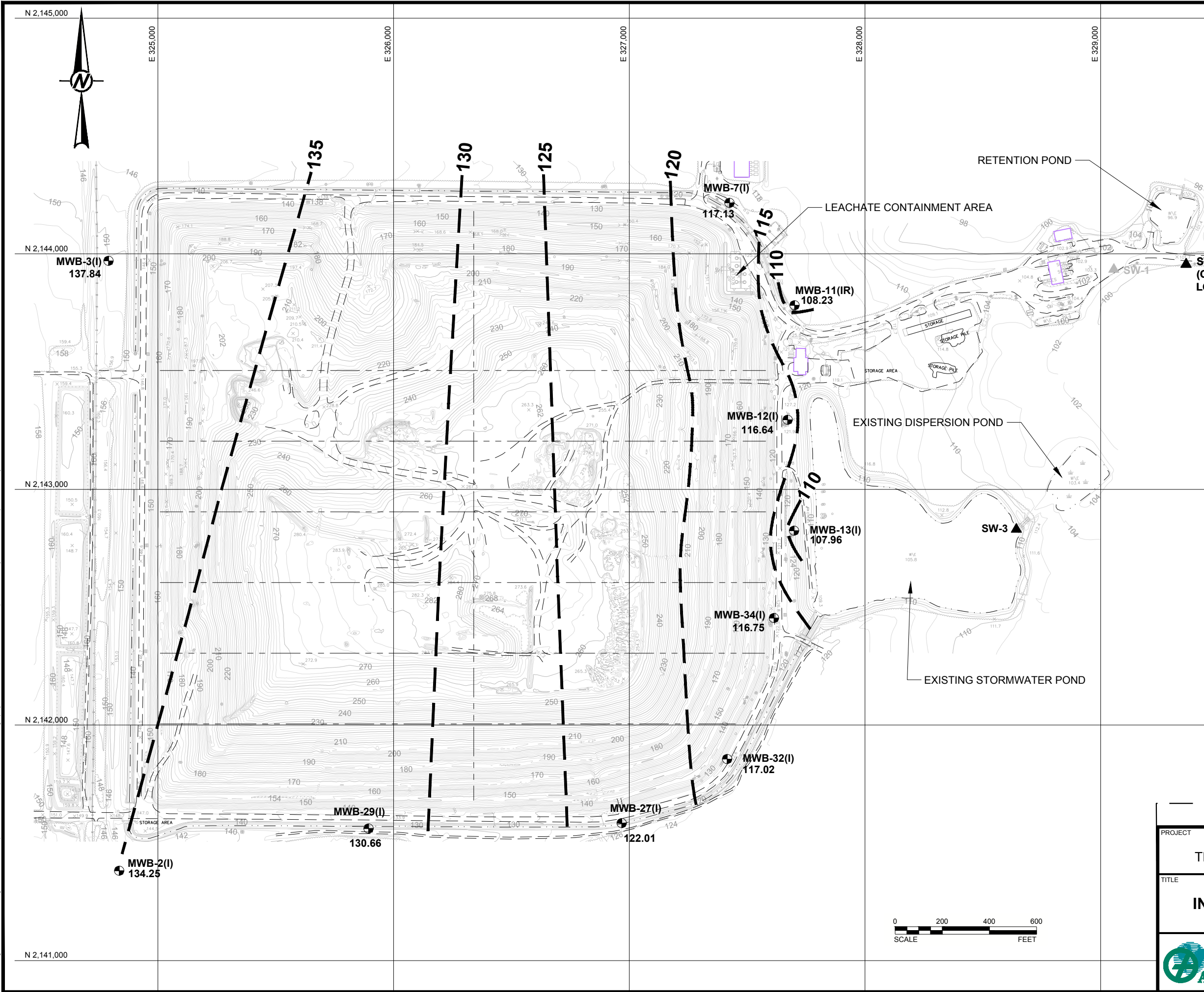
1. BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.

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<br>TRAIL RIDGE LANDFILL / JACKSONVILLE, FL    |  |          |            |
| TITLE                                                          |  |          |            |
| AUGUST 2014<br>SHALLOW SURFICIAL AQUIFER<br>POTENTIOMETRIC MAP |  |          |            |
| PROJECT No.                                                    |  | 1302576  | FILE No.   |
| DESIGN                                                         |  | -        | SCALE      |
| CADD                                                           |  | RJC      | 2014-09-25 |
| CHECK                                                          |  | SSG      | 2014-09-25 |
| REVIEW                                                         |  | RWP      | 2014-09-25 |
| FIGURE                                                         |  | AS SHOWN |            |
| Golder Associates                                              |  | 3        |            |

C:\Waste Management\11200141 Trail Ridge\Site\Annual Pot Map\2014-08\1302576-04 Intermediate 2014-08.dwg | Layout: 1302576-04 Intermediate 2014-08 | Modified: ssmiley 09/30/2014 4:43 PM | Plotted: ssmiley 10/01/2014.



### LEGEND

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

### NOTES

1. WATER LEVELS MEASURED BY PROTECH ON AUGUST 19, 2014.

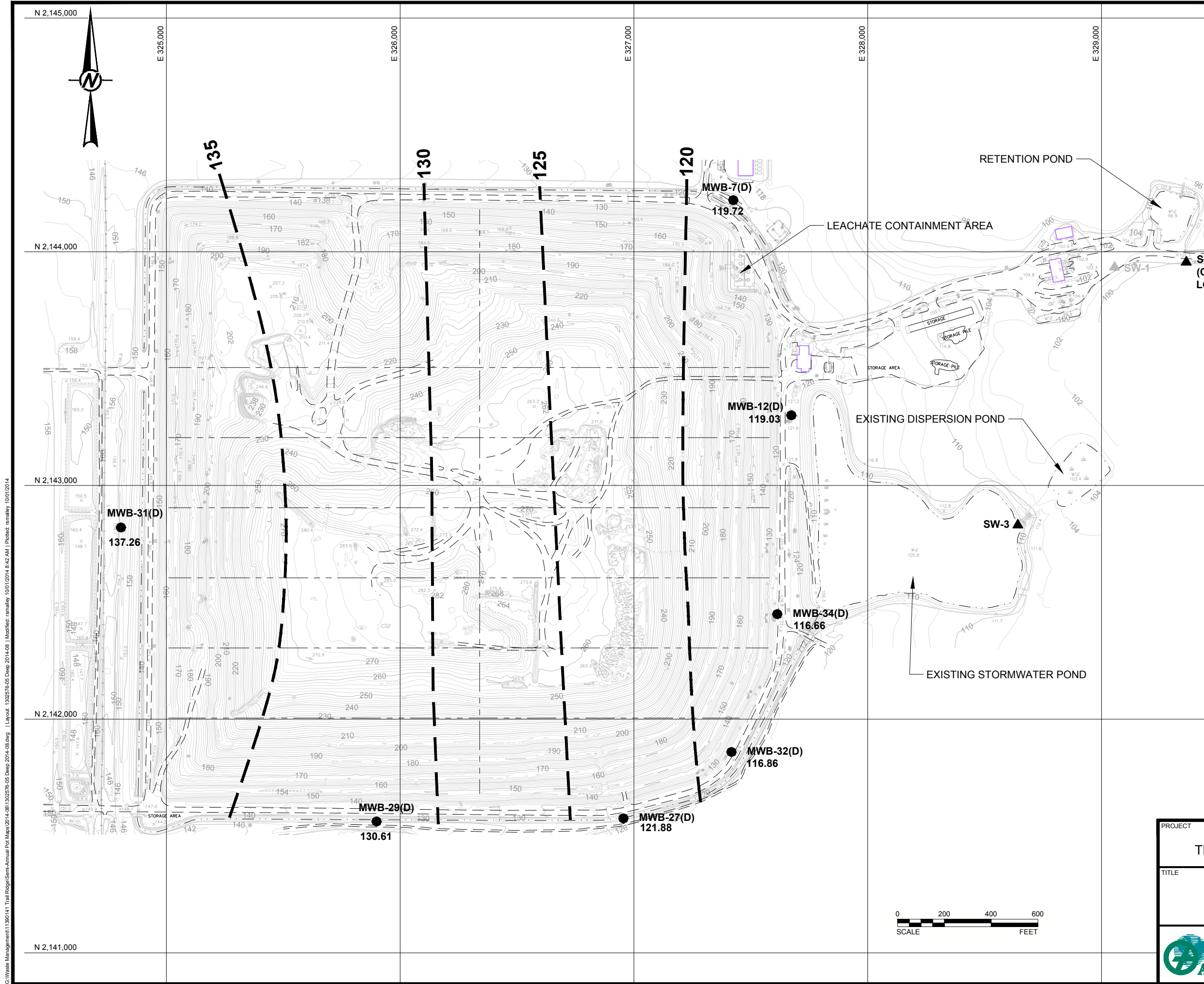
### REFERENCES

- BASE MAP PROVIDED BY WASTE MANAGEMENT, INC. OF FLORIDA, DATE OF PHOTOGRAPHY 01/12/11.
- 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<br>TRAIL RIDGE LANDFILL / JACKSONVILLE, FL         |                                          |
| TITLE       |     | AUGUST 2014<br>INTERMEDIATE SURFICIAL AQUIFER<br>POTENTIOMETRIC MAP |                                          |
| PROJECT No. |     | 1302576                                                             | FILE No. 1302576-04 Intermediate 2014-08 |
| DESIGN      | -   | -                                                                   | SCALE AS SHOWN                           |
| CADD        | RJC | 2014-09-25                                                          | FIGURE                                   |
| CHECK       | SSG | 2014-09-25                                                          |                                          |
| REVIEW      | RWP | 2014-09-25                                                          |                                          |





LEGEND

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

NOTES

1. WATER LEVELS MEASURED BY PROTECH ON AUGUST 19, 2014.

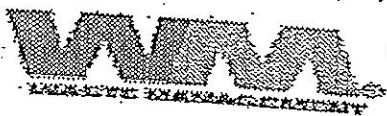
REFERENCES

- 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<br>WASTE MANAGEMENT<br>TRAIL RIDGE LANDFILL / JACKSONVILLE, FL |                     |     |                                  |
| TITLE<br>AUGUST 2014<br>DEEP SURFICIAL AQUIFER<br>POTENTIOMETRIC MAP   |                     |     |                                  |
|                                                                        | PROJECT No. 1302576 |     | FILE No. 1302576-05 Deep 2014-08 |
|                                                                        | DESIGN              | -   | SCALE AS SHOWN                   |
|                                                                        | CADD                | RJC | 2014-09-25                       |
|                                                                        | CHECK               | SSG | 2014-09-25                       |
| REVIEW RWP                                                             |                     |     | 2014-09-25                       |
|                                                                        |                     |     | FIGURE 5                         |

**APPENDIX A**  
**INSTRUMENT CALIBRATION FIELD RECORDS**  
**AND WELL DEVELOPMENT FORMS**



# WELL CONDITION SUMMARY

Site: TRAIL RIDGE

Personnel: DAN ARMOUR

Date: 8-19-14

Page 1 of 3

| Well ID | Protective Casing                                                          | Well Casing                                                                | Label                                                                         | Lock                                                                   | Sample Equipment Type        | General Turbidity                                                            | Well Yield                                                                    | Comments/Observations |
|---------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------|
| MWB29S  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | DEDICATED<br>BLADDER<br>PUMP | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB27S  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB13S  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB22S  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB12S  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB12I  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB13I  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB27I  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB29I  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB2I   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> 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 Commission.



# WELL CONDITION SUMMARY

Site: TRAIL RIDGE

Personnel: DAN ARMOUR

Date: 8-19-14

Page 2 of 3

| Well ID   | Protective Casing                                                          | Well Casing                                                                | Label                                                                         | Lock                                                                   | Sample Equipment Type        | General Turbidity                                                            | Well Yield                                                                    | Comments/Observations |
|-----------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------|
| MWB31I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | DEDICATED<br>BLADDER<br>PUMP | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB11I(R) | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB34I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB32I    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
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| MWB33S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB34S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB11S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB20S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate |                       |
| MWB35S    | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> 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 Completion.



# WELL CONDITION SUMMARY

Site: TRAIL RIDGE

Personnel: DAN ARMOUR

Date: 8-19-14

Page 3 of 3

| Well ID | Protective Casing                                                          | Well Casing                                                                | Label                                                                         | Lock                                                                   | Sample Equipment Type        | General Turbidity                                                            | Well Yield                                                                    | Comments/Observations |
|---------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------|
| MWB25   | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | DEDICATED<br>BLADDER<br>PUMP | <input type="checkbox"/> Clear<br><input checked="" type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | COMPLETED A DISSOLVED |
| MWB215  | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No | "                            | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Turbid | <input checked="" type="checkbox"/> OK<br><input type="checkbox"/> Inadequate | METALS SAMPLE         |
|         | <input type="checkbox"/> OK<br><input type="checkbox"/> Damaged            | <input type="checkbox"/> OK<br><input type="checkbox"/> Damaged            | <input type="checkbox"/> OK<br><input type="checkbox"/> Inadequate            | <input type="checkbox"/> Yes<br><input type="checkbox"/> No            |                              | <input type="checkbox"/> Clear<br><input checked="" type="checkbox"/> Turbid | <input type="checkbox"/> OK<br><input type="checkbox"/> Inadequate            |                       |
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\* 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 Completion.

## 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 EXP: JUNE 2015 7.01 (std)

Standard B PINE ENVIRONMENTAL EXP: DEC 2014 4.01 (std)

Standard CPINE ENVIRONMENTAL EXP: JULY 2015 10.01 (std)

[illegible]

INSTRUMENT (MAKE/MODEL#) HFS SCIENTIFIC MICRO TPI INSTRUMENT # 108086

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

Standard A 1000 NTU HF SCIENTIFIC EXP: 10-2014

Standard B 10.0 NTU HF Scientific Exp: 10-2014

Standard C 0.02 NTU HF Scientific EXP: 10-2014

Revision Date: February 1, 2004

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

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

Standard A 84 NS/cm PINE ENVIRONMENTAL EXP: B-2014

Standard B 1413<sup>NS</sup> cm PINE ENVIRONMENTAL EXP: 8-2014

[illegible]

## Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HANNA HI 9825

INSTRUMENT # 725490

- ☐ TEMPERATURE

☐ CONDUCTIVITY☐ SALINITY

□ pH

☐ ORP

☐ TURBIDITY

☐ RESIDUAL CI

☒ 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

[illegible]

DEP-SOP-001/01  
FS 2200 Groundwater Sampling

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

**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: 640-48932-1

Client Project/Site: Trail Ridge Landfill

For:

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

Attn: Shannon George



Authorized for release by:  
9/11/2014 3:01:35 PM

Amy Atkins, Project Manager II  
(813)885-7427  
[amy.atkins@testamericainc.com](mailto:amy.atkins@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

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Visit us at:

[www.testamericainc.com](http://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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## Definitions/Glossary

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

TestAmerica Job ID: 640-48932-1

### 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 Semi 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. |

#### 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                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------|
| 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.                                                       |
| J         | Estimated value; value may not be accurate.                                                                          |
| Q         | Sample held beyond the accepted holding time.                                                                        |

### Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| 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)                                                                       |

TestAmerica Tallahassee

## Case Narrative

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

TestAmerica Job ID: 640-48932-1

**Job ID: 640-48932-1**

**Laboratory: TestAmerica Tallahassee**

### Narrative

#### Job Narrative 640-48932-1

#### Receipt

The samples were received on 8/21/2014 8:15 AM and 8/22/2014 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.6° C, 2.8° C, 2.8° C and 3.0° C.

#### GC/MS VOA

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 346586 recovered outside control limits for the following analytes: Acrylonitrile. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Metals

Method 1631E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 228490 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample and duplicate (LCS/LCSD) recoveries was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

Method 353.2: The following sample(s) was received outside of holding time: MWB21S (640-48951-14), MWB2I (640-48951-1), MWB2S (640-48951-13).

Method 353.2: The following sample(s) was received with minimal time remaining. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MWB3I (640-48951-2), MWB3S (640-48951-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

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

TestAmerica Job ID: 640-48932-1

Client Sample ID: SW-1

Lab Sample ID: 640-48932-1

| Analyte                       | Result      | Qualifier | PQL     | MDL     | Unit      | Dil | Fac | D | Method         | Prep Type            |
|-------------------------------|-------------|-----------|---------|---------|-----------|-----|-----|---|----------------|----------------------|
| cis-1,2-Dichloroethene        | 0.25        | I         | 1.0     | 0.15    | ug/L      | 1   |     |   | 8260B          | Total/NA             |
| Tetrachloroethene             | 0.21        | I         | 1.0     | 0.15    | ug/L      | 1   |     |   | 8260B          | Total/NA             |
| Trichloroethene               | 0.26        | I         | 1.0     | 0.13    | ug/L      | 1   |     |   | 8260B          | Total/NA             |
| Mercury                       | 0.0043      |           | 0.0025  | 0.0010  | ug/L      | 1   |     |   | 1631E          | Total/NA             |
| Arsenic                       | 1.3         | I         | 2.5     | 1.3     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Barium                        | 33          |           | 5.0     | 1.3     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Cobalt                        | 0.24        | I         | 0.50    | 0.15    | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Copper                        | 2.0         | I         | 5.0     | 1.1     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Iron                          | 700         |           | 100     | 33      | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Lead                          | 0.91        | I         | 1.5     | 0.20    | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Zinc                          | 19          | I         | 20      | 8.3     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Hardness as calcium carbonate | 78          |           | 3.3     | 3.3     | mg/L      | 1   |     |   | SM 2340B       | Total/NA             |
| Total Suspended Solids        | 13          |           | 5.0     | 5.0     | mg/L      | 1   |     |   | 2540 D-2011    | Total/NA             |
| Total Dissolved Solids        | 180         |           | 10      | 10      | mg/L      | 1   |     |   | 2540C-2011     | Total/NA             |
| Nitrate as N                  | 0.047       | I         | 0.050   | 0.010   | mg/L      | 1   |     |   | 353.2          | Total/NA             |
| Nitrate Nitrite as N          | 0.18        |           | 0.050   | 0.010   | mg/L      | 1   |     |   | 353.2          | Total/NA             |
| Phosphorus                    | 0.042       | I         | 0.10    | 0.041   | mg/L      | 1   |     |   | 365.4          | Total/NA             |
| Biochemical Oxygen Demand     | 10          |           | 2.0     | 2.0     | mg/L      | 1   |     |   | 5210B-2011     | Total/NA             |
| Total Organic Carbon          | 21          |           | 1.0     | 0.50    | mg/L      | 1   |     |   | 5310 B-2011    | Total/NA             |
| Chemical Oxygen Demand        | 48          |           | 10      | 5.0     | mg/L      | 1   |     |   | SM 5220D       | Total/NA             |
| Nitrogen, Total               | 0.87        |           | 0.25    | 0.25    | mg/L      | 1   |     |   | Total Nitrogen | Total/NA             |
| Unionized Ammonia             | 0.0017      |           | 0.00028 | 0.00028 | mg/L      | 1   |     |   | UnionizedNH3   | Total/NA             |
| Color                         | Yellow Tint |           |         |         | PCU       | 1   |     |   | Field Sampling | Total/NA             |
| Field pH                      | 7.11        |           |         |         | 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          | 245         |           |         |         | umhos/cm  | 1   |     |   | Field Sampling | Total/NA             |
| Turbidity                     | 16.37       |           |         |         | NTU       | 1   |     |   | Field Sampling | Total/NA             |

Client Sample ID: SW-3

Lab Sample ID: 640-48932-2

| Analyte                | Result | Qualifier | PQL  | MDL  | Unit | Dil | Fac | D | Method | Prep Type            |
|------------------------|--------|-----------|------|------|------|-----|-----|---|--------|----------------------|
| cis-1,2-Dichloroethene | 0.18   | I         | 1.0  | 0.15 | ug/L | 1   |     |   | 8260B  | Total/NA             |
| Tetrachloroethene      | 0.35   | I         | 1.0  | 0.15 | ug/L | 1   |     |   | 8260B  | Total/NA             |
| Trichloroethene        | 0.45   | I         | 1.0  | 0.13 | ug/L | 1   |     |   | 8260B  | Total/NA             |
| Arsenic                | 1.6    | I         | 2.5  | 1.3  | ug/L | 1   |     |   | 6020   | Total<br>Recoverable |
| Barium                 | 19     |           | 5.0  | 1.3  | ug/L | 1   |     |   | 6020   | Total<br>Recoverable |
| Cobalt                 | 0.16   | I         | 0.50 | 0.15 | ug/L | 1   |     |   | 6020   | Total<br>Recoverable |
| Copper                 | 1.1    | I         | 5.0  | 1.1  | ug/L | 1   |     |   | 6020   | Total<br>Recoverable |
| Iron                   | 120    |           | 100  | 33   | ug/L | 1   |     |   | 6020   | Total<br>Recoverable |

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: 640-48932-1

### Client Sample ID: SW-3 (Continued)

### Lab Sample ID: 640-48932-2

| Analyte                       | Result      | Qualifier | PQL     | MDL     | Unit      | Dil | Fac | D | Method         | Prep Type            |
|-------------------------------|-------------|-----------|---------|---------|-----------|-----|-----|---|----------------|----------------------|
| Lead                          | 1.1         | I         | 1.5     | 0.20    | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Nickel                        | 2.2         | I         | 5.0     | 2.0     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Vanadium                      | 4.6         | I         | 10      | 3.8     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Hardness as calcium carbonate | 140         |           | 3.3     | 3.3     | mg/L      | 1   |     |   | SM 2340B       | Total/NA             |
| Total Suspended Solids        | 7.5         |           | 5.0     | 5.0     | mg/L      | 1   |     |   | 2540 D-2011    | Total/NA             |
| Total Dissolved Solids        | 270         |           | 10      | 10      | mg/L      | 1   |     |   | 2540C-2011     | Total/NA             |
| Nitrate as N                  | 0.055       |           | 0.050   | 0.010   | mg/L      | 1   |     |   | 353.2          | Total/NA             |
| Nitrate Nitrite as N          | 0.047       | I         | 0.050   | 0.010   | mg/L      | 1   |     |   | 353.2          | Total/NA             |
| Biochemical Oxygen Demand     | 23          |           | 2.0     | 2.0     | mg/L      | 1   |     |   | 5210B-2011     | Total/NA             |
| Total Organic Carbon          | 18          |           | 1.0     | 0.50    | mg/L      | 1   |     |   | 5310 B-2011    | Total/NA             |
| Chemical Oxygen Demand        | 42          |           | 10      | 5.0     | mg/L      | 1   |     |   | SM 5220D       | Total/NA             |
| Nitrogen, Total               | 2.7         |           | 0.25    | 0.25    | mg/L      | 1   |     |   | Total Nitrogen | Total/NA             |
| Unionized Ammonia             | 0.025       |           | 0.00028 | 0.00028 | mg/L      | 1   |     |   | UnionizedNH3   | Total/NA             |
| Color                         | Yellow Tint |           |         |         | PCU       | 1   |     |   | Field Sampling | Total/NA             |
| Field pH                      | 7.14        |           |         |         | SU        | 1   |     |   | Field Sampling | Total/NA             |
| Field Temperature             | 29.1        |           |         |         | 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          | 436         |           |         |         | umhos/cm  | 1   |     |   | Field Sampling | Total/NA             |
| Turbidity                     | 14.12       |           |         |         | NTU       | 1   |     |   | Field Sampling | Total/NA             |

### Client Sample ID: Trip Blank 48932

### Lab Sample ID: 640-48932-3

No Detections.

### Client Sample ID: MWB29S

### Lab Sample ID: 640-48933-1

| 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                 | 13     |           | 5.0   | 1.3   | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Cobalt                 | 0.22   | I         | 0.50  | 0.15  | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Iron                   | 610    |           | 100   | 33    | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Sodium                 | 3.7    |           | 0.50  | 0.25  | mg/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 34     |           | 5.0   | 5.0   | mg/L      | 1   |     |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.049  | I         | 0.050 | 0.026 | mg/L      | 1   |     |   | 350.1          | Total/NA             |
| Color                  | None   |           |       |       | PCU       | 1   |     |   | Field Sampling | Total/NA             |
| Field pH               | 4.44   |           |       |       | SU        | 1   |     |   | Field Sampling | Total/NA             |
| Field Temperature      | 26.4   |           |       |       | 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   | 45     |           |       |       | umhos/cm  | 1   |     |   | Field Sampling | Total/NA             |
| Turbidity              | 3.37   |           |       |       | NTU       | 1   |     |   | Field Sampling | Total/NA             |
| Water Level            | 129.47 |           |       |       | ft        | 1   |     |   | Field Sampling | Total/NA             |

### Client Sample ID: MWB27S

### Lab Sample ID: 640-48933-2

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: 640-48932-1

### Client Sample ID: MWB27S (Continued)

Lab Sample ID: 640-48933-2

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type   |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|-------------|
| Chloride               | 22     |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA    |
| Barium                 | 26     |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total       |
|                        |        |           |       |       |           |         |   |                | Recoverable |
| Cobalt                 | 0.22   | I         | 0.50  | 0.15  | ug/L      | 1       |   | 6020           | Total       |
|                        |        |           |       |       |           |         |   |                | Recoverable |
| Iron                   | 740    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total       |
|                        |        |           |       |       |           |         |   |                | Recoverable |
| Nickel                 | 2.7    | I         | 5.0   | 2.0   | ug/L      | 1       |   | 6020           | Total       |
|                        |        |           |       |       |           |         |   |                | Recoverable |
| Sodium                 | 13     |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total       |
|                        |        |           |       |       |           |         |   |                | Recoverable |
| Total Dissolved Solids | 140    |           | 10    | 10    | mg/L      | 1       |   | 2540C-2011     | Total/NA    |
| Ammonia (as N)         | 0.21   |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA    |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA    |
| Field pH               | 5.15   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA    |
| Field Temperature      | 24.9   |           |       |       | 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   | 205    |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA    |
| Turbidity              | 3.69   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA    |
| Water Level            | 121.27 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA    |

### Client Sample ID: MWB13S

Lab Sample ID: 640-48933-3

| Analyte                | Result            | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type   |
|------------------------|-------------------|-----------|-------|-------|-----------|---------|---|----------------|-------------|
| Acetone                | 5.1               | I         | 25    | 5.0   | ug/L      | 1       |   | 8260B          | Total/NA    |
| Chloride               | 25                |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA    |
| Barium                 | 5.0               |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Cadmium                | 0.20              | I         | 0.50  | 0.095 | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Copper                 | 11                |           | 5.0   | 1.1   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Iron                   | 600               |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Lead                   | 0.36              | I         | 1.5   | 0.20  | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Nickel                 | 2.8               | I         | 5.0   | 2.0   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Selenium               | 3.0               |           | 2.5   | 1.0   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Sodium                 | 23                |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Vanadium               | 31                |           | 10    | 3.8   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Zinc                   | 13                | I         | 20    | 8.3   | ug/L      | 1       |   | 6020           | Total       |
|                        |                   |           |       |       |           |         |   |                | Recoverable |
| Total Dissolved Solids | 230               |           | 10    | 10    | mg/L      | 1       |   | 2540C-2011     | Total/NA    |
| Ammonia (as N)         | 0.71              |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA    |
| Nitrate as N           | 0.42              |           | 0.050 | 0.010 | mg/L      | 1       |   | 353.2          | Total/NA    |
| Color                  | Yellow-Brown Tint |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA    |
| Field pH               | 5.89              |           |       |       | SU        | 1       |   | Field Sampling | Total/NA    |
| Field Temperature      | 16.5              |           |       |       | Degrees C | 1       |   | Field Sampling | Total/NA    |

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: 640-48932-1

## Client Sample ID: MWB13S (Continued)

Lab Sample ID: 640-48933-3

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | Dil Fac | D | Method         | Prep Type |
|----------------------|--------|-----------|-----|-----|----------|---------|---|----------------|-----------|
| Oxygen, Dissolved    | 0.4    |           |     |     | mg/L     | 1       |   | Field Sampling | Total/NA  |
| Sheen                | None   |           |     |     | NONE     | 1       |   | Field Sampling | Total/NA  |
| Specific Conductance | 327    |           |     |     | umhos/cm | 1       |   | Field Sampling | Total/NA  |
| Turbidity            | 9.41   |           |     |     | NTU      | 1       |   | Field Sampling | Total/NA  |
| Water Level          | 109.34 |           |     |     | ft       | 1       |   | Field Sampling | Total/NA  |

## Client Sample ID: MWB22S

Lab Sample ID: 640-48933-4

| 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                 | 5.5    |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Copper                 | 1.2    | I         | 5.0   | 1.1   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Iron                   | 140    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 9.6    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Zinc                   | 9.6    | I         | 20    | 8.3   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 190    |           | 10    | 10    | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.29   |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | 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      | 0.1    |           |       |       | mg/L      | 1       |   | Field Sampling | Total/NA          |
| Sheen                  | None   |           |       |       | NONE      | 1       |   | Field Sampling | Total/NA          |
| Specific Conductance   | 274    |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 3.61   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 114.4  |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

## Client Sample ID: MWB12S

Lab Sample ID: 640-48933-5

| Analyte                | Result    | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type         |
|------------------------|-----------|-----------|-------|-------|-----------|---------|---|----------------|-------------------|
| Chloride               | 60        |           | 1.0   | 0.50  | mg/L      | 2       |   | 300.0          | Total/NA          |
| Barium                 | 2.3       | I         | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Iron                   | 79        | I         | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Nickel                 | 3.9       | I         | 5.0   | 2.0   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Selenium               | 2.7       |           | 2.5   | 1.0   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 38        |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Vanadium               | 48        |           | 10    | 3.8   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 270       |           | 10    | 10    | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Nitrate as N           | 0.10      |           | 0.050 | 0.010 | mg/L      | 1       |   | 353.2          | Total/NA          |
| Color                  | SI Yellow |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 5.78      |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 25.6      |           |       |       | Degrees C | 1       |   | Field Sampling | Total/NA          |

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: 640-48932-1

### Client Sample ID: MWB12S (Continued)

Lab Sample ID: 640-48933-5

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | Dil Fac | D | Method         | Prep Type |
|----------------------|--------|-----------|-----|-----|----------|---------|---|----------------|-----------|
| Oxygen, Dissolved    | 0.3    |           |     |     | mg/L     | 1       |   | Field Sampling | Total/NA  |
| Sheen                | None   |           |     |     | NONE     | 1       |   | Field Sampling | Total/NA  |
| Specific Conductance | 408    |           |     |     | umhos/cm | 1       |   | Field Sampling | Total/NA  |
| Turbidity            | 5.23   |           |     |     | NTU      | 1       |   | Field Sampling | Total/NA  |
| Water Level          | 113.73 |           |     |     | ft       | 1       |   | Field Sampling | Total/NA  |

### Client Sample ID: MWB12I

Lab Sample ID: 640-48933-6

| 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          |
| Iron                   | 370    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 3.4    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 42     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.052  |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 5.35   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 25.8   |           |       |       | 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   | 39     |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 3.71   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 116.64 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

### Client Sample ID: MWB13I

Lab Sample ID: 640-48933-7

| 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          |
| Iron                   | 410    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 3.5    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 34     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.056  |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 5.25   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 25.8   |           |       |       | 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              | 3.71   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 107.96 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

### Client Sample ID: MWB27I

Lab Sample ID: 640-48933-8

| 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          |
| Iron     | 490    |           | 100  | 33   | ug/L | 1       |   | 6020   | Total Recoverable |
| Sodium   | 3.4    |           | 0.50 | 0.25 | mg/L | 1       |   | 6020   | Total Recoverable |

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: 640-48932-1

### Client Sample ID: MWB27I (Continued)

Lab Sample ID: 640-48933-8

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|-----------|
| Total Dissolved Solids | 68     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA  |
| Ammonia (as N)         | 0.068  |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA  |
| Nitrate as N           | 0.016  | I         | 0.050 | 0.010 | mg/L      | 1       |   | 353.2          | Total/NA  |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA  |
| Field pH               | 5.55   |           |       |       | 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   | 51     |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA  |
| Turbidity              | 4.59   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA  |
| Water Level            | 122.01 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA  |

### Client Sample ID: MWB29I

Lab Sample ID: 640-48933-9

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type         |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|-------------------|
| Chloride               | 6.1    |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA          |
| Iron                   | 510    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 4.3    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 39     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.056  |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 5.17   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 23.5   |           |       |       | 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   | 41     |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 3.3    |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 130.66 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

### Client Sample ID: Trip Blank 48933

Lab Sample ID: 640-48933-10

No Detections.

### Client Sample ID: MWB2I

Lab Sample ID: 640-48951-1

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type         |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|-------------------|
| Chloride               | 7.8    |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA          |
| Iron                   | 410    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 5.1    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 36     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.031  | I         | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 4.82   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 21.5   |           |       |       | 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   | 41     |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 3.07   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |

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: 640-48932-1

### Client Sample ID: MWB2I (Continued)

Lab Sample ID: 640-48951-1

| Analyte     | Result | Qualifier | PQL | MDL | Unit | Dil Fac | D | Method         | Prep Type |
|-------------|--------|-----------|-----|-----|------|---------|---|----------------|-----------|
| Water Level | 134.23 |           |     |     | ft   |         | 1 | Field Sampling | Total/NA  |

### Client Sample ID: MWB3I

Lab Sample ID: 640-48951-2

| Analyte                | Result | Qualifier | PQL  | MDL  | Unit      | Dil Fac | D | Method         | Prep Type         |
|------------------------|--------|-----------|------|------|-----------|---------|---|----------------|-------------------|
| Chloride               | 6.4    |           | 0.50 | 0.25 | mg/L      | 1       |   | 300.0          | Total/NA          |
| Iron                   | 820    |           | 100  | 33   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 4.1    |           | 0.50 | 0.25 | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 25     |           | 5.0  | 5.0  | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Color                  | None   |           |      |      | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 4.83   |           |      |      | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 21.1   |           |      |      | 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   | 40     |           |      |      | 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: MWB11I (R)

Lab Sample ID: 640-48951-3

| 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          |
| Iron                   | 390    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 3.5    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 46     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.047  | I         | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 4.86   |           |       |       | 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   | 36     |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 3.97   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 108.22 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

### Client Sample ID: MWB34I

Lab Sample ID: 640-48951-4

| 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          |
| Iron                   | 430    |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 3.6    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 34     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.067  |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 5.38   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 25.7   |           |       |       | Degrees C | 1       |   | Field Sampling | Total/NA          |

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: 640-48932-1

### Client Sample ID: MWB34I (Continued)

Lab Sample ID: 640-48951-4

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | Dil Fac | D | Method         | Prep Type |
|----------------------|--------|-----------|-----|-----|----------|---------|---|----------------|-----------|
| 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            | 3.44   |           |     |     | NTU      | 1       |   | Field Sampling | Total/NA  |
| Water Level          | 116.75 |           |     |     | ft       | 1       |   | Field Sampling | Total/NA  |

### Client Sample ID: MWB32I

Lab Sample ID: 640-48951-5

| 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             |
| Iron                   | 150        |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Sodium                 | 3.5        |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 33         |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.041      | I         | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA             |
| Color                  | SI Whitish |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA             |
|                        | Tint       |           |       |       |           |         |   |                |                      |
| Field pH               | 5.3        |           |       |       | SU        | 1       |   | Field Sampling | Total/NA             |
| Field Temperature      | 22.0       |           |       |       | 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   | 41         |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA             |
| Turbidity              | 9.02       |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA             |
| Water Level            | 117.01     |           |       |       | ft        | 1       |   | Field Sampling | Total/NA             |

### Client Sample ID: FIELD BLANK 01 48951

Lab Sample ID: 640-48951-6

No Detections.

### Client Sample ID: MWB32S

Lab Sample ID: 640-48951-7

| 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                 | 43         |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Cobalt                 | 0.50       |           | 0.50  | 0.15  | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Iron                   | 1100       |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Lead                   | 0.39       | I         | 1.5   | 0.20  | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Sodium                 | 17         |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 110        |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.85       |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA             |
| Color                  | Brown Tint |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA             |
| Field pH               | 5.15       |           |       |       | SU        | 1       |   | Field Sampling | Total/NA             |
| Field Temperature      | 23.9       |           |       |       | 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   | 175        |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA             |
| Turbidity              | 6.39       |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA             |

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: 640-48932-1

### Client Sample ID: MWB32S (Continued)

Lab Sample ID: 640-48951-7

| Analyte     | Result | Qualifier | PQL | MDL | Unit | Dil | Fac | D | Method         | Prep Type |
|-------------|--------|-----------|-----|-----|------|-----|-----|---|----------------|-----------|
| Water Level | 115.76 |           |     |     | ft   |     |     | 1 | Field Sampling | Total/NA  |

### Client Sample ID: MWB33S

Lab Sample ID: 640-48951-8

| Analyte                | Result    | Qualifier | PQL   | MDL   | Unit      | Dil | Fac | D | Method         | Prep Type            |
|------------------------|-----------|-----------|-------|-------|-----------|-----|-----|---|----------------|----------------------|
| Chloride               | 7.8       |           | 0.50  | 0.25  | mg/L      |     |     | 1 | 300.0          | Total/NA             |
| Barium                 | 6.9       |           | 5.0   | 1.3   | ug/L      |     |     | 1 | 6020           | Total<br>Recoverable |
| Iron                   | 95        | I         | 100   | 33    | ug/L      |     |     | 1 | 6020           | Total<br>Recoverable |
| Sodium                 | 8.0       |           | 0.50  | 0.25  | mg/L      |     |     | 1 | 6020           | Total<br>Recoverable |
| Vanadium               | 6.0       | I         | 10    | 3.8   | ug/L      |     |     | 1 | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 150       |           | 10    | 10    | mg/L      |     |     | 1 | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 1.2       |           | 0.050 | 0.026 | mg/L      |     |     | 1 | 350.1          | Total/NA             |
| Color                  | SI Yellow |           |       |       | PCU       |     |     | 1 | Field Sampling | Total/NA             |
| Field pH               | 5.67      |           |       |       | SU        |     |     | 1 | Field Sampling | Total/NA             |
| Field Temperature      | 24.2      |           |       |       | 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   | 268       |           |       |       | umhos/cm  |     |     | 1 | Field Sampling | Total/NA             |
| Turbidity              | 1.78      |           |       |       | NTU       |     |     | 1 | Field Sampling | Total/NA             |
| Water Level            | 115.29    |           |       |       | ft        |     |     | 1 | Field Sampling | Total/NA             |

### Client Sample ID: MWB34S

Lab Sample ID: 640-48951-9

| Analyte                | Result      | Qualifier | PQL   | MDL   | Unit | Dil | Fac | D | Method         | Prep Type            |
|------------------------|-------------|-----------|-------|-------|------|-----|-----|---|----------------|----------------------|
| Chloride               | 63          |           | 1.0   | 0.50  | mg/L |     |     | 2 | 300.0          | Total/NA             |
| Barium                 | 4.3         | I         | 5.0   | 1.3   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Chromium               | 2.7         | I         | 5.0   | 2.5   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Cobalt                 | 0.83        |           | 0.50  | 0.15  | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Copper                 | 3.8         | I         | 5.0   | 1.1   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Iron                   | 290         |           | 100   | 33    | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Lead                   | 0.21        | I         | 1.5   | 0.20  | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Nickel                 | 5.2         |           | 5.0   | 2.0   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Sodium                 | 89          |           | 0.50  | 0.25  | mg/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Vanadium               | 11          |           | 10    | 3.8   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Zinc                   | 45          |           | 20    | 8.3   | ug/L |     |     | 1 | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 420         |           | 10    | 10    | mg/L |     |     | 1 | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 3.3         |           | 0.10  | 0.052 | mg/L |     |     | 2 | 350.1          | Total/NA             |
| Nitrate as N           | 0.083       | J         | 0.050 | 0.010 | mg/L |     |     | 1 | 353.2          | Total/NA             |
| Color                  | Yellow Tint |           |       |       | PCU  |     |     | 1 | Field Sampling | Total/NA             |

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: 640-48932-1

## Client Sample ID: MWB34S (Continued)

Lab Sample ID: 640-48951-9

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | Dil Fac | D | Method         | Prep Type |
|----------------------|--------|-----------|-----|-----|-----------|---------|---|----------------|-----------|
| Field pH             | 6.1    |           |     |     | SU        | 1       |   | Field Sampling | Total/NA  |
| Field Temperature    | 25.0   |           |     |     | 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 | 702    |           |     |     | umhos/cm  | 1       |   | Field Sampling | Total/NA  |
| Turbidity            | 1.31   |           |     |     | NTU       | 1       |   | Field Sampling | Total/NA  |
| Water Level          | 115.9  |           |     |     | ft        | 1       |   | Field Sampling | Total/NA  |

## Client Sample ID: MWB11S

Lab Sample ID: 640-48951-10

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type         |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|-------------------|
| Chloride               | 20     |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA          |
| Barium                 | 69     |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Cobalt                 | 0.56   |           | 0.50  | 0.15  | ug/L      | 1       |   | 6020           | Total Recoverable |
| Iron                   | 1700   |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 12     |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total Recoverable |
| Vanadium               | 7.5    | I         | 10    | 3.8   | ug/L      | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 100    |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.12   |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA          |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 4.03   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA          |
| Field Temperature      | 23.2   |           |       |       | 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   | 174    |           |       |       | umhos/cm  | 1       |   | Field Sampling | Total/NA          |
| Turbidity              | 2.52   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA          |
| Water Level            | 108.42 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA          |

## Client Sample ID: MWB20S

Lab Sample ID: 640-48951-11

| Analyte                | Result     | Qualifier | PQL   | MDL   | Unit | Dil Fac | D | Method         | Prep Type         |
|------------------------|------------|-----------|-------|-------|------|---------|---|----------------|-------------------|
| Chloride               | 8.0        |           | 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 |
| Copper                 | 1.3        | I         | 5.0   | 1.1   | ug/L | 1       |   | 6020           | Total Recoverable |
| Iron                   | 180        |           | 100   | 33    | ug/L | 1       |   | 6020           | Total Recoverable |
| Lead                   | 0.48       | I         | 1.5   | 0.20  | ug/L | 1       |   | 6020           | Total Recoverable |
| Sodium                 | 4.3        |           | 0.50  | 0.25  | mg/L | 1       |   | 6020           | Total Recoverable |
| Total Dissolved Solids | 60         |           | 5.0   | 5.0   | mg/L | 1       |   | 2540C-2011     | Total/NA          |
| Ammonia (as N)         | 0.27       |           | 0.050 | 0.026 | mg/L | 1       |   | 350.1          | Total/NA          |
| Color                  | Brown Tint |           |       |       | PCU  | 1       |   | Field Sampling | Total/NA          |
| Field pH               | 4.26       |           |       |       | SU   | 1       |   | Field Sampling | Total/NA          |

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: 640-48932-1

## Client Sample ID: MWB20S (Continued)

Lab Sample ID: 640-48951-11

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | Dil Fac | D | Method         | Prep Type |
|----------------------|--------|-----------|-----|-----|-----------|---------|---|----------------|-----------|
| Field Temperature    | 26.0   |           |     |     | 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 | 74     |           |     |     | umhos/cm  | 1       |   | Field Sampling | Total/NA  |
| Turbidity            | 6.11   |           |     |     | NTU       | 1       |   | Field Sampling | Total/NA  |
| Water Level          | 112.81 |           |     |     | ft        | 1       |   | Field Sampling | Total/NA  |

## Client Sample ID: MWB3S

Lab Sample ID: 640-48951-12

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil Fac | D | Method         | Prep Type            |
|------------------------|--------|-----------|-------|-------|-----------|---------|---|----------------|----------------------|
| Chloride               | 10     |           | 0.50  | 0.25  | mg/L      | 1       |   | 300.0          | Total/NA             |
| Barium                 | 15     |           | 5.0   | 1.3   | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Iron                   | 3500   |           | 100   | 33    | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Lead                   | 0.25   | I         | 1.5   | 0.20  | ug/L      | 1       |   | 6020           | Total<br>Recoverable |
| Sodium                 | 5.8    |           | 0.50  | 0.25  | mg/L      | 1       |   | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 31     |           | 5.0   | 5.0   | mg/L      | 1       |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.12   |           | 0.050 | 0.026 | mg/L      | 1       |   | 350.1          | Total/NA             |
| Color                  | None   |           |       |       | PCU       | 1       |   | Field Sampling | Total/NA             |
| Field pH               | 4.59   |           |       |       | SU        | 1       |   | Field Sampling | Total/NA             |
| Field Temperature      | 21.9   |           |       |       | Degrees C | 1       |   | Field Sampling | Total/NA             |
| Oxygen, Dissolved      | 1.0    |           |       |       | 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              | 3.88   |           |       |       | NTU       | 1       |   | Field Sampling | Total/NA             |
| Water Level            | 145.77 |           |       |       | ft        | 1       |   | Field Sampling | Total/NA             |

## Client Sample ID: MWB2S

Lab Sample ID: 640-48951-13

| 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             |
| Arsenic   | 3.1    |           | 2.5  | 1.3  | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Barium    | 80     |           | 5.0  | 1.3  | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Beryllium | 0.79   |           | 0.50 | 0.25 | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Chromium  | 20     |           | 5.0  | 2.5  | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Cobalt    | 3.3    |           | 0.50 | 0.15 | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Copper    | 7.2    |           | 5.0  | 1.1  | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Iron      | 10000  |           | 100  | 33   | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Lead      | 16     |           | 1.5  | 0.20 | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Nickel    | 8.6    |           | 5.0  | 2.0  | ug/L | 1       |   | 6020   | Total<br>Recoverable |
| Selenium  | 1.5    | I         | 2.5  | 1.0  | ug/L | 1       |   | 6020   | Total<br>Recoverable |

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: 640-48932-1

## Client Sample ID: MWB2S (Continued)

Lab Sample ID: 640-48951-13

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit      | Dil | Fac | D | Method         | Prep Type            |
|------------------------|--------|-----------|-------|-------|-----------|-----|-----|---|----------------|----------------------|
| Sodium                 | 7.2    |           | 0.50  | 0.25  | mg/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Vanadium               | 26     |           | 10    | 3.8   | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Zinc                   | 16     | I         | 20    | 8.3   | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Dissolved Barium       | 11     |           | 5.0   | 1.3   | ug/L      | 1   |     |   | 6020           | Dissolved            |
| Dissolved Cobalt       | 0.21   | I         | 0.50  | 0.15  | ug/L      | 1   |     |   | 6020           | Dissolved            |
| Dissolved Iron         | 180    |           | 100   | 33    | ug/L      | 1   |     |   | 6020           | Dissolved            |
| Dissolved Sodium       | 5.9    |           | 0.50  | 0.25  | mg/L      | 1   |     |   | 6020           | Dissolved            |
| Total Dissolved Solids | 70     |           | 5.0   | 5.0   | mg/L      | 1   |     |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.18   |           | 0.050 | 0.026 | mg/L      | 1   |     |   | 350.1          | Total/NA             |
| Nitrate as N           | 0.030  | I Q       | 0.050 | 0.010 | mg/L      | 1   |     |   | 353.2          | Total/NA             |
| Color                  | Brown  |           |       |       | PCU       | 1   |     |   | Field Sampling | Total/NA             |
| Field pH               | 4.47   |           |       |       | SU        | 1   |     |   | Field Sampling | Total/NA             |
| Field Temperature      | 25.3   |           |       |       | 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   | 84     |           |       |       | umhos/cm  | 1   |     |   | Field Sampling | Total/NA             |
| Turbidity              | 85.22  |           |       |       | NTU       | 1   |     |   | Field Sampling | Total/NA             |
| Water Level            | 136.77 |           |       |       | ft        | 1   |     |   | Field Sampling | Total/NA             |

## Client Sample ID: MWB21S

Lab Sample ID: 640-48951-14

| Analyte                | Result | Qualifier | PQL   | MDL    | Unit      | Dil | Fac | D | Method         | Prep Type            |
|------------------------|--------|-----------|-------|--------|-----------|-----|-----|---|----------------|----------------------|
| DBCP                   | 0.0079 | I         | 0.020 | 0.0050 | ug/L      | 1   |     |   | 8011           | Total/NA             |
| Chloride               | 6.0    |           | 0.50  | 0.25   | mg/L      | 1   |     |   | 300.0          | Total/NA             |
| Barium                 | 16     |           | 5.0   | 1.3    | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Iron                   | 590    |           | 100   | 33     | ug/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Sodium                 | 3.4    |           | 0.50  | 0.25   | mg/L      | 1   |     |   | 6020           | Total<br>Recoverable |
| Total Dissolved Solids | 36     |           | 5.0   | 5.0    | mg/L      | 1   |     |   | 2540C-2011     | Total/NA             |
| Ammonia (as N)         | 0.15   |           | 0.050 | 0.026  | mg/L      | 1   |     |   | 350.1          | Total/NA             |
| Color                  | None   |           |       |        | PCU       | 1   |     |   | Field Sampling | Total/NA             |
| Field pH               | 5.16   |           |       |        | 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   | 43     |           |       |        | umhos/cm  | 1   |     |   | Field Sampling | Total/NA             |
| Turbidity              | 3.92   |           |       |        | NTU       | 1   |     |   | Field Sampling | Total/NA             |
| Water Level            | 111.93 |           |       |        | ft        | 1   |     |   | Field Sampling | Total/NA             |

## Client Sample ID: TRIP02 BLANK 48951

Lab Sample ID: 640-48951-15

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-1**

**Date Collected: 08/20/14 07:40**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48932-1**

**Matrix: Water**

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

| Analyte                       | Result      | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                       | 5.0         | U         | 25  | 5.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Acrylonitrile                 | 7.2         | U         | 20  | 7.2  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Benzene                       | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Bromoform                     | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Bromomethane                  | 2.0         | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| 2-Butanone (MEK)              | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Carbon disulfide              | 0.60        | U         | 2.0 | 0.60 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Carbon tetrachloride          | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chlorobenzene                 | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chlorobromomethane            | 0.14        | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chlorodibromomethane          | 0.10        | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chloroethane                  | 2.0         | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chloroform                    | 0.14        | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Chloromethane                 | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 18:36 | 1       |
| <b>cis-1,2-Dichloroethene</b> | <b>0.25</b> | <b>I</b>  | 1.0 | 0.15 | ug/L |   |          | 08/30/14 18:36 | 1       |
| cis-1,3-Dichloropropene       | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,2-Dibromo-3-Chloropropane   | 0.44        | U         | 5.0 | 0.44 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Dibromomethane                | 0.20        | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,2-Dichlorobenzene           | 0.21        | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,4-Dichlorobenzene           | 0.28        | U         | 1.0 | 0.28 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Dichlorobromomethane          | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1-Dichloroethane            | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,2-Dichloroethane            | 0.10        | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1-Dichloroethene            | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,2-Dichloropropane           | 0.13        | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Ethylbenzene                  | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Ethylene Dibromide            | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 2-Hexanone                    | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Iodomethane                   | 1.0         | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Methylene Chloride            | 1.0         | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| 4-Methyl-2-pentanone (MIBK)   | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 18:36 | 1       |
| Styrene                       | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1,1,2-Tetrachloroethane     | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1,2,2-Tetrachloroethane     | 0.18        | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 18:36 | 1       |
| <b>Tetrachloroethene</b>      | <b>0.21</b> | <b>I</b>  | 1.0 | 0.15 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Toluene                       | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 18:36 | 1       |
| trans-1,4-Dichloro-2-butene   | 0.50        | U         | 2.0 | 0.50 | ug/L |   |          | 08/30/14 18:36 | 1       |
| trans-1,2-Dichloroethene      | 0.20        | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 18:36 | 1       |
| trans-1,3-Dichloropropene     | 0.21        | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1,1-Trichloroethane         | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,1,2-Trichloroethane         | 0.13        | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 18:36 | 1       |
| <b>Trichloroethene</b>        | <b>0.26</b> | <b>I</b>  | 1.0 | 0.13 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Trichlorofluoromethane        | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 18:36 | 1       |
| 1,2,3-Trichloropropane        | 0.41        | U         | 1.0 | 0.41 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Vinyl acetate                 | 0.28        | U         | 2.0 | 0.28 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Vinyl chloride                | 0.18        | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 18:36 | 1       |
| Xylenes, Total                | 0.20        | U         | 2.0 | 0.20 | ug/L |   |          | 08/30/14 18:36 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-1**

**Lab Sample ID: 640-48932-1**

**Date Collected: 08/20/14 07:40**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                                   | %Recovery | Qualifier | Limits   |         |      |   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------------------------|-----------|-----------|----------|---------|------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                                | 86        |           | 70 - 130 |         |      |   |                | 08/30/14 18:36 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)                |           |           |          |         |      |   |                |                |         |
| Analyte                                                     | Result    | Qualifier | PQL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                                        | 0.0053    | U         | 0.021    | 0.0053  | ug/L |   | 08/21/14 14:43 | 08/22/14 06:50 | 1       |
| EDB                                                         | 0.0023    | U         | 0.021    | 0.0023  | ug/L |   | 08/21/14 14:43 | 08/22/14 06:50 | 1       |
| Surrogate                                                   | %Recovery | Qualifier | Limits   |         |      |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                           | 115       |           | 60 - 144 |         |      |   | 08/21/14 14:43 | 08/22/14 06:50 | 1       |
| Method: 1631E - Mercury, Low Level (CVAFS)                  |           |           |          |         |      |   |                |                |         |
| Analyte                                                     | Result    | Qualifier | PQL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Mercury                                                     | 0.0043    |           | 0.0025   | 0.0010  | ug/L |   | 08/22/14 15:25 | 09/02/14 11:39 | 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 |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Arsenic                                                     | 1.3       | I         | 2.5      | 1.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Barium                                                      | 33        |           | 5.0      | 1.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Beryllium                                                   | 0.25      | U         | 0.50     | 0.25    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Cadmium                                                     | 0.095     | U         | 0.50     | 0.095   | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Chromium                                                    | 2.5       | U         | 5.0      | 2.5     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Cobalt                                                      | 0.24      | I         | 0.50     | 0.15    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Copper                                                      | 2.0       | I         | 5.0      | 1.1     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Iron                                                        | 700       |           | 100      | 33      | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Lead                                                        | 0.91      | I         | 1.5      | 0.20    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Nickel                                                      | 2.0       | U         | 5.0      | 2.0     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Selenium                                                    | 1.0       | U         | 2.5      | 1.0     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Silver                                                      | 0.25      | U         | 1.0      | 0.25    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Thallium                                                    | 0.50      | U         | 1.0      | 0.50    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Vanadium                                                    | 3.8       | U         | 10       | 3.8     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 1       |
| Zinc                                                        | 19        | I         | 20       | 8.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:18 | 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                               | 78        |           | 3.3      | 3.3     | mg/L |   |                | 08/29/14 06:18 | 1       |
| General Chemistry                                           |           |           |          |         |      |   |                |                |         |
| Analyte                                                     | Result    | Qualifier | PQL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Total Suspended Solids                                      | 13        |           | 5.0      | 5.0     | mg/L |   |                | 08/27/14 14:36 | 1       |
| Total Dissolved Solids                                      | 180       |           | 10       | 10      | mg/L |   |                | 08/24/14 14:00 | 1       |
| Nitrate as N                                                | 0.047     | I         | 0.050    | 0.010   | mg/L |   |                | 08/21/14 11:42 | 1       |
| Nitrate Nitrite as N                                        | 0.18      |           | 0.050    | 0.010   | mg/L |   |                | 08/22/14 17:30 | 1       |
| Phosphorus                                                  | 0.042     | I         | 0.10     | 0.041   | mg/L |   | 09/02/14 16:09 | 09/03/14 13:02 | 1       |
| Biochemical Oxygen Demand                                   | 10        |           | 2.0      | 2.0     | mg/L |   |                | 08/21/14 13:12 | 1       |
| Total Organic Carbon                                        | 21        |           | 1.0      | 0.50    | mg/L |   |                | 08/30/14 00:17 | 1       |
| Chemical Oxygen Demand                                      | 48        |           | 10       | 5.0     | mg/L |   |                | 08/27/14 12:32 | 1       |
| Nitrogen, Total                                             | 0.87      |           | 0.25     | 0.25    | mg/L |   |                | 08/29/14 16:04 | 1       |
| Unionized Ammonia                                           | 0.0017    |           | 0.00028  | 0.00028 | mg/L |   |                | 09/04/14 07:19 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-1**

**Lab Sample ID: 640-48932-1**

**Date Collected: 08/20/14 07:40**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

## Method: Field Sampling - Field Sampling

| Analyte              | Result      | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-------------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | Yellow Tint |           |     |     | PCU       |   |          | 08/20/14 07:40 | 1       |
| Field pH             | 7.11        |           |     |     | SU        |   |          | 08/20/14 07:40 | 1       |
| Field Temperature    | 24.2        |           |     |     | Degrees C |   |          | 08/20/14 07:40 | 1       |
| Oxygen, Dissolved    | 5.3         |           |     |     | mg/L      |   |          | 08/20/14 07:40 | 1       |
| Sheen                | None        |           |     |     | NONE      |   |          | 08/20/14 07:40 | 1       |
| Specific Conductance | 245         |           |     |     | umhos/cm  |   |          | 08/20/14 07:40 | 1       |
| Turbidity            | 16.37       |           |     |     | NTU       |   |          | 08/20/14 07:40 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-3**

**Date Collected: 08/20/14 08:15**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48932-2**

**Matrix: Water**

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

| Analyte                       | Result      | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------------------------|-------------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                       | 5.0         | U         | 25  | 5.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Acrylonitrile                 | 7.2         | U         | 20  | 7.2  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Benzene                       | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Bromoform                     | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Bromomethane                  | 2.0         | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| 2-Butanone (MEK)              | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Carbon disulfide              | 0.60        | U         | 2.0 | 0.60 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Carbon tetrachloride          | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chlorobenzene                 | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chlorobromomethane            | 0.14        | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chlorodibromomethane          | 0.10        | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chloroethane                  | 2.0         | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chloroform                    | 0.14        | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Chloromethane                 | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 19:02 | 1       |
| <b>cis-1,2-Dichloroethene</b> | <b>0.18</b> | <b>I</b>  | 1.0 | 0.15 | ug/L |   |          | 08/30/14 19:02 | 1       |
| cis-1,3-Dichloropropene       | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,2-Dibromo-3-Chloropropane   | 0.44        | U         | 5.0 | 0.44 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Dibromomethane                | 0.20        | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,2-Dichlorobenzene           | 0.21        | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,4-Dichlorobenzene           | 0.28        | U         | 1.0 | 0.28 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Dichlorobromomethane          | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1-Dichloroethane            | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,2-Dichloroethane            | 0.10        | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1-Dichloroethene            | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,2-Dichloropropane           | 0.13        | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Ethylbenzene                  | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Ethylene Dibromide            | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 2-Hexanone                    | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Iodomethane                   | 1.0         | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Methylene Chloride            | 1.0         | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| 4-Methyl-2-pentanone (MIBK)   | 1.0         | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 19:02 | 1       |
| Styrene                       | 0.11        | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1,1,2-Tetrachloroethane     | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1,2,2-Tetrachloroethane     | 0.18        | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 19:02 | 1       |
| <b>Tetrachloroethene</b>      | <b>0.35</b> | <b>I</b>  | 1.0 | 0.15 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Toluene                       | 0.33        | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 19:02 | 1       |
| trans-1,4-Dichloro-2-butene   | 0.50        | U         | 2.0 | 0.50 | ug/L |   |          | 08/30/14 19:02 | 1       |
| trans-1,2-Dichloroethene      | 0.20        | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 19:02 | 1       |
| trans-1,3-Dichloropropene     | 0.21        | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1,1-Trichloroethane         | 0.50        | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,1,2-Trichloroethane         | 0.13        | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 19:02 | 1       |
| <b>Trichloroethene</b>        | <b>0.45</b> | <b>I</b>  | 1.0 | 0.13 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Trichlorofluoromethane        | 0.25        | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 19:02 | 1       |
| 1,2,3-Trichloropropane        | 0.41        | U         | 1.0 | 0.41 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Vinyl acetate                 | 0.28        | U         | 2.0 | 0.28 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Vinyl chloride                | 0.18        | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 19:02 | 1       |
| Xylenes, Total                | 0.20        | U         | 2.0 | 0.20 | ug/L |   |          | 08/30/14 19:02 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-3**

**Lab Sample ID: 640-48932-2**

**Date Collected: 08/20/14 08:15**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                                   | %Recovery | Qualifier | Limits   |         |      |   | Prepared       | Analyzed       | Dil Fac |
|-------------------------------------------------------------|-----------|-----------|----------|---------|------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                                | 86        |           | 70 - 130 |         |      |   |                | 08/30/14 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                                                        | 0.0051    | U         | 0.021    | 0.0051  | ug/L |   | 08/21/14 14:43 | 08/22/14 07:02 | 1       |
| EDB                                                         | 0.0023    | U         | 0.021    | 0.0023  | ug/L |   | 08/21/14 14:43 | 08/22/14 07:02 | 1       |
| Surrogate                                                   | %Recovery | Qualifier | Limits   |         |      |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                           | 111       |           | 60 - 144 |         |      |   | 08/21/14 14:43 | 08/22/14 07:02 | 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 |   | 08/22/14 15:25 | 09/02/14 11:47 | 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 |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Arsenic                                                     | 1.6       | I         | 2.5      | 1.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Barium                                                      | 19        |           | 5.0      | 1.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Beryllium                                                   | 0.25      | U         | 0.50     | 0.25    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Cadmium                                                     | 0.095     | U         | 0.50     | 0.095   | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Chromium                                                    | 2.5       | U         | 5.0      | 2.5     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Cobalt                                                      | 0.16      | I         | 0.50     | 0.15    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Copper                                                      | 1.1       | I         | 5.0      | 1.1     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Iron                                                        | 120       |           | 100      | 33      | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Lead                                                        | 1.1       | I         | 1.5      | 0.20    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Nickel                                                      | 2.2       | I         | 5.0      | 2.0     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Selenium                                                    | 1.0       | U         | 2.5      | 1.0     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Silver                                                      | 0.25      | U         | 1.0      | 0.25    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Thallium                                                    | 0.50      | U         | 1.0      | 0.50    | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Vanadium                                                    | 4.6       | I         | 10       | 3.8     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 1       |
| Zinc                                                        | 8.3       | U         | 20       | 8.3     | ug/L |   | 08/25/14 13:12 | 08/29/14 06:40 | 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 |   |                | 08/29/14 06:40 | 1       |
| General Chemistry                                           |           |           |          |         |      |   |                |                |         |
| Analyte                                                     | Result    | Qualifier | PQL      | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Total Suspended Solids                                      | 7.5       |           | 5.0      | 5.0     | mg/L |   |                | 08/27/14 14:19 | 1       |
| Total Dissolved Solids                                      | 270       |           | 10       | 10      | mg/L |   |                | 08/24/14 14:00 | 1       |
| Nitrate as N                                                | 0.055     |           | 0.050    | 0.010   | mg/L |   |                | 08/21/14 11:45 | 1       |
| Nitrate Nitrite as N                                        | 0.047     | I         | 0.050    | 0.010   | mg/L |   |                | 08/23/14 11:52 | 1       |
| Phosphorus                                                  | 0.041     | U         | 0.10     | 0.041   | mg/L |   | 09/02/14 16:09 | 09/03/14 13:05 | 1       |
| Biochemical Oxygen Demand                                   | 23        |           | 2.0      | 2.0     | mg/L |   |                | 08/21/14 13:12 | 1       |
| Total Organic Carbon                                        | 18        |           | 1.0      | 0.50    | mg/L |   |                | 08/30/14 00:59 | 1       |
| Chemical Oxygen Demand                                      | 42        |           | 10       | 5.0     | mg/L |   |                | 08/27/14 12:32 | 1       |
| Nitrogen, Total                                             | 2.7       |           | 0.25     | 0.25    | mg/L |   |                | 08/29/14 16:04 | 1       |
| Unionized Ammonia                                           | 0.025     |           | 0.00028  | 0.00028 | mg/L |   |                | 09/04/14 07:19 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-3**

**Lab Sample ID: 640-48932-2**

**Date Collected: 08/20/14 08:15**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

### Method: Field Sampling - Field Sampling

| Analyte              | Result      | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|-------------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | Yellow Tint |           |     |     | PCU       |   |          | 08/20/14 08:15 | 1       |
| Field pH             | 7.14        |           |     |     | SU        |   |          | 08/20/14 08:15 | 1       |
| Field Temperature    | 29.1        |           |     |     | Degrees C |   |          | 08/20/14 08:15 | 1       |
| Oxygen, Dissolved    | 5.3         |           |     |     | mg/L      |   |          | 08/20/14 08:15 | 1       |
| Sheen                | None        |           |     |     | NONE      |   |          | 08/20/14 08:15 | 1       |
| Specific Conductance | 436         |           |     |     | umhos/cm  |   |          | 08/20/14 08:15 | 1       |
| Turbidity            | 14.12       |           |     |     | NTU       |   |          | 08/20/14 08:15 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: Trip Blank 48932**

**Lab Sample ID: 640-48932-3**

**Date Collected: 08/20/14 00:00**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 13:01 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/30/14 13:01 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/30/14 13:01 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/30/14 13:01 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/30/14 13:01 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/30/14 13:01 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/30/14 13:01 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/30/14 13:01 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/30/14 13:01 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: Trip Blank 48932**

**Lab Sample ID: 640-48932-3**

**Date Collected: 08/20/14 00:00**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| <i>Surrogate</i>             | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|------------------------------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| 1,2-Dichloroethane-d4 (Surr) | 86               |                  | 70 - 130      |                 | 08/30/14 13:01  | 1              |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB29S**

**Lab Sample ID: 640-48933-1**

**Date Collected: 08/19/14 18:39**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:28 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 16:28 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:28 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:28 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 16:28 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 16:28 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:28 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 16:28 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 16:28 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB29S**

**Lab Sample ID: 640-48933-1**

**Date Collected: 08/19/14 18:39**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 79        |           | 70 - 130 |        |           |   |                | 08/28/14 16:28 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0052    | U         | 0.021    | 0.0052 | ug/L      |   | 08/27/14 09:53 | 08/27/14 17:51 | 1       |
| EDB                                                | 0.0023    | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 17:51 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 110       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 17:51 | 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      |   |                | 09/03/14 18:15 | 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      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Barium                                             | 13        |           | 5.0      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Cobalt                                             | 0.22      | I         | 0.50     | 0.15   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Iron                                               | 610       |           | 100      | 33     | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Sodium                                             | 3.7       |           | 0.50     | 0.25   | mg/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:22 | 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      |   | 08/21/14 13:41 | 08/22/14 09:32 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 34        |           | 5.0      | 5.0    | mg/L      |   |                | 08/21/14 15:06 | 1       |
| Ammonia (as N)                                     | 0.049     | I         | 0.050    | 0.026  | mg/L      |   |                | 08/25/14 16:50 | 1       |
| Nitrate as N                                       | 0.010     | U         | 0.050    | 0.010  | mg/L      |   |                | 08/21/14 11:22 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/19/14 18:38 | 1       |
| Field pH                                           | 4.44      |           |          |        | SU        |   |                | 08/19/14 18:38 | 1       |
| Field Temperature                                  | 26.4      |           |          |        | Degrees C |   |                | 08/19/14 18:38 | 1       |
| Oxygen, Dissolved                                  | 0.3       |           |          |        | mg/L      |   |                | 08/19/14 18:38 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/19/14 18:38 | 1       |
| Specific Conductance                               | 45        |           |          |        | umhos/cm  |   |                | 08/19/14 18:38 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB29S**

**Lab Sample ID: 640-48933-1**

**Date Collected: 08/19/14 18:39**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 3.37   |           |     |     | NTU  |   |          | 08/19/14 18:38 | 1       |
| Water Level | 129.47 |           |     |     | ft   |   |          | 08/19/14 18:38 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB27S**

**Lab Sample ID: 640-48933-2**

**Date Collected: 08/19/14 17:29**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:54 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 16:54 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 16:54 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 16:54 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 16:54 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 16:54 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 16:54 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 16:54 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 16:54 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB27S**

**Lab Sample ID: 640-48933-2**

**Date Collected: 08/19/14 17:29**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 80        |           | 70 - 130 |        |           |   |                | 08/28/14 16:54 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0054    | U         | 0.022    | 0.0054 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:03 | 1       |
| EDB                                                | 0.0024    | U         | 0.022    | 0.0024 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:03 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 114       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 18:03 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 22        |           | 0.50     | 0.25   | mg/L      |   |                | 09/03/14 18:29 | 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      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Barium                                             | 26        |           | 5.0      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Cobalt                                             | 0.22      | I         | 0.50     | 0.15   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Iron                                               | 740       |           | 100      | 33     | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Nickel                                             | 2.7       | I         | 5.0      | 2.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Sodium                                             | 13        |           | 0.50     | 0.25   | mg/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:29 | 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      |   | 08/21/14 13:41 | 08/22/14 09:41 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 140       |           | 10       | 10     | mg/L      |   |                | 08/21/14 15:06 | 1       |
| Ammonia (as N)                                     | 0.21      |           | 0.050    | 0.026  | mg/L      |   |                | 08/25/14 16:50 | 1       |
| Nitrate as N                                       | 0.010     | U         | 0.050    | 0.010  | mg/L      |   |                | 08/21/14 11:26 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/19/14 17:28 | 1       |
| Field pH                                           | 5.15      |           |          |        | SU        |   |                | 08/19/14 17:28 | 1       |
| Field Temperature                                  | 24.9      |           |          |        | Degrees C |   |                | 08/19/14 17:28 | 1       |
| Oxygen, Dissolved                                  | 0.0       |           |          |        | mg/L      |   |                | 08/19/14 17:28 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/19/14 17:28 | 1       |
| Specific Conductance                               | 205       |           |          |        | umhos/cm  |   |                | 08/19/14 17:28 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB27S**

**Lab Sample ID: 640-48933-2**

**Date Collected: 08/19/14 17:29**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 3.69   |           |     |     | NTU  |   |          | 08/19/14 17:28 | 1       |
| Water Level | 121.27 |           |     |     | ft   |   |          | 08/19/14 17:28 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB13S**

**Lab Sample ID: 640-48933-3**

**Date Collected: 08/19/14 16:19**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.1    | I         | 25  | 5.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:19 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 17:19 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:19 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:19 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 17:19 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 17:19 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:19 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 17:19 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 17:19 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB13S**

**Lab Sample ID: 640-48933-3**

**Date Collected: 08/19/14 16:19**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                          | %Recovery         | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-------------------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 81                |           | 70 - 130 |        |           |   |                | 08/28/14 17:19 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |                   |           |          |        |           |   |                |                |         |
| Analyte                                            | Result            | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0052            | U         | 0.021    | 0.0052 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:15 | 1       |
| EDB                                                | 0.0023            | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:15 | 1       |
| Surrogate                                          | %Recovery         | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 113               |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 18:15 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |                   |           |          |        |           |   |                |                |         |
| Analyte                                            | Result            | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 25                |           | 0.50     | 0.25   | mg/L      |   |                | 09/03/14 18:44 | 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      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Arsenic                                            | 1.3               | U         | 2.5      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Barium                                             | 5.0               |           | 5.0      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Beryllium                                          | 0.25              | U         | 0.50     | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Cadmium                                            | 0.20              | I         | 0.50     | 0.095  | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Chromium                                           | 2.5               | U         | 5.0      | 2.5    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Cobalt                                             | 0.15              | U         | 0.50     | 0.15   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Copper                                             | 11                |           | 5.0      | 1.1    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Iron                                               | 600               |           | 100      | 33     | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Lead                                               | 0.36              | I         | 1.5      | 0.20   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Nickel                                             | 2.8               | I         | 5.0      | 2.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Selenium                                           | 3.0               |           | 2.5      | 1.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Silver                                             | 0.25              | U         | 1.0      | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Sodium                                             | 23                |           | 0.50     | 0.25   | mg/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Thallium                                           | 0.50              | U         | 1.0      | 0.50   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Vanadium                                           | 31                |           | 10       | 3.8    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 1       |
| Zinc                                               | 13                | I         | 20       | 8.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:37 | 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      |   | 08/21/14 13:41 | 08/22/14 09:44 | 1       |
| General Chemistry                                  |                   |           |          |        |           |   |                |                |         |
| Analyte                                            | Result            | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 230               |           | 10       | 10     | mg/L      |   |                | 08/21/14 15:06 | 1       |
| Ammonia (as N)                                     | 0.71              |           | 0.050    | 0.026  | mg/L      |   |                | 08/25/14 16:50 | 1       |
| Nitrate as N                                       | 0.42              |           | 0.050    | 0.010  | mg/L      |   |                | 08/21/14 11:33 | 1       |
| Method: Field Sampling - Field Sampling            |                   |           |          |        |           |   |                |                |         |
| Analyte                                            | Result            | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | Yellow-Brown Tint |           |          |        | PCU       |   |                | 08/19/14 16:18 | 1       |
| Field pH                                           | 5.89              |           |          |        | SU        |   |                | 08/19/14 16:18 | 1       |
| Field Temperature                                  | 16.5              |           |          |        | Degrees C |   |                | 08/19/14 16:18 | 1       |
| Oxygen, Dissolved                                  | 0.4               |           |          |        | mg/L      |   |                | 08/19/14 16:18 | 1       |
| Sheen                                              | None              |           |          |        | NONE      |   |                | 08/19/14 16:18 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB13S**

**Lab Sample ID: 640-48933-3**

**Date Collected: 08/19/14 16:19**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

### Method: Field Sampling - Field Sampling (Continued)

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|----------|---|----------|----------------|---------|
| Specific Conductance | 327    |           |     |     | umhos/cm |   |          | 08/19/14 16:18 | 1       |
| Turbidity            | 9.41   |           |     |     | NTU      |   |          | 08/19/14 16:18 | 1       |
| Water Level          | 109.34 |           |     |     | ft       |   |          | 08/19/14 16:18 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB22S**

**Lab Sample ID: 640-48933-4**

**Date Collected: 08/19/14 15:10**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:45 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 17:45 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 17:45 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 17:45 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 17:45 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 17:45 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 17:45 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 17:45 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 17:45 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB22S**

**Lab Sample ID: 640-48933-4**

**Date Collected: 08/19/14 15:10**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 80        |           | 70 - 130 |        |           |   |                | 08/28/14 17:45 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0053    | U         | 0.021    | 0.0053 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:27 | 1       |
| EDB                                                | 0.0023    | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:27 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 111       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 18:27 | 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      |   |                | 09/03/14 18:58 | 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      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Barium                                             | 5.5       |           | 5.0      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Copper                                             | 1.2       | I         | 5.0      | 1.1    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Iron                                               | 140       |           | 100      | 33     | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Sodium                                             | 9.6       |           | 0.50     | 0.25   | mg/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 1       |
| Zinc                                               | 9.6       | I         | 20       | 8.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:44 | 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      |   | 08/21/14 13:41 | 08/22/14 09:46 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 190       |           | 10       | 10     | mg/L      |   |                | 08/21/14 15:06 | 1       |
| Ammonia (as N)                                     | 0.29      |           | 0.050    | 0.026  | mg/L      |   |                | 08/25/14 16:50 | 1       |
| Nitrate as N                                       | 0.010     | U         | 0.050    | 0.010  | mg/L      |   |                | 08/21/14 11:34 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/19/14 15:09 | 1       |
| Field pH                                           | 5.98      |           |          |        | SU        |   |                | 08/19/14 15:09 | 1       |
| Field Temperature                                  | 25.7      |           |          |        | Degrees C |   |                | 08/19/14 15:09 | 1       |
| Oxygen, Dissolved                                  | 0.1       |           |          |        | mg/L      |   |                | 08/19/14 15:09 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/19/14 15:09 | 1       |
| Specific Conductance                               | 274       |           |          |        | umhos/cm  |   |                | 08/19/14 15:09 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB22S**

**Lab Sample ID: 640-48933-4**

**Date Collected: 08/19/14 15:10**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 3.61   |           |     |     | NTU  |   |          | 08/19/14 15:09 | 1       |
| Water Level | 114.4  |           |     |     | ft   |   |          | 08/19/14 15:09 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB12S**

**Lab Sample ID: 640-48933-5**

**Date Collected: 08/19/14 14:33**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 18:11 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 18:11 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 18:11 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 18:11 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 18:11 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 18:11 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 18:11 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 18:11 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 18:11 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB12S**

**Lab Sample ID: 640-48933-5**

**Date Collected: 08/19/14 14:33**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   |                | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 84        |           | 70 - 130 |        |           |   |                |                | 08/28/14 18:11 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| DBCP                                               | 0.0053    | U         | 0.021    | 0.0053 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:39 | 1              |         |
| EDB                                                | 0.0023    | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 18:39 | 1              |         |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   |                | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 108       |           | 60 - 144 |        |           |   |                | 08/27/14 09:53 | 08/27/14 18:39 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Chloride                                           | 60        |           | 1.0      | 0.50   | mg/L      |   |                | 09/04/14 11:05 | 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      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Barium                                             | 2.3       | I         | 5.0      | 1.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Iron                                               | 79        | I         | 100      | 33     | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Nickel                                             | 3.9       | I         | 5.0      | 2.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Selenium                                           | 2.7       |           | 2.5      | 1.0    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Sodium                                             | 38        |           | 0.50     | 0.25   | mg/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Vanadium                                           | 48        |           | 10       | 3.8    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 1              |         |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/22/14 09:59 | 08/25/14 19:51 | 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      |   | 08/21/14 13:41 | 08/22/14 09:49 | 1              |         |
| General Chemistry                                  |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Total Dissolved Solids                             | 270       |           | 10       | 10     | mg/L      |   |                | 08/21/14 15:06 | 1              |         |
| Ammonia (as N)                                     | 0.026     | U         | 0.050    | 0.026  | mg/L      |   |                | 08/25/14 16:50 | 1              |         |
| Nitrate as N                                       | 0.10      |           | 0.050    | 0.010  | mg/L      |   |                | 08/21/14 11:36 | 1              |         |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Color                                              | SI Yellow |           |          |        | PCU       |   |                | 08/19/14 14:32 | 1              |         |
|                                                    | Tint      |           |          |        |           |   |                |                |                |         |
| Field pH                                           | 5.78      |           |          |        | SU        |   |                | 08/19/14 14:32 | 1              |         |
| Field Temperature                                  | 25.6      |           |          |        | Degrees C |   |                | 08/19/14 14:32 | 1              |         |
| Oxygen, Dissolved                                  | 0.3       |           |          |        | mg/L      |   |                | 08/19/14 14:32 | 1              |         |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/19/14 14:32 | 1              |         |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB12S**

**Date Collected: 08/19/14 14:33**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48933-5**

**Matrix: Water**

### Method: Field Sampling - Field Sampling (Continued)

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|----------|---|----------|----------------|---------|
| Specific Conductance | 408    |           |     |     | umhos/cm |   |          | 08/19/14 14:32 | 1       |
| Turbidity            | 5.23   |           |     |     | NTU      |   |          | 08/19/14 14:32 | 1       |
| Water Level          | 113.73 |           |     |     | ft       |   |          | 08/19/14 14:32 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB12I**

**Lab Sample ID: 640-48933-6**

**Date Collected: 08/19/14 14:03**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

## 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 |   |          | 09/03/14 20:54 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 370    |           | 100  | 33   | ug/L |   | 08/22/14 09:59 | 08/25/14 19:59 | 1       |
| Sodium  | 3.4    |           | 0.50 | 0.25 | mg/L |   | 08/22/14 09:59 | 08/25/14 19:59 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 42     |           | 5.0   | 5.0   | mg/L |   |          | 08/21/14 15:06 | 1       |
| Ammonia (as N)         | 0.052  |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 10:56 | 1       |
| Nitrate as N           | 0.010  | U         | 0.050 | 0.010 | mg/L |   |          | 08/21/14 11:37 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/19/14 14:02 | 1       |
| Field pH             | 5.35   |           |     |     | SU        |   |          | 08/19/14 14:02 | 1       |
| Field Temperature    | 25.8   |           |     |     | Degrees C |   |          | 08/19/14 14:02 | 1       |
| Oxygen, Dissolved    | 0.1    |           |     |     | mg/L      |   |          | 08/19/14 14:02 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/19/14 14:02 | 1       |
| Specific Conductance | 39     |           |     |     | umhos/cm  |   |          | 08/19/14 14:02 | 1       |
| Turbidity            | 3.71   |           |     |     | NTU       |   |          | 08/19/14 14:02 | 1       |
| Water Level          | 116.64 |           |     |     | ft        |   |          | 08/19/14 14:02 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB13I**

**Lab Sample ID: 640-48933-7**

**Date Collected: 08/19/14 15:45**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

## 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 |   |          | 09/03/14 21:08 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 410    |           | 100  | 33   | ug/L |   | 08/22/14 09:59 | 08/25/14 20:06 | 1       |
| Sodium  | 3.5    |           | 0.50 | 0.25 | mg/L |   | 08/22/14 09:59 | 08/25/14 20:06 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 34     |           | 5.0   | 5.0   | mg/L |   |          | 08/21/14 15:06 | 1       |
| Ammonia (as N)         | 0.056  |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 10:57 | 1       |
| Nitrate as N           | 0.010  | U         | 0.050 | 0.010 | mg/L |   |          | 08/21/14 11:38 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/19/14 15:44 | 1       |
| Field pH             | 5.25   |           |     |     | SU        |   |          | 08/19/14 15:44 | 1       |
| Field Temperature    | 25.8   |           |     |     | Degrees C |   |          | 08/19/14 15:44 | 1       |
| Oxygen, Dissolved    | 0.2    |           |     |     | mg/L      |   |          | 08/19/14 15:44 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/19/14 15:44 | 1       |
| Specific Conductance | 36     |           |     |     | umhos/cm  |   |          | 08/19/14 15:44 | 1       |
| Turbidity            | 3.71   |           |     |     | NTU       |   |          | 08/19/14 15:44 | 1       |
| Water Level          | 107.96 |           |     |     | ft        |   |          | 08/19/14 15:44 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB27I**

**Lab Sample ID: 640-48933-8**

**Date Collected: 08/19/14 16:59**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

## 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 |   |          | 09/03/14 21:22 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 490    |           | 100  | 33   | ug/L |   | 08/22/14 09:59 | 08/25/14 20:14 | 1       |
| Sodium  | 3.4    |           | 0.50 | 0.25 | mg/L |   | 08/22/14 09:59 | 08/25/14 20:14 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 68     |           | 5.0   | 5.0   | mg/L |   |          | 08/21/14 15:06 | 1       |
| Ammonia (as N)         | 0.068  |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 10:57 | 1       |
| Nitrate as N           | 0.016  | I         | 0.050 | 0.010 | mg/L |   |          | 08/21/14 11:39 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/19/14 16:58 | 1       |
| Field pH             | 5.55   |           |     |     | SU        |   |          | 08/19/14 16:58 | 1       |
| Field Temperature    | 21.9   |           |     |     | Degrees C |   |          | 08/19/14 16:58 | 1       |
| Oxygen, Dissolved    | 0.0    |           |     |     | mg/L      |   |          | 08/19/14 16:58 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/19/14 16:58 | 1       |
| Specific Conductance | 51     |           |     |     | umhos/cm  |   |          | 08/19/14 16:58 | 1       |
| Turbidity            | 4.59   |           |     |     | NTU       |   |          | 08/19/14 16:58 | 1       |
| Water Level          | 122.01 |           |     |     | ft        |   |          | 08/19/14 16:58 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB29I**

**Lab Sample ID: 640-48933-9**

**Date Collected: 08/19/14 18:05**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

## Method: 300.0 - Anions, Ion Chromatography

| Analyte  | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride | 6.1    |           | 0.50 | 0.25 | mg/L |   |          | 09/03/14 21:37 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 510    |           | 100  | 33   | ug/L |   | 08/22/14 09:59 | 08/25/14 14:05 | 1       |
| Sodium  | 4.3    |           | 0.50 | 0.25 | mg/L |   | 08/22/14 09:59 | 08/25/14 14:05 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 39     |           | 5.0   | 5.0   | mg/L |   |          | 08/24/14 14:00 | 1       |
| Ammonia (as N)         | 0.056  |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:06 | 1       |
| Nitrate as N           | 0.010  | U         | 0.050 | 0.010 | mg/L |   |          | 08/21/14 11:40 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/19/14 18:04 | 1       |
| Field pH             | 5.17   |           |     |     | SU        |   |          | 08/19/14 18:04 | 1       |
| Field Temperature    | 23.5   |           |     |     | Degrees C |   |          | 08/19/14 18:04 | 1       |
| Oxygen, Dissolved    | 0.2    |           |     |     | mg/L      |   |          | 08/19/14 18:04 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/19/14 18:04 | 1       |
| Specific Conductance | 41     |           |     |     | umhos/cm  |   |          | 08/19/14 18:04 | 1       |
| Turbidity            | 3.3    |           |     |     | NTU       |   |          | 08/19/14 18:04 | 1       |
| Water Level          | 130.66 |           |     |     | ft        |   |          | 08/19/14 18:04 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: Trip Blank 48933**

**Lab Sample ID: 640-48933-10**

**Date Collected: 08/19/14 00:00**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Acrylonitrile               | 7.2    | U         | 20  | 7.2  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 12:41 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 12:41 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/28/14 12:41 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/28/14 12:41 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/28/14 12:41 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/28/14 12:41 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/28/14 12:41 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Vinyl acetate               | 0.28   | U         | 2.0 | 0.28 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/28/14 12:41 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/28/14 12:41 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: Trip Blank 48933**

**Lab Sample ID: 640-48933-10**

**Date Collected: 08/19/14 00:00**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| <i>Surrogate</i>             | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|------------------------------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| 1,2-Dichloroethane-d4 (Surr) | 82               |                  | 70 - 130      |                 | 08/28/14 12:41  | 1              |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB2I**

**Date Collected: 08/20/14 09:51**

**Date Received: 08/22/14 08:20**

**Lab Sample ID: 640-48951-1**

**Matrix: Water**

## Method: 300.0 - Anions, Ion Chromatography

| Analyte  | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride | 7.8    |           | 0.50 | 0.25 | mg/L |   |          | 09/03/14 22:20 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 410    |           | 100  | 33   | ug/L |   | 08/25/14 15:12 | 08/29/14 02:16 | 1       |
| Sodium  | 5.1    |           | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 02:16 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 36     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.031  | I         | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:06 | 1       |
| Nitrate as N           | 0.010  | Q U       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:58 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/20/14 09:50 | 1       |
| Field pH             | 4.82   |           |     |     | SU        |   |          | 08/20/14 09:50 | 1       |
| Field Temperature    | 21.5   |           |     |     | Degrees C |   |          | 08/20/14 09:50 | 1       |
| Oxygen, Dissolved    | 0.3    |           |     |     | mg/L      |   |          | 08/20/14 09:50 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/20/14 09:50 | 1       |
| Specific Conductance | 41     |           |     |     | umhos/cm  |   |          | 08/20/14 09:50 | 1       |
| Turbidity            | 3.07   |           |     |     | NTU       |   |          | 08/20/14 09:50 | 1       |
| Water Level          | 134.23 |           |     |     | ft        |   |          | 08/20/14 09:50 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB3I**

**Date Collected: 08/20/14 11:26**

**Date Received: 08/22/14 08:20**

**Lab Sample ID: 640-48951-2**

**Matrix: Water**

## Method: 300.0 - Anions, Ion Chromatography

| Analyte  | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloride | 6.4    |           | 0.50 | 0.25 | mg/L |   |          | 09/03/14 22:34 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 820    |           | 100  | 33   | ug/L |   | 08/25/14 15:12 | 08/29/14 02:23 | 1       |
| Sodium  | 4.1    |           | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 02:23 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 25     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.026  | U         | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:06 | 1       |
| Nitrate as N           | 0.010  | Q U       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:39 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/20/14 11:25 | 1       |
| Field pH             | 4.83   |           |     |     | SU        |   |          | 08/20/14 11:25 | 1       |
| Field Temperature    | 21.1   |           |     |     | Degrees C |   |          | 08/20/14 11:25 | 1       |
| Oxygen, Dissolved    | 0.0    |           |     |     | mg/L      |   |          | 08/20/14 11:25 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/20/14 11:25 | 1       |
| Specific Conductance | 40     |           |     |     | umhos/cm  |   |          | 08/20/14 11:25 | 1       |
| Turbidity            | 2.08   |           |     |     | NTU       |   |          | 08/20/14 11:25 | 1       |
| Water Level          | 137.83 |           |     |     | ft        |   |          | 08/20/14 11:25 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB11I (R)**

**Lab Sample ID: 640-48951-3**

**Date Collected: 08/20/14 12:34**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

## 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 |   |          | 09/03/14 22:49 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 390    |           | 100  | 33   | ug/L |   | 08/25/14 15:12 | 08/29/14 02:31 | 1       |
| Sodium  | 3.5    |           | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 02:31 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 46     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.047  | I         | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:06 | 1       |
| Nitrate as N           | 0.010  | J U       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:49 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/20/14 12:33 | 1       |
| Field pH             | 4.86   |           |     |     | SU        |   |          | 08/20/14 12:33 | 1       |
| Field Temperature    | 24.4   |           |     |     | Degrees C |   |          | 08/20/14 12:33 | 1       |
| Oxygen, Dissolved    | 0.0    |           |     |     | mg/L      |   |          | 08/20/14 12:33 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/20/14 12:33 | 1       |
| Specific Conductance | 36     |           |     |     | umhos/cm  |   |          | 08/20/14 12:33 | 1       |
| Turbidity            | 3.97   |           |     |     | NTU       |   |          | 08/20/14 12:33 | 1       |
| Water Level          | 108.22 |           |     |     | ft        |   |          | 08/20/14 12:33 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB34I**

**Lab Sample ID: 640-48951-4**

**Date Collected: 08/20/14 13:39**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

## 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 |   |          | 09/03/14 23:03 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 430    |           | 100  | 33   | ug/L |   | 08/25/14 15:12 | 08/29/14 02:52 | 1       |
| Sodium  | 3.6    |           | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 02:52 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 34     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.067  |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:36 | 1       |
| Nitrate as N           | 0.010  | J U       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:51 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | None   |           |     |     | PCU       |   |          | 08/20/14 13:38 | 1       |
| Field pH             | 5.38   |           |     |     | SU        |   |          | 08/20/14 13:38 | 1       |
| Field Temperature    | 25.7   |           |     |     | Degrees C |   |          | 08/20/14 13:38 | 1       |
| Oxygen, Dissolved    | 0.0    |           |     |     | mg/L      |   |          | 08/20/14 13:38 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/20/14 13:38 | 1       |
| Specific Conductance | 43     |           |     |     | umhos/cm  |   |          | 08/20/14 13:38 | 1       |
| Turbidity            | 3.44   |           |     |     | NTU       |   |          | 08/20/14 13:38 | 1       |
| Water Level          | 116.75 |           |     |     | ft        |   |          | 08/20/14 13:38 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB32I**

**Lab Sample ID: 640-48951-5**

**Date Collected: 08/20/14 15:21**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

## 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 |   |          | 09/03/14 23:46 | 1       |

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

| Analyte | Result | Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Iron    | 150    |           | 100  | 33   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:00 | 1       |
| Sodium  | 3.5    |           | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 03:00 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 33     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.041  | I         | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:36 | 1       |
| Nitrate as N           | 0.010  | J U       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:55 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result     | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|------------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | SI Whitish |           |     |     | PCU       |   |          | 08/20/14 15:20 | 1       |
|                      | Tint       |           |     |     |           |   |          |                |         |
| Field pH             | 5.3        |           |     |     | SU        |   |          | 08/20/14 15:20 | 1       |
| Field Temperature    | 22.0       |           |     |     | Degrees C |   |          | 08/20/14 15:20 | 1       |
| Oxygen, Dissolved    | 0.0        |           |     |     | mg/L      |   |          | 08/20/14 15:20 | 1       |
| Sheen                | None       |           |     |     | NONE      |   |          | 08/20/14 15:20 | 1       |
| Specific Conductance | 41         |           |     |     | umhos/cm  |   |          | 08/20/14 15:20 | 1       |
| Turbidity            | 9.02       |           |     |     | NTU       |   |          | 08/20/14 15:20 | 1       |
| Water Level          | 117.01     |           |     |     | ft        |   |          | 08/20/14 15:20 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: FIELD BLANK 01 48951**

**Lab Sample ID: 640-48951-6**

**Date Collected: 08/20/14 16:05**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:25 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 15:25 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:25 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:25 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 15:25 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 15:25 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:25 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 15:25 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 15:25 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: FIELD BLANK 01 48951**

**Lab Sample ID: 640-48951-6**

**Date Collected: 08/20/14 16:05**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |      |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 91        |           | 70 - 130 |        |      |   |                | 08/29/14 15:25 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |      |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0055    | U         | 0.022    | 0.0055 | ug/L |   | 08/27/14 09:53 | 08/27/14 18:51 | 1       |
| EDB                                                | 0.0024    | U         | 0.022    | 0.0024 | ug/L |   | 08/27/14 09:53 | 08/27/14 18:51 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |      |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 111       |           | 60 - 144 |        |      |   | 08/27/14 09:53 | 08/27/14 18:51 | 1       |
| 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 |   |                | 09/04/14 00:01 | 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 |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Barium                                             | 1.3       | U         | 5.0      | 1.3    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Iron                                               | 33        | U         | 100      | 33     | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Sodium                                             | 0.25      | U         | 0.50     | 0.25   | mg/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L |   | 08/25/14 15:12 | 08/29/14 03:07 | 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 |   | 08/25/14 09:22 | 08/25/14 18:19 | 1       |
| General Chemistry                                  |           |           |          |        |      |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 5.0       | U         | 5.0      | 5.0    | mg/L |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.026     | U         | 0.050    | 0.026  | mg/L |   |                | 08/26/14 10:57 | 1       |
| Nitrate as N                                       | 0.010     | J U       | 0.050    | 0.010  | mg/L |   |                | 08/22/14 11:57 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB32S**

**Lab Sample ID: 640-48951-7**

**Date Collected: 08/20/14 15:52**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:54 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 15:54 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 15:54 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 15:54 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 15:54 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 15:54 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 15:54 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 15:54 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 15:54 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB32S**

**Lab Sample ID: 640-48951-7**

**Date Collected: 08/20/14 15:52**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery  | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|------------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 92         |           | 70 - 130 |        |           |   |                | 08/29/14 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                                               | 0.0053     | U         | 0.021    | 0.0053 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:03 | 1       |
| EDB                                                | 0.0023     | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:03 | 1       |
| Surrogate                                          | %Recovery  | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 107        |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 19:03 | 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      |   |                | 09/04/14 00:15 | 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      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Arsenic                                            | 1.3        | U         | 2.5      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Barium                                             | 43         |           | 5.0      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Beryllium                                          | 0.25       | U         | 0.50     | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Cadmium                                            | 0.095      | U         | 0.50     | 0.095  | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Chromium                                           | 2.5        | U         | 5.0      | 2.5    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Cobalt                                             | 0.50       |           | 0.50     | 0.15   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Copper                                             | 1.1        | U         | 5.0      | 1.1    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Iron                                               | 1100       |           | 100      | 33     | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Lead                                               | 0.39       | I         | 1.5      | 0.20   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Nickel                                             | 2.0        | U         | 5.0      | 2.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Selenium                                           | 1.0        | U         | 2.5      | 1.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Silver                                             | 0.25       | U         | 1.0      | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Sodium                                             | 17         |           | 0.50     | 0.25   | mg/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Thallium                                           | 0.50       | U         | 1.0      | 0.50   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Vanadium                                           | 3.8        | U         | 10       | 3.8    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 1       |
| Zinc                                               | 8.3        | U         | 20       | 8.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:14 | 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      |   | 08/25/14 09:22 | 08/25/14 18:22 | 1       |
| General Chemistry                                  |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 110        |           | 5.0      | 5.0    | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.85       |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 11:36 | 1       |
| Nitrate as N                                       | 0.010      | J U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 11:56 | 1       |
| Method: Field Sampling - Field Sampling            |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | Brown Tint |           |          |        | PCU       |   |                | 08/20/14 15:51 | 1       |
| Field pH                                           | 5.15       |           |          |        | SU        |   |                | 08/20/14 15:51 | 1       |
| Field Temperature                                  | 23.9       |           |          |        | Degrees C |   |                | 08/20/14 15:51 | 1       |
| Oxygen, Dissolved                                  | 0.4        |           |          |        | mg/L      |   |                | 08/20/14 15:51 | 1       |
| Sheen                                              | None       |           |          |        | NONE      |   |                | 08/20/14 15:51 | 1       |
| Specific Conductance                               | 175        |           |          |        | umhos/cm  |   |                | 08/20/14 15:51 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB32S**

**Lab Sample ID: 640-48951-7**

**Date Collected: 08/20/14 15:52**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 6.39   |           |     |     | NTU  |   |          | 08/20/14 15:51 | 1       |
| Water Level | 115.76 |           |     |     | ft   |   |          | 08/20/14 15:51 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB33S**

**Lab Sample ID: 640-48951-8**

**Date Collected: 08/20/14 14:45**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:23 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 16:23 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:23 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:23 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 16:23 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 16:23 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:23 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 16:23 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 16:23 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB33S**

**Lab Sample ID: 640-48951-8**

**Date Collected: 08/20/14 14:45**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   |                | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 91        |           | 70 - 130 |        |           |   |                |                | 08/29/14 16:23 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| DBCP                                               | 0.0052    | U         | 0.021    | 0.0052 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:15 | 1              |         |
| EDB                                                | 0.0023    | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:15 | 1              |         |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   |                | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 107       |           | 60 - 144 |        |           |   |                | 08/27/14 09:53 | 08/27/14 19:15 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Chloride                                           | 7.8       |           | 0.50     | 0.25   | mg/L      |   |                | 09/04/14 00:58 | 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      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Barium                                             | 6.9       |           | 5.0      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Iron                                               | 95        | I         | 100      | 33     | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Sodium                                             | 8.0       |           | 0.50     | 0.25   | mg/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Vanadium                                           | 6.0       | I         | 10       | 3.8    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 1              |         |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:22 | 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      |   | 08/25/14 09:22 | 08/25/14 18:25 | 1              |         |
| General Chemistry                                  |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Total Dissolved Solids                             | 150       |           | 10       | 10     | mg/L      |   |                | 08/26/14 12:51 | 1              |         |
| Ammonia (as N)                                     | 1.2       |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 11:36 | 1              |         |
| Nitrate as N                                       | 0.010     | J U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 11:53 | 1              |         |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac        |         |
| Color                                              | SI Yellow |           |          |        | PCU       |   |                | 08/20/14 14:44 | 1              |         |
| Field pH                                           | Tint      |           |          |        | SU        |   |                | 08/20/14 14:44 | 1              |         |
| Field Temperature                                  | 5.67      |           |          |        | Degrees C |   |                | 08/20/14 14:44 | 1              |         |
| Oxygen, Dissolved                                  | 24.2      |           |          |        | mg/L      |   |                | 08/20/14 14:44 | 1              |         |
| Sheen                                              | 0.1       |           |          |        | NONE      |   |                | 08/20/14 14:44 | 1              |         |
|                                                    | None      |           |          |        |           |   |                |                |                |         |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB33S**

**Lab Sample ID: 640-48951-8**

**Date Collected: 08/20/14 14:45**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

### Method: Field Sampling - Field Sampling (Continued)

| Analyte              | Result | Qualifier | PQL | MDL | Unit     | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|----------|---|----------|----------------|---------|
| Specific Conductance | 268    |           |     |     | umhos/cm |   |          | 08/20/14 14:44 | 1       |
| Turbidity            | 1.78   |           |     |     | NTU      |   |          | 08/20/14 14:44 | 1       |
| Water Level          | 115.29 |           |     |     | ft       |   |          | 08/20/14 14:44 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB34S**

**Lab Sample ID: 640-48951-9**

**Date Collected: 08/20/14 14:12**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:53 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 16:53 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 16:53 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 16:53 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 16:53 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 16:53 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 16:53 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 16:53 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 16:53 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB34S**

**Lab Sample ID: 640-48951-9**

**Date Collected: 08/20/14 14:12**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery   | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-------------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 91          |           | 70 - 130 |        |           |   |                | 08/29/14 16:53 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |             |           |          |        |           |   |                |                |         |
| Analyte                                            | Result      | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0051      | U         | 0.020    | 0.0051 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:27 | 1       |
| EDB                                                | 0.0022      | U         | 0.020    | 0.0022 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:27 | 1       |
| Surrogate                                          | %Recovery   | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 110         |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 19:27 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |             |           |          |        |           |   |                |                |         |
| Analyte                                            | Result      | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 63          |           | 1.0      | 0.50   | mg/L      |   |                | 09/04/14 11:21 | 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      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Arsenic                                            | 1.3         | U         | 2.5      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Barium                                             | 4.3         | I         | 5.0      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Beryllium                                          | 0.25        | U         | 0.50     | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Cadmium                                            | 0.095       | U         | 0.50     | 0.095  | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Chromium                                           | 2.7         | I         | 5.0      | 2.5    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Cobalt                                             | 0.83        |           | 0.50     | 0.15   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Copper                                             | 3.8         | I         | 5.0      | 1.1    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Iron                                               | 290         |           | 100      | 33     | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Lead                                               | 0.21        | I         | 1.5      | 0.20   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Nickel                                             | 5.2         |           | 5.0      | 2.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Selenium                                           | 1.0         | U         | 2.5      | 1.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Silver                                             | 0.25        | U         | 1.0      | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Sodium                                             | 89          |           | 0.50     | 0.25   | mg/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Thallium                                           | 0.50        | U         | 1.0      | 0.50   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Vanadium                                           | 11          |           | 10       | 3.8    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 1       |
| Zinc                                               | 45          |           | 20       | 8.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:29 | 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      |   | 08/25/14 09:22 | 08/25/14 18:28 | 1       |
| General Chemistry                                  |             |           |          |        |           |   |                |                |         |
| Analyte                                            | Result      | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 420         |           | 10       | 10     | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 3.3         |           | 0.10     | 0.052  | mg/L      |   |                | 08/26/14 11:43 | 2       |
| Nitrate as N                                       | 0.083       | J         | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 11:52 | 1       |
| Method: Field Sampling - Field Sampling            |             |           |          |        |           |   |                |                |         |
| Analyte                                            | Result      | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | Yellow Tint |           |          |        | PCU       |   |                | 08/20/14 14:11 | 1       |
| Field pH                                           | 6.1         |           |          |        | SU        |   |                | 08/20/14 14:11 | 1       |
| Field Temperature                                  | 25.0        |           |          |        | Degrees C |   |                | 08/20/14 14:11 | 1       |
| Oxygen, Dissolved                                  | 0.0         |           |          |        | mg/L      |   |                | 08/20/14 14:11 | 1       |
| Sheen                                              | None        |           |          |        | NONE      |   |                | 08/20/14 14:11 | 1       |
| Specific Conductance                               | 702         |           |          |        | umhos/cm  |   |                | 08/20/14 14:11 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB34S**

**Lab Sample ID: 640-48951-9**

**Date Collected: 08/20/14 14:12**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 1.31   |           |     |     | NTU  |   |          | 08/20/14 14:11 | 1       |
| Water Level | 115.9  |           |     |     | ft   |   |          | 08/20/14 14:11 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB11S**

**Lab Sample ID: 640-48951-10**

**Date Collected: 08/20/14 13:04**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:22 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 17:22 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:22 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:22 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 17:22 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 17:22 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:22 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 17:22 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 17:22 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB11S**

**Lab Sample ID: 640-48951-10**

**Date Collected: 08/20/14 13:04**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 92        |           | 70 - 130 |        |           |   |                | 08/29/14 17:22 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0054    | U         | 0.022    | 0.0054 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:39 | 1       |
| EDB                                                | 0.0024    | U         | 0.022    | 0.0024 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:39 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 106       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 19:39 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 20        |           | 0.50     | 0.25   | mg/L      |   |                | 09/04/14 01:27 | 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      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Barium                                             | 69        |           | 5.0      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Cobalt                                             | 0.56      |           | 0.50     | 0.15   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Iron                                               | 1700      |           | 100      | 33     | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Sodium                                             | 12        |           | 0.50     | 0.25   | mg/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Vanadium                                           | 7.5       | I         | 10       | 3.8    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:36 | 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      |   | 08/25/14 09:22 | 08/25/14 18:30 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 100       |           | 5.0      | 5.0    | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.12      |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 11:36 | 1       |
| Nitrate as N                                       | 0.010     | J U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 11:50 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/20/14 13:03 | 1       |
| Field pH                                           | 4.03      |           |          |        | SU        |   |                | 08/20/14 13:03 | 1       |
| Field Temperature                                  | 23.2      |           |          |        | Degrees C |   |                | 08/20/14 13:03 | 1       |
| Oxygen, Dissolved                                  | 0.0       |           |          |        | mg/L      |   |                | 08/20/14 13:03 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/20/14 13:03 | 1       |
| Specific Conductance                               | 174       |           |          |        | umhos/cm  |   |                | 08/20/14 13:03 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB11S**

**Lab Sample ID: 640-48951-10**

**Date Collected: 08/20/14 13:04**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 2.52   |           |     |     | NTU  |   |          | 08/20/14 13:03 | 1       |
| Water Level | 108.42 |           |     |     | ft   |   |          | 08/20/14 13:03 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB20S**

**Lab Sample ID: 640-48951-11**

**Date Collected: 08/20/14 12:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:52 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 17:52 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 17:52 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 17:52 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 17:52 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 17:52 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 17:52 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 17:52 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 17:52 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB20S**

**Lab Sample ID: 640-48951-11**

**Date Collected: 08/20/14 12:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery  | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|------------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 91         |           | 70 - 130 |        |           |   |                | 08/29/14 17:52 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0052     | U         | 0.021    | 0.0052 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:51 | 1       |
| EDB                                                | 0.0023     | U         | 0.021    | 0.0023 | ug/L      |   | 08/27/14 09:53 | 08/27/14 19:51 | 1       |
| Surrogate                                          | %Recovery  | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 105        |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 19:51 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 8.0        |           | 0.50     | 0.25   | mg/L      |   |                | 09/04/14 01:42 | 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      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Arsenic                                            | 1.3        | U         | 2.5      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Barium                                             | 11         |           | 5.0      | 1.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Beryllium                                          | 0.25       | U         | 0.50     | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Cadmium                                            | 0.095      | U         | 0.50     | 0.095  | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Chromium                                           | 2.5        | U         | 5.0      | 2.5    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Cobalt                                             | 0.15       | I         | 0.50     | 0.15   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Copper                                             | 1.3        | I         | 5.0      | 1.1    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Iron                                               | 180        |           | 100      | 33     | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Lead                                               | 0.48       | I         | 1.5      | 0.20   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Nickel                                             | 2.0        | U         | 5.0      | 2.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Selenium                                           | 1.0        | U         | 2.5      | 1.0    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Silver                                             | 0.25       | U         | 1.0      | 0.25   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Sodium                                             | 4.3        |           | 0.50     | 0.25   | mg/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Thallium                                           | 0.50       | U         | 1.0      | 0.50   | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Vanadium                                           | 3.8        | U         | 10       | 3.8    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 1       |
| Zinc                                               | 8.3        | U         | 20       | 8.3    | ug/L      |   | 08/25/14 15:12 | 08/29/14 03:44 | 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      |   | 08/25/14 09:22 | 08/25/14 18:33 | 1       |
| General Chemistry                                  |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 60         |           | 5.0      | 5.0    | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.27       |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 11:39 | 1       |
| Nitrate as N                                       | 0.010      | J U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 11:43 | 1       |
| Method: Field Sampling - Field Sampling            |            |           |          |        |           |   |                |                |         |
| Analyte                                            | Result     | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | Brown Tint |           |          |        | PCU       |   |                | 08/20/14 11:59 | 1       |
| Field pH                                           | 4.26       |           |          |        | SU        |   |                | 08/20/14 11:59 | 1       |
| Field Temperature                                  | 26.0       |           |          |        | Degrees C |   |                | 08/20/14 11:59 | 1       |
| Oxygen, Dissolved                                  | 0.0        |           |          |        | mg/L      |   |                | 08/20/14 11:59 | 1       |
| Sheen                                              | None       |           |          |        | NONE      |   |                | 08/20/14 11:59 | 1       |
| Specific Conductance                               | 74         |           |          |        | umhos/cm  |   |                | 08/20/14 11:59 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB20S**

**Lab Sample ID: 640-48951-11**

**Date Collected: 08/20/14 12:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 6.11   |           |     |     | NTU  |   |          | 08/20/14 11:59 | 1       |
| Water Level | 112.81 |           |     |     | ft   |   |          | 08/20/14 11:59 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB3S**

**Lab Sample ID: 640-48951-12**

**Date Collected: 08/20/14 10:54**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:21 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 18:21 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:21 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:21 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 18:21 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 18:21 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:21 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 18:21 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 18:21 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB3S**

**Lab Sample ID: 640-48951-12**

**Date Collected: 08/20/14 10:54**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 92        |           | 70 - 130 |        |           |   |                | 08/29/14 18:21 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0054    | U         | 0.021    | 0.0054 | ug/L      |   | 08/27/14 09:53 | 08/27/14 20:03 | 1       |
| EDB                                                | 0.0024    | U         | 0.021    | 0.0024 | ug/L      |   | 08/27/14 09:53 | 08/27/14 20:03 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 108       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 20:03 | 1       |
| Method: 300.0 - Anions, Ion Chromatography         |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Chloride                                           | 10        |           | 0.50     | 0.25   | mg/L      |   |                | 09/04/14 01:56 | 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      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Barium                                             | 15        |           | 5.0      | 1.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Iron                                               | 3500      |           | 100      | 33     | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Lead                                               | 0.25      | I         | 1.5      | 0.20   | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Sodium                                             | 5.8       |           | 0.50     | 0.25   | mg/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 17:52 | 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      |   | 08/25/14 09:22 | 08/25/14 18:42 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 31        |           | 5.0      | 5.0    | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.12      |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 10:57 | 1       |
| Nitrate as N                                       | 0.010     | Q U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 12:02 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/20/14 10:53 | 1       |
| Field pH                                           | 4.59      |           |          |        | SU        |   |                | 08/20/14 10:53 | 1       |
| Field Temperature                                  | 21.9      |           |          |        | Degrees C |   |                | 08/20/14 10:53 | 1       |
| Oxygen, Dissolved                                  | 1.0       |           |          |        | mg/L      |   |                | 08/20/14 10:53 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/20/14 10:53 | 1       |
| Specific Conductance                               | 59        |           |          |        | umhos/cm  |   |                | 08/20/14 10:53 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB3S**

**Lab Sample ID: 640-48951-12**

**Date Collected: 08/20/14 10:54**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

**Method: Field Sampling - Field Sampling (Continued)**

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 3.88   |           |     |     | NTU  |   |          | 08/20/14 10:53 | 1       |
| Water Level | 145.77 |           |     |     | ft   |   |          | 08/20/14 10:53 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB2S**

**Lab Sample ID: 640-48951-13**

**Date Collected: 08/20/14 10:20**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:50 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 18:50 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 18:50 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 18:50 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 18:50 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 18:50 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 18:50 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 18:50 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 18:50 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB2S**

**Lab Sample ID: 640-48951-13**

**Date Collected: 08/20/14 10:20**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |      |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 91        |           | 70 - 130 |        |      |   |                | 08/29/14 18:50 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |      |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0054    | U         | 0.021    | 0.0054 | ug/L |   | 08/27/14 09:53 | 08/27/14 20:15 | 1       |
| EDB                                                | 0.0024    | U         | 0.021    | 0.0024 | ug/L |   | 08/27/14 09:53 | 08/27/14 20:15 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |      |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 95        |           | 60 - 144 |        |      |   | 08/27/14 09:53 | 08/27/14 20:15 | 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 |   |                | 09/04/14 03:08 | 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 |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Arsenic                                            | 3.1       |           | 2.5      | 1.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Barium                                             | 80        |           | 5.0      | 1.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Beryllium                                          | 0.79      |           | 0.50     | 0.25   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Chromium                                           | 20        |           | 5.0      | 2.5    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Cobalt                                             | 3.3       |           | 0.50     | 0.15   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Copper                                             | 7.2       |           | 5.0      | 1.1    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Iron                                               | 10000     |           | 100      | 33     | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Lead                                               | 16        |           | 1.5      | 0.20   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Nickel                                             | 8.6       |           | 5.0      | 2.0    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Selenium                                           | 1.5       | I         | 2.5      | 1.0    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Sodium                                             | 7.2       |           | 0.50     | 0.25   | mg/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Vanadium                                           | 26        |           | 10       | 3.8    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Zinc                                               | 16        | I         | 20       | 8.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:15 | 1       |
| Method: 6020 - Metals (ICP/MS) - Dissolved         |           |           |          |        |      |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
| Dissolved Antimony                                 | 2.3       | U         | 5.0      | 2.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Arsenic                                  | 1.3       | U         | 2.5      | 1.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Barium                                   | 11        |           | 5.0      | 1.3    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Beryllium                                | 0.25      | U         | 0.50     | 0.25   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Cadmium                                  | 0.095     | U         | 0.50     | 0.095  | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Chromium                                 | 2.5       | U         | 5.0      | 2.5    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Cobalt                                   | 0.21      | I         | 0.50     | 0.15   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Copper                                   | 1.1       | U         | 5.0      | 1.1    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Iron                                     | 180       |           | 100      | 33     | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Lead                                     | 0.20      | U         | 1.5      | 0.20   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Nickel                                   | 2.0       | U         | 5.0      | 2.0    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Selenium                                 | 1.0       | U         | 2.5      | 1.0    | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Silver                                   | 0.25      | U         | 1.0      | 0.25   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Sodium                                   | 5.9       |           | 0.50     | 0.25   | mg/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Thallium                                 | 0.50      | U         | 1.0      | 0.50   | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB2S**

**Lab Sample ID: 640-48951-13**

**Date Collected: 08/20/14 10:20**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

## Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

| Analyte            | Result | Qualifier | PQL | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Dissolved Vanadium | 3.8    | U         | 10  | 3.8 | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 1       |
| Dissolved Zinc     | 8.3    | U         | 20  | 8.3 | ug/L |   | 08/26/14 07:47 | 08/26/14 18:22 | 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 |   | 08/25/14 09:22 | 08/25/14 18:45 | 1       |

## General Chemistry

| Analyte                | Result | Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------|-----------|-------|-------|------|---|----------|----------------|---------|
| Total Dissolved Solids | 70     |           | 5.0   | 5.0   | mg/L |   |          | 08/26/14 12:51 | 1       |
| Ammonia (as N)         | 0.18   |           | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:14 | 1       |
| Nitrate as N           | 0.030  | I Q       | 0.050 | 0.010 | mg/L |   |          | 08/22/14 12:04 | 1       |

## Method: Field Sampling - Field Sampling

| Analyte              | Result | Qualifier | PQL | MDL | Unit      | D | Prepared | Analyzed       | Dil Fac |
|----------------------|--------|-----------|-----|-----|-----------|---|----------|----------------|---------|
| Color                | Brown  |           |     |     | PCU       |   |          | 08/20/14 10:19 | 1       |
| Field pH             | 4.47   |           |     |     | SU        |   |          | 08/20/14 10:19 | 1       |
| Field Temperature    | 25.3   |           |     |     | Degrees C |   |          | 08/20/14 10:19 | 1       |
| Oxygen, Dissolved    | 0.7    |           |     |     | mg/L      |   |          | 08/20/14 10:19 | 1       |
| Sheen                | None   |           |     |     | NONE      |   |          | 08/20/14 10:19 | 1       |
| Specific Conductance | 84     |           |     |     | umhos/cm  |   |          | 08/20/14 10:19 | 1       |
| Turbidity            | 85.22  |           |     |     | NTU       |   |          | 08/20/14 10:19 | 1       |
| Water Level          | 136.77 |           |     |     | ft        |   |          | 08/20/14 10:19 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB21S**

**Lab Sample ID: 640-48951-14**

**Date Collected: 08/20/14 09:18**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 19:20 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 19:20 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 19:20 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 19:20 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 19:20 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 19:20 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 19:20 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 19:20 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 19:20 | 1       |

TestAmerica Tallahassee

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB21S**

**Lab Sample ID: 640-48951-14**

**Date Collected: 08/20/14 09:18**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
|----------------------------------------------------|-----------|-----------|----------|--------|-----------|---|----------------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr)                       | 93        |           | 70 - 130 |        |           |   |                | 08/29/14 19:20 | 1       |
| Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)       |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| DBCP                                               | 0.0079    | I         | 0.020    | 0.0050 | ug/L      |   | 08/27/14 09:53 | 08/27/14 20:26 | 1       |
| EDB                                                | 0.0022    | U         | 0.020    | 0.0022 | ug/L      |   | 08/27/14 09:53 | 08/27/14 20:26 | 1       |
| Surrogate                                          | %Recovery | Qualifier | Limits   |        |           |   | Prepared       | Analyzed       | Dil Fac |
| Pentachloroethane                                  | 111       |           | 60 - 144 |        |           |   | 08/27/14 09:53 | 08/27/14 20:26 | 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      |   |                | 09/04/14 03:22 | 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      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Arsenic                                            | 1.3       | U         | 2.5      | 1.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Barium                                             | 16        |           | 5.0      | 1.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Beryllium                                          | 0.25      | U         | 0.50     | 0.25   | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Cadmium                                            | 0.095     | U         | 0.50     | 0.095  | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Chromium                                           | 2.5       | U         | 5.0      | 2.5    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Cobalt                                             | 0.15      | U         | 0.50     | 0.15   | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Copper                                             | 1.1       | U         | 5.0      | 1.1    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Iron                                               | 590       |           | 100      | 33     | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Lead                                               | 0.20      | U         | 1.5      | 0.20   | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Nickel                                             | 2.0       | U         | 5.0      | 2.0    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Selenium                                           | 1.0       | U         | 2.5      | 1.0    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Silver                                             | 0.25      | U         | 1.0      | 0.25   | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Sodium                                             | 3.4       |           | 0.50     | 0.25   | mg/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Thallium                                           | 0.50      | U         | 1.0      | 0.50   | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Vanadium                                           | 3.8       | U         | 10       | 3.8    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 1       |
| Zinc                                               | 8.3       | U         | 20       | 8.3    | ug/L      |   | 08/26/14 07:47 | 08/26/14 18:29 | 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      |   | 08/25/14 08:40 | 08/25/14 16:36 | 1       |
| General Chemistry                                  |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Total Dissolved Solids                             | 36        |           | 5.0      | 5.0    | mg/L      |   |                | 08/26/14 12:51 | 1       |
| Ammonia (as N)                                     | 0.15      |           | 0.050    | 0.026  | mg/L      |   |                | 08/26/14 11:14 | 1       |
| Nitrate as N                                       | 0.010     | Q U       | 0.050    | 0.010  | mg/L      |   |                | 08/22/14 12:03 | 1       |
| Method: Field Sampling - Field Sampling            |           |           |          |        |           |   |                |                |         |
| Analyte                                            | Result    | Qualifier | PQL      | MDL    | Unit      | D | Prepared       | Analyzed       | Dil Fac |
| Color                                              | None      |           |          |        | PCU       |   |                | 08/20/14 09:17 | 1       |
| Field pH                                           | 5.16      |           |          |        | SU        |   |                | 08/20/14 09:17 | 1       |
| Field Temperature                                  | 25.1      |           |          |        | Degrees C |   |                | 08/20/14 09:17 | 1       |
| Oxygen, Dissolved                                  | 0.0       |           |          |        | mg/L      |   |                | 08/20/14 09:17 | 1       |
| Sheen                                              | None      |           |          |        | NONE      |   |                | 08/20/14 09:17 | 1       |
| Specific Conductance                               | 43        |           |          |        | umhos/cm  |   |                | 08/20/14 09:17 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB21S**

**Lab Sample ID: 640-48951-14**

**Date Collected: 08/20/14 09:18**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

### Method: Field Sampling - Field Sampling (Continued)

| Analyte     | Result | Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Turbidity   | 3.92   |           |     |     | NTU  |   |          | 08/20/14 09:17 | 1       |
| Water Level | 111.93 |           |     |     | ft   |   |          | 08/20/14 09:17 | 1       |

# Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: TRIP02 BLANK 48951**

**Lab Sample ID: 640-48951-15**

**Date Collected: 08/20/14 00:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

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

| Analyte                     | Result | Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0    | U         | 25  | 5.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Acrylonitrile               | 7.2    | J U       | 20  | 7.2  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Benzene                     | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Bromoform                   | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Bromomethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| 2-Butanone (MEK)            | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Carbon disulfide            | 0.60   | U         | 2.0 | 0.60 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Carbon tetrachloride        | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chlorobenzene               | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chlorobromomethane          | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chlorodibromomethane        | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chloroethane                | 2.0    | U         | 5.0 | 2.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chloroform                  | 0.14   | U         | 1.0 | 0.14 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Chloromethane               | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 14:56 | 1       |
| cis-1,2-Dichloroethene      | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 14:56 | 1       |
| cis-1,3-Dichloropropene     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44   | U         | 5.0 | 0.44 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Dibromomethane              | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,2-Dichlorobenzene         | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,4-Dichlorobenzene         | 0.28   | U         | 1.0 | 0.28 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Dichlorobromomethane        | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1-Dichloroethane          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,2-Dichloroethane          | 0.10   | U         | 1.0 | 0.10 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1-Dichloroethene          | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,2-Dichloropropane         | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Ethylbenzene                | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Ethylene Dibromide          | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 2-Hexanone                  | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Iodomethane                 | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Methylene Chloride          | 1.0    | U         | 5.0 | 1.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0    | U         | 10  | 1.0  | ug/L |   |          | 08/29/14 14:56 | 1       |
| Styrene                     | 0.11   | U         | 1.0 | 0.11 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Tetrachloroethene           | 0.15   | U         | 1.0 | 0.15 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Toluene                     | 0.33   | U         | 1.0 | 0.33 | ug/L |   |          | 08/29/14 14:56 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50   | U         | 2.0 | 0.50 | ug/L |   |          | 08/29/14 14:56 | 1       |
| trans-1,2-Dichloroethene    | 0.20   | U         | 1.0 | 0.20 | ug/L |   |          | 08/29/14 14:56 | 1       |
| trans-1,3-Dichloropropene   | 0.21   | U         | 1.0 | 0.21 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1,1-Trichloroethane       | 0.50   | U         | 1.0 | 0.50 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,1,2-Trichloroethane       | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Trichloroethene             | 0.13   | U         | 1.0 | 0.13 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Trichlorofluoromethane      | 0.25   | U         | 1.0 | 0.25 | ug/L |   |          | 08/29/14 14:56 | 1       |
| 1,2,3-Trichloropropane      | 0.41   | U         | 1.0 | 0.41 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Vinyl acetate               | 0.28   | J U       | 2.0 | 0.28 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Vinyl chloride              | 0.18   | U         | 1.0 | 0.18 | ug/L |   |          | 08/29/14 14:56 | 1       |
| Xylenes, Total              | 0.20   | U         | 2.0 | 0.20 | ug/L |   |          | 08/29/14 14:56 | 1       |

TestAmerica Tallahassee

## Client Sample Results

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: TRIP02 BLANK 48951**

**Lab Sample ID: 640-48951-15**

**Date Collected: 08/20/14 00:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| <i>Surrogate</i>             | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|------------------------------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| 1,2-Dichloroethane-d4 (Surr) | 91               |                  | 70 - 130      |                 | 08/29/14 14:56  | 1              |

## Surrogate Summary

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

TestAmerica Job ID: 640-48932-1

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

Matrix: Water

Prep Type: Total/NA

|                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID     | Client Sample ID       | TOL<br>(70-130)                                | 12DCE<br>(70-130) |
| 640-48932-1       | SW-1                   |                                                | 86                |
| 640-48932-2       | SW-3                   |                                                | 86                |
| 640-48932-3       | Trip Blank 48932       |                                                | 86                |
| 640-48933-1       | MWB29S                 |                                                | 79                |
| 640-48933-2       | MWB27S                 |                                                | 80                |
| 640-48933-3       | MWB13S                 |                                                | 81                |
| 640-48933-4       | MWB22S                 |                                                | 80                |
| 640-48933-5       | MWB12S                 |                                                | 84                |
| 640-48933-10      | Trip Blank 48933       |                                                | 82                |
| 640-48951-6       | FIELD BLANK 01 48951   |                                                | 91                |
| 640-48951-7       | MWB32S                 |                                                | 92                |
| 640-48951-8       | MWB33S                 |                                                | 91                |
| 640-48951-9       | MWB34S                 |                                                | 91                |
| 640-48951-10      | MWB11S                 |                                                | 92                |
| 640-48951-11      | MWB20S                 |                                                | 91                |
| 640-48951-12      | MWB3S                  |                                                | 92                |
| 640-48951-13      | MWB2S                  |                                                | 91                |
| 640-48951-14      | MWB21S                 |                                                | 93                |
| 640-48951-15      | TRIP02 BLANK 48951     |                                                | 91                |
| LCS 680-346308/3  | Lab Control Sample     | 103                                            | 102               |
| LCS 680-346586/4  | Lab Control Sample     | 116                                            | 107               |
| LCS 680-346741/3  | Lab Control Sample     | 99                                             | 100               |
| LCSD 680-346308/4 | Lab Control Sample Dup | 115                                            | 112               |
| LCSD 680-346586/5 | Lab Control Sample Dup | 95                                             | 86                |
| LCSD 680-346741/4 | Lab Control Sample Dup | 95                                             | 98                |
| MB 680-346308/8   | Method Blank           | 94                                             | 81                |
| MB 680-346586/8   | Method Blank           | 109                                            | 89                |
| MB 680-346741/8   | Method Blank           | 98                                             | 90                |

#### Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

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

Matrix: Water

Prep Type: Total/NA

|                |                  | Percent Surrogate Recovery (Acceptance Limits) |  |
|----------------|------------------|------------------------------------------------|--|
| Lab Sample ID  | Client Sample ID | PCA1<br>(60-144)                               |  |
| 640-48932-1    | SW-1             | 115                                            |  |
| 640-48951-7 MS | MWB32S           | 136                                            |  |
| 640-48951-9    | MWB34S           | 110                                            |  |

#### Surrogate Legend

PCA = Pentachloroethane

TestAmerica Tallahassee

# Surrogate Summary

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

TestAmerica Job ID: 640-48932-1

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

**Matrix: Water**

**Prep Type: Total/NA**

| Percent Surrogate Recovery (Acceptance Limits) |                        |                  |
|------------------------------------------------|------------------------|------------------|
| Lab Sample ID                                  | Client Sample ID       | PCA2<br>(60-144) |
| 640-48932-2                                    | SW-3                   | 111              |
| 640-48933-1                                    | MWB29S                 | 110              |
| 640-48933-2                                    | MWB27S                 | 114              |
| 640-48933-3                                    | MWB13S                 | 113              |
| 640-48933-4                                    | MWB22S                 | 111              |
| 640-48933-5                                    | MWB12S                 | 108              |
| 640-48951-6                                    | FIELD BLANK 01 48951   | 111              |
| 640-48951-6 MS                                 | FIELD BLANK 01 48951   | 108              |
| 640-48951-6 MSD                                | FIELD BLANK 01 48951   | 106              |
| 640-48951-7                                    | MWB32S                 | 107              |
| 640-48951-8                                    | MWB33S                 | 107              |
| 640-48951-10                                   | MWB11S                 | 106              |
| 640-48951-11                                   | MWB20S                 | 105              |
| 640-48951-12                                   | MWB3S                  | 108              |
| 640-48951-13                                   | MWB2S                  | 95               |
| 640-48951-14                                   | MWB21S                 | 111              |
| LCS 680-345210/4-A                             | Lab Control Sample     | 116              |
| LCS 680-345698/11-A                            | Lab Control Sample     | 108              |
| LCSD 680-345210/5-A                            | Lab Control Sample Dup | 114              |
| LCSD 680-345698/12-A                           | Lab Control Sample Dup | 106              |
| MB 680-345210/3-A                              | Method Blank           | 112              |
| MB 680-345698/10-A                             | Method Blank           | 107              |

## Surrogate Legend

PCA = Pentachloroethane

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: MB 680-346308/8

Matrix: Water

Analysis Batch: 346308

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0       | U            | 25  | 5.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Acrylonitrile               | 7.2       | U            | 20  | 7.2  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Benzene                     | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Bromoform                   | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Bromomethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| 2-Butanone (MEK)            | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Carbon disulfide            | 0.60      | U            | 2.0 | 0.60 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Carbon tetrachloride        | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chlorobenzene               | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chlorobromomethane          | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chlorodibromomethane        | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chloroethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chloroform                  | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Chloromethane               | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/28/14 11:25 | 1       |
| cis-1,2-Dichloroethene      | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/28/14 11:25 | 1       |
| cis-1,3-Dichloropropene     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44      | U            | 5.0 | 0.44 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Dibromomethane              | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,2-Dichlorobenzene         | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,4-Dichlorobenzene         | 0.28      | U            | 1.0 | 0.28 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Dichlorobromomethane        | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1-Dichloroethane          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,2-Dichloroethane          | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1-Dichloroethene          | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,2-Dichloropropane         | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Ethylbenzene                | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Ethylene Dibromide          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 2-Hexanone                  | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Iodomethane                 | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Methylene Chloride          | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/28/14 11:25 | 1       |
| Styrene                     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Tetrachloroethene           | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Toluene                     | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/28/14 11:25 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50      | U            | 2.0 | 0.50 | ug/L |   |          | 08/28/14 11:25 | 1       |
| trans-1,2-Dichloroethene    | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/28/14 11:25 | 1       |
| trans-1,3-Dichloropropene   | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1,1-Trichloroethane       | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,1,2-Trichloroethane       | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Trichloroethene             | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Trichlorofluoromethane      | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/28/14 11:25 | 1       |
| 1,2,3-Trichloropropane      | 0.41      | U            | 1.0 | 0.41 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Vinyl acetate               | 0.28      | U            | 2.0 | 0.28 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Vinyl chloride              | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/28/14 11:25 | 1       |
| Xylenes, Total              | 0.20      | U            | 2.0 | 0.20 | ug/L |   |          | 08/28/14 11:25 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: MB 680-346308/8

Matrix: Water

Analysis Batch: 346308

Client Sample ID: Method Blank

Prep Type: Total/NA

| Surrogate                    | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------------|-----------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 81              |                 | 70 - 130 |          | 08/28/14 11:25 | 1       |

Lab Sample ID: LCS 680-346308/3

Matrix: Water

Analysis Batch: 346308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-----------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Acetone                     | 250            | 300           |                  | ug/L |   | 120  | 39 - 162        |
| Acrylonitrile               | 500            | 513           |                  | ug/L |   | 103  | 50 - 150        |
| Benzene                     | 50.0           | 50.2          |                  | ug/L |   | 100  | 74 - 123        |
| Bromoform                   | 50.0           | 53.3          |                  | ug/L |   | 107  | 60 - 134        |
| Bromomethane                | 50.0           | 36.0          |                  | ug/L |   | 72   | 10 - 171        |
| 2-Butanone (MEK)            | 250            | 258           |                  | ug/L |   | 103  | 55 - 142        |
| Carbon disulfide            | 50.0           | 46.4          |                  | ug/L |   | 93   | 63 - 142        |
| Carbon tetrachloride        | 50.0           | 51.5          |                  | ug/L |   | 103  | 70 - 131        |
| Chlorobenzene               | 50.0           | 50.4          |                  | ug/L |   | 101  | 79 - 120        |
| Chlorobromomethane          | 50.0           | 52.1          |                  | ug/L |   | 104  | 60 - 136        |
| Chlorodibromomethane        | 50.0           | 55.8          |                  | ug/L |   | 112  | 63 - 134        |
| Chloroethane                | 50.0           | 49.8          |                  | ug/L |   | 100  | 47 - 148        |
| Chloroform                  | 50.0           | 51.8          |                  | ug/L |   | 104  | 76 - 128        |
| Chloromethane               | 50.0           | 39.0          |                  | ug/L |   | 78   | 47 - 151        |
| cis-1,2-Dichloroethene      | 50.0           | 51.1          |                  | ug/L |   | 102  | 78 - 127        |
| cis-1,3-Dichloropropene     | 50.0           | 51.7          |                  | ug/L |   | 103  | 73 - 128        |
| 1,2-Dibromo-3-Chloropropane | 50.0           | 49.2          |                  | ug/L |   | 98   | 57 - 126        |
| Dibromomethane              | 50.0           | 53.9          |                  | ug/L |   | 108  | 75 - 122        |
| 1,2-Dichlorobenzene         | 50.0           | 47.8          |                  | ug/L |   | 96   | 77 - 124        |
| 1,4-Dichlorobenzene         | 50.0           | 48.5          |                  | ug/L |   | 97   | 76 - 124        |
| Dichlorobromomethane        | 50.0           | 52.8          |                  | ug/L |   | 106  | 72 - 129        |
| 1,1-Dichloroethane          | 50.0           | 52.1          |                  | ug/L |   | 104  | 69 - 132        |
| 1,2-Dichloroethane          | 50.0           | 52.4          |                  | ug/L |   | 105  | 75 - 120        |
| 1,1,1-Dichloroethene        | 50.0           | 54.5          |                  | ug/L |   | 109  | 73 - 134        |
| 1,2-Dichloropropane         | 50.0           | 50.4          |                  | ug/L |   | 101  | 71 - 126        |
| Ethylbenzene                | 50.0           | 48.9          |                  | ug/L |   | 98   | 78 - 125        |
| Ethylene Dibromide          | 50.0           | 51.5          |                  | ug/L |   | 103  | 75 - 127        |
| 2-Hexanone                  | 250            | 251           |                  | ug/L |   | 100  | 52 - 149        |
| Iodomethane                 | 50.0           | 48.3          |                  | ug/L |   | 97   | 50 - 150        |
| Methylene Chloride          | 50.0           | 50.0          |                  | ug/L |   | 100  | 79 - 124        |
| 4-Methyl-2-pentanone (MIBK) | 250            | 251           |                  | ug/L |   | 100  | 51 - 143        |
| Styrene                     | 50.0           | 52.7          |                  | ug/L |   | 105  | 75 - 129        |
| 1,1,1,2-Tetrachloroethane   | 50.0           | 51.3          |                  | ug/L |   | 103  | 68 - 132        |
| 1,1,2,2-Tetrachloroethane   | 50.0           | 48.5          |                  | ug/L |   | 97   | 71 - 127        |
| Tetrachloroethene           | 50.0           | 52.5          |                  | ug/L |   | 105  | 77 - 128        |
| Toluene                     | 50.0           | 50.7          |                  | ug/L |   | 101  | 77 - 125        |
| trans-1,4-Dichloro-2-butene | 50.0           | 63.4          |                  | ug/L |   | 127  | 50 - 150        |
| trans-1,2-Dichloroethene    | 50.0           | 48.6          |                  | ug/L |   | 97   | 78 - 130        |
| trans-1,3-Dichloropropene   | 50.0           | 56.4          |                  | ug/L |   | 113  | 72 - 127        |
| 1,1,1-Trichloroethane       | 50.0           | 55.2          |                  | ug/L |   | 110  | 76 - 126        |
| 1,1,2-Trichloroethane       | 50.0           | 51.3          |                  | ug/L |   | 103  | 69 - 127        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCS 680-346308/3

Matrix: Water

Analysis Batch: 346308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 50.0        | 51.3       |               | ug/L |   | 103  | 80 - 120     |
| Trichlorofluoromethane | 50.0        | 51.6       |               | ug/L |   | 103  | 66 - 144     |
| 1,2,3-Trichloropropane | 50.0        | 51.9       |               | ug/L |   | 104  | 74 - 126     |
| Vinyl acetate          | 100         | 82.8       |               | ug/L |   | 83   | 10 - 200     |
| Vinyl chloride         | 50.0        | 45.1       |               | ug/L |   | 90   | 58 - 141     |
| Xylenes, Total         | 100         | 99.4       |               | ug/L |   | 99   | 80 - 124     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| Toluene-d8 (Surr)            | 103           |               | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 102           |               | 70 - 130 |

Lab Sample ID: LCSD 680-346308/4

Matrix: Water

Analysis Batch: 346308

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                     | 250         | 357         |                | ug/L |   | 143  | 39 - 162     | 17  | 50        |
| Acrylonitrile               | 500         | 567         |                | ug/L |   | 113  | 50 - 150     | 10  | 50        |
| Benzene                     | 50.0        | 55.1        |                | ug/L |   | 110  | 74 - 123     | 9   | 30        |
| Bromoform                   | 50.0        | 54.0        |                | ug/L |   | 108  | 60 - 134     | 1   | 30        |
| Bromomethane                | 50.0        | 31.5        |                | ug/L |   | 63   | 10 - 171     | 13  | 50        |
| 2-Butanone (MEK)            | 250         | 280         |                | ug/L |   | 112  | 55 - 142     | 8   | 30        |
| Carbon disulfide            | 50.0        | 51.7        |                | ug/L |   | 103  | 63 - 142     | 11  | 30        |
| Carbon tetrachloride        | 50.0        | 58.1        |                | ug/L |   | 116  | 70 - 131     | 12  | 30        |
| Chlorobenzene               | 50.0        | 52.7        |                | ug/L |   | 105  | 79 - 120     | 4   | 30        |
| Chlorobromomethane          | 50.0        | 56.7        |                | ug/L |   | 113  | 60 - 136     | 8   | 30        |
| Chlorodibromomethane        | 50.0        | 60.8        |                | ug/L |   | 122  | 63 - 134     | 9   | 50        |
| Chloroethane                | 50.0        | 59.5        |                | ug/L |   | 119  | 47 - 148     | 18  | 40        |
| Chloroform                  | 50.0        | 57.8        |                | ug/L |   | 116  | 76 - 128     | 11  | 30        |
| Chloromethane               | 50.0        | 43.3        |                | ug/L |   | 87   | 47 - 151     | 10  | 30        |
| cis-1,2-Dichloroethene      | 50.0        | 56.8        |                | ug/L |   | 114  | 78 - 127     | 11  | 30        |
| cis-1,3-Dichloropropene     | 50.0        | 55.5        |                | ug/L |   | 111  | 73 - 128     | 7   | 30        |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 51.9        |                | ug/L |   | 104  | 57 - 126     | 5   | 50        |
| Dibromomethane              | 50.0        | 59.7        |                | ug/L |   | 119  | 75 - 122     | 10  | 30        |
| 1,2-Dichlorobenzene         | 50.0        | 50.9        |                | ug/L |   | 102  | 77 - 124     | 6   | 30        |
| 1,4-Dichlorobenzene         | 50.0        | 50.8        |                | ug/L |   | 102  | 76 - 124     | 5   | 30        |
| Dichlorobromomethane        | 50.0        | 58.1        |                | ug/L |   | 116  | 72 - 129     | 10  | 30        |
| 1,1-Dichloroethane          | 50.0        | 55.8        |                | ug/L |   | 112  | 69 - 132     | 7   | 30        |
| 1,2-Dichloroethane          | 50.0        | 58.9        |                | ug/L |   | 118  | 75 - 120     | 12  | 30        |
| 1,1-Dichloroethene          | 50.0        | 60.6        |                | ug/L |   | 121  | 73 - 134     | 11  | 30        |
| 1,2-Dichloropropane         | 50.0        | 57.0        |                | ug/L |   | 114  | 71 - 126     | 12  | 30        |
| Ethylbenzene                | 50.0        | 52.3        |                | ug/L |   | 105  | 78 - 125     | 7   | 30        |
| Ethylene Dibromide          | 50.0        | 58.4        |                | ug/L |   | 117  | 75 - 127     | 13  | 30        |
| 2-Hexanone                  | 250         | 275         |                | ug/L |   | 110  | 52 - 149     | 9   | 30        |
| Iodomethane                 | 50.0        | 55.4        |                | ug/L |   | 111  | 50 - 150     | 14  | 50        |
| Methylene Chloride          | 50.0        | 53.2        |                | ug/L |   | 106  | 79 - 124     | 6   | 30        |
| 4-Methyl-2-pentanone (MIBK) | 250         | 280         |                | ug/L |   | 112  | 51 - 143     | 11  | 30        |
| Styrene                     | 50.0        | 55.4        |                | ug/L |   | 111  | 75 - 129     | 5   | 30        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCSD 680-346308/4

Matrix: Water

Analysis Batch: 346308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte                     | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| 1,1,1,2-Tetrachloroethane   | 50.0        | 53.8        |                | ug/L |   | 108  | 68 - 132     | 5   | 30        |
| 1,1,1,2,2-Tetrachloroethane | 50.0        | 51.1        |                | ug/L |   | 102  | 71 - 127     | 5   | 30        |
| Tetrachloroethene           | 50.0        | 58.0        |                | ug/L |   | 116  | 77 - 128     | 10  | 30        |
| Toluene                     | 50.0        | 56.5        |                | ug/L |   | 113  | 77 - 125     | 11  | 30        |
| trans-1,4-Dichloro-2-butene | 50.0        | 64.1        |                | ug/L |   | 128  | 50 - 150     | 1   | 50        |
| trans-1,2-Dichloroethene    | 50.0        | 55.2        |                | ug/L |   | 110  | 78 - 130     | 13  | 30        |
| trans-1,3-Dichloropropene   | 50.0        | 62.8        |                | ug/L |   | 126  | 72 - 127     | 11  | 50        |
| 1,1,1-Trichloroethane       | 50.0        | 61.3        |                | ug/L |   | 123  | 76 - 126     | 11  | 30        |
| 1,1,2-Trichloroethane       | 50.0        | 55.7        |                | ug/L |   | 111  | 69 - 127     | 8   | 30        |
| Trichloroethene             | 50.0        | 55.1        |                | ug/L |   | 110  | 80 - 120     | 7   | 30        |
| Trichlorofluoromethane      | 50.0        | 57.3        |                | ug/L |   | 115  | 66 - 144     | 10  | 30        |
| 1,2,3-Trichloropropane      | 50.0        | 56.5        |                | ug/L |   | 113  | 74 - 126     | 9   | 30        |
| Vinyl acetate               | 100         | 90.9        |                | ug/L |   | 91   | 10 - 200     | 9   | 30        |
| Vinyl chloride              | 50.0        | 47.7        |                | ug/L |   | 95   | 58 - 141     | 6   | 30        |
| Xylenes, Total              | 100         | 105         |                | ug/L |   | 105  | 80 - 124     | 5   | 30        |

| Surrogate                    | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------------------|----------------|----------------|----------|
| Toluene-d8 (Surr)            | 115            |                | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 112            |                | 70 - 130 |

Lab Sample ID: MB 680-346586/8

Matrix: Water

Analysis Batch: 346586

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0       | U            | 25  | 5.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Acrylonitrile               | 7.2       | U            | 20  | 7.2  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Benzene                     | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Bromoform                   | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Bromomethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| 2-Butanone (MEK)            | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Carbon disulfide            | 0.60      | U            | 2.0 | 0.60 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Carbon tetrachloride        | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chlorobenzene               | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chlorobromomethane          | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chlorodibromomethane        | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chloroethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chloroform                  | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Chloromethane               | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/29/14 13:55 | 1       |
| cis-1,2-Dichloroethene      | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/29/14 13:55 | 1       |
| cis-1,3-Dichloropropene     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44      | U            | 5.0 | 0.44 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Dibromomethane              | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,2-Dichlorobenzene         | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,4-Dichlorobenzene         | 0.28      | U            | 1.0 | 0.28 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Dichlorobromomethane        | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,1-Dichloroethane          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,2-Dichloroethane          | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/29/14 13:55 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: MB 680-346586/8

Matrix: Water

Analysis Batch: 346586

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| 1,1-Dichloroethene          | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,2-Dichloropropane         | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Ethylbenzene                | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Ethylene Dibromide          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 2-Hexanone                  | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Iodomethane                 | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Methylene Chloride          | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/29/14 13:55 | 1       |
| Styrene                     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Tetrachloroethene           | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Toluene                     | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/29/14 13:55 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50      | U            | 2.0 | 0.50 | ug/L |   |          | 08/29/14 13:55 | 1       |
| trans-1,2-Dichloroethene    | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/29/14 13:55 | 1       |
| trans-1,3-Dichloropropene   | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,1,1-Trichloroethane       | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,1,2-Trichloroethane       | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Trichloroethene             | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Trichlorofluoromethane      | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/29/14 13:55 | 1       |
| 1,2,3-Trichloropropane      | 0.41      | U            | 1.0 | 0.41 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Vinyl acetate               | 0.28      | U            | 2.0 | 0.28 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Vinyl chloride              | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/29/14 13:55 | 1       |
| Xylenes, Total              | 0.20      | U            | 2.0 | 0.20 | ug/L |   |          | 08/29/14 13:55 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 89           |              | 70 - 130 |          | 08/29/14 13:55 | 1       |

Lab Sample ID: LCS 680-346586/4

Matrix: Water

Analysis Batch: 346586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Acetone                | 250         | 273        |               | ug/L |   | 109  | 39 - 162     |
| Acrylonitrile          | 500         | 1690       | J             | ug/L |   | 337  | 50 - 150     |
| Benzene                | 50.0        | 57.3       |               | ug/L |   | 115  | 74 - 123     |
| Bromoform              | 50.0        | 58.7       |               | ug/L |   | 117  | 60 - 134     |
| Bromomethane           | 50.0        | 57.0       |               | ug/L |   | 114  | 10 - 171     |
| 2-Butanone (MEK)       | 250         | 286        |               | ug/L |   | 114  | 55 - 142     |
| Carbon disulfide       | 50.0        | 52.2       |               | ug/L |   | 104  | 63 - 142     |
| Carbon tetrachloride   | 50.0        | 51.1       |               | ug/L |   | 102  | 70 - 131     |
| Chlorobenzene          | 50.0        | 56.6       |               | ug/L |   | 113  | 79 - 120     |
| Chlorobromomethane     | 50.0        | 57.4       |               | ug/L |   | 115  | 60 - 136     |
| Chlorodibromomethane   | 50.0        | 58.1       |               | ug/L |   | 116  | 63 - 134     |
| Chloroethane           | 50.0        | 40.9       |               | ug/L |   | 82   | 47 - 148     |
| Chloroform             | 50.0        | 57.0       |               | ug/L |   | 114  | 76 - 128     |
| Chloromethane          | 50.0        | 46.1       |               | ug/L |   | 92   | 47 - 151     |
| cis-1,2-Dichloroethene | 50.0        | 55.1       |               | ug/L |   | 110  | 78 - 127     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCS 680-346586/4

Matrix: Water

Analysis Batch: 346586

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| cis-1,3-Dichloropropene     | 50.0        | 57.7       |               | ug/L |   | 115  | 73 - 128     |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 56.3       |               | ug/L |   | 113  | 57 - 126     |
| Dibromomethane              | 50.0        | 54.4       |               | ug/L |   | 109  | 75 - 122     |
| 1,2-Dichlorobenzene         | 50.0        | 55.9       |               | ug/L |   | 112  | 77 - 124     |
| 1,4-Dichlorobenzene         | 50.0        | 55.6       |               | ug/L |   | 111  | 76 - 124     |
| Dichlorobromomethane        | 50.0        | 58.1       |               | ug/L |   | 116  | 72 - 129     |
| 1,1-Dichloroethane          | 50.0        | 51.9       |               | ug/L |   | 104  | 69 - 132     |
| 1,2-Dichloroethane          | 50.0        | 55.0       |               | ug/L |   | 110  | 75 - 120     |
| 1,1-Dichloroethene          | 50.0        | 53.4       |               | ug/L |   | 107  | 73 - 134     |
| 1,2-Dichloropropane         | 50.0        | 55.5       |               | ug/L |   | 111  | 71 - 126     |
| Ethylbenzene                | 50.0        | 58.9       |               | ug/L |   | 118  | 78 - 125     |
| Ethylene Dibromide          | 50.0        | 55.9       |               | ug/L |   | 112  | 75 - 127     |
| 2-Hexanone                  | 250         | 285        |               | ug/L |   | 114  | 52 - 149     |
| Iodomethane                 | 50.0        | 52.6       |               | ug/L |   | 105  | 50 - 150     |
| Methylene Chloride          | 50.0        | 58.7       |               | ug/L |   | 117  | 79 - 124     |
| 4-Methyl-2-pentanone (MIBK) | 250         | 277        |               | ug/L |   | 111  | 51 - 143     |
| Styrene                     | 50.0        | 57.3       |               | ug/L |   | 115  | 75 - 129     |
| 1,1,1,2-Tetrachloroethane   | 50.0        | 58.1       |               | ug/L |   | 116  | 68 - 132     |
| 1,1,2,2-Tetrachloroethane   | 50.0        | 55.8       |               | ug/L |   | 112  | 71 - 127     |
| Tetrachloroethene           | 50.0        | 52.2       |               | ug/L |   | 104  | 77 - 128     |
| Toluene                     | 50.0        | 57.7       |               | ug/L |   | 115  | 77 - 125     |
| trans-1,4-Dichloro-2-butene | 50.0        | 59.0       |               | ug/L |   | 118  | 50 - 150     |
| trans-1,2-Dichloroethene    | 50.0        | 58.1       |               | ug/L |   | 116  | 78 - 130     |
| trans-1,3-Dichloropropene   | 50.0        | 56.1       |               | ug/L |   | 112  | 72 - 127     |
| 1,1,1-Trichloroethane       | 50.0        | 51.3       |               | ug/L |   | 103  | 76 - 126     |
| 1,1,2-Trichloroethane       | 50.0        | 55.5       |               | ug/L |   | 111  | 69 - 127     |
| Trichloroethene             | 50.0        | 52.8       |               | ug/L |   | 106  | 80 - 120     |
| Trichlorofluoromethane      | 50.0        | 56.5       |               | ug/L |   | 113  | 66 - 144     |
| 1,2,3-Trichloropropane      | 50.0        | 57.6       |               | ug/L |   | 115  | 74 - 126     |
| Vinyl acetate               | 100         | 101        |               | ug/L |   | 101  | 10 - 200     |
| Vinyl chloride              | 50.0        | 43.7       |               | ug/L |   | 87   | 58 - 141     |
| Xylenes, Total              | 100         | 116        |               | ug/L |   | 116  | 80 - 124     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| Toluene-d8 (Surr)            | 116           |               | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 107           |               | 70 - 130 |

Lab Sample ID: LCSD 680-346586/5

Matrix: Water

Analysis Batch: 346586

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          | 250         | 239         |                | ug/L |   | 96   | 39 - 162     | 13  | 50        |
| Acrylonitrile    | 500         | 1330        | J              | ug/L |   | 267  | 50 - 150     | 23  | 50        |
| Benzene          | 50.0        | 46.1        |                | ug/L |   | 92   | 74 - 123     | 22  | 30        |
| Bromoform        | 50.0        | 47.8        |                | ug/L |   | 96   | 60 - 134     | 20  | 30        |
| Bromomethane     | 50.0        | 45.0        |                | ug/L |   | 90   | 10 - 171     | 23  | 50        |
| 2-Butanone (MEK) | 250         | 213         |                | ug/L |   | 85   | 55 - 142     | 29  | 30        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCSD 680-346586/5

Matrix: Water

Analysis Batch: 346586

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 |
|-----------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Carbon disulfide            | 50.0        | 46.0        |                | ug/L |   | 92   | 63 - 142     | 13  | 30        |
| Carbon tetrachloride        | 50.0        | 41.4        |                | ug/L |   | 83   | 70 - 131     | 21  | 30        |
| Chlorobenzene               | 50.0        | 46.6        |                | ug/L |   | 93   | 79 - 120     | 19  | 30        |
| Chlorobromomethane          | 50.0        | 47.5        |                | ug/L |   | 95   | 60 - 136     | 19  | 30        |
| Chlorodibromomethane        | 50.0        | 46.8        |                | ug/L |   | 94   | 63 - 134     | 22  | 50        |
| Chloroethane                | 50.0        | 33.0        |                | ug/L |   | 66   | 47 - 148     | 21  | 40        |
| Chloroform                  | 50.0        | 46.5        |                | ug/L |   | 93   | 76 - 128     | 20  | 30        |
| Chloromethane               | 50.0        | 36.8        |                | ug/L |   | 74   | 47 - 151     | 22  | 30        |
| cis-1,2-Dichloroethene      | 50.0        | 44.3        |                | ug/L |   | 89   | 78 - 127     | 22  | 30        |
| cis-1,3-Dichloropropene     | 50.0        | 46.5        |                | ug/L |   | 93   | 73 - 128     | 21  | 30        |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 47.1        |                | ug/L |   | 94   | 57 - 126     | 18  | 50        |
| Dibromomethane              | 50.0        | 44.7        |                | ug/L |   | 89   | 75 - 122     | 20  | 30        |
| 1,2-Dichlorobenzene         | 50.0        | 46.1        |                | ug/L |   | 92   | 77 - 124     | 19  | 30        |
| 1,4-Dichlorobenzene         | 50.0        | 45.6        |                | ug/L |   | 91   | 76 - 124     | 20  | 30        |
| Dichlorobromomethane        | 50.0        | 46.5        |                | ug/L |   | 93   | 72 - 129     | 22  | 30        |
| 1,1-Dichloroethane          | 50.0        | 43.9        |                | ug/L |   | 88   | 69 - 132     | 17  | 30        |
| 1,2-Dichloroethane          | 50.0        | 44.3        |                | ug/L |   | 89   | 75 - 120     | 22  | 30        |
| 1,1-Dichloroethene          | 50.0        | 45.0        |                | ug/L |   | 90   | 73 - 134     | 17  | 30        |
| 1,2-Dichloropropane         | 50.0        | 45.7        |                | ug/L |   | 91   | 71 - 126     | 19  | 30        |
| Ethylbenzene                | 50.0        | 47.4        |                | ug/L |   | 95   | 78 - 125     | 22  | 30        |
| Ethylene Dibromide          | 50.0        | 45.7        |                | ug/L |   | 91   | 75 - 127     | 20  | 30        |
| 2-Hexanone                  | 250         | 232         |                | ug/L |   | 93   | 52 - 149     | 20  | 30        |
| Iodomethane                 | 50.0        | 45.7        |                | ug/L |   | 91   | 50 - 150     | 14  | 50        |
| Methylene Chloride          | 50.0        | 51.1        |                | ug/L |   | 102  | 79 - 124     | 14  | 30        |
| 4-Methyl-2-pentanone (MIBK) | 250         | 225         |                | ug/L |   | 90   | 51 - 143     | 21  | 30        |
| Styrene                     | 50.0        | 46.4        |                | ug/L |   | 93   | 75 - 129     | 21  | 30        |
| 1,1,1,2-Tetrachloroethane   | 50.0        | 46.4        |                | ug/L |   | 93   | 68 - 132     | 22  | 30        |
| 1,1,2,2-Tetrachloroethane   | 50.0        | 45.3        |                | ug/L |   | 91   | 71 - 127     | 21  | 30        |
| Tetrachloroethene           | 50.0        | 42.7        |                | ug/L |   | 85   | 77 - 128     | 20  | 30        |
| Toluene                     | 50.0        | 46.3        |                | ug/L |   | 93   | 77 - 125     | 22  | 30        |
| trans-1,4-Dichloro-2-butene | 50.0        | 47.9        |                | ug/L |   | 96   | 50 - 150     | 21  | 50        |
| trans-1,2-Dichloroethene    | 50.0        | 47.1        |                | ug/L |   | 94   | 78 - 130     | 21  | 30        |
| trans-1,3-Dichloropropene   | 50.0        | 45.2        |                | ug/L |   | 90   | 72 - 127     | 22  | 50        |
| 1,1,1-Trichloroethane       | 50.0        | 41.8        |                | ug/L |   | 84   | 76 - 126     | 20  | 30        |
| 1,1,2-Trichloroethane       | 50.0        | 45.7        |                | ug/L |   | 91   | 69 - 127     | 19  | 30        |
| Trichloroethene             | 50.0        | 43.0        |                | ug/L |   | 86   | 80 - 120     | 20  | 30        |
| Trichlorofluoromethane      | 50.0        | 46.7        |                | ug/L |   | 93   | 66 - 144     | 19  | 30        |
| 1,2,3-Trichloropropane      | 50.0        | 46.1        |                | ug/L |   | 92   | 74 - 126     | 22  | 30        |
| Vinyl acetate               | 100         | 73.8        | J              | ug/L |   | 74   | 10 - 200     | 32  | 30        |
| Vinyl chloride              | 50.0        | 38.8        |                | ug/L |   | 78   | 58 - 141     | 12  | 30        |
| Xylenes, Total              | 100         | 94.0        |                | ug/L |   | 94   | 80 - 124     | 21  | 30        |

| Surrogate                    | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------------------|----------------|----------------|----------|
| Toluene-d8 (Surr)            | 95             |                | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 86             |                | 70 - 130 |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: MB 680-346741/8

Matrix: Water

Analysis Batch: 346741

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | PQL | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|------|------|---|----------|----------------|---------|
| Acetone                     | 5.0       | U            | 25  | 5.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Acrylonitrile               | 7.2       | U            | 20  | 7.2  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Benzene                     | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Bromoform                   | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Bromomethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| 2-Butanone (MEK)            | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Carbon disulfide            | 0.60      | U            | 2.0 | 0.60 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Carbon tetrachloride        | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chlorobenzene               | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chlorobromomethane          | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chlorodibromomethane        | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chloroethane                | 2.0       | U            | 5.0 | 2.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chloroform                  | 0.14      | U            | 1.0 | 0.14 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Chloromethane               | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/30/14 11:42 | 1       |
| cis-1,2-Dichloroethene      | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/30/14 11:42 | 1       |
| cis-1,3-Dichloropropene     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,2-Dibromo-3-Chloropropane | 0.44      | U            | 5.0 | 0.44 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Dibromomethane              | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,2-Dichlorobenzene         | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,4-Dichlorobenzene         | 0.28      | U            | 1.0 | 0.28 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Dichlorobromomethane        | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1-Dichloroethane          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,2-Dichloroethane          | 0.10      | U            | 1.0 | 0.10 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1-Dichloroethene          | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,2-Dichloropropane         | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Ethylbenzene                | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Ethylene Dibromide          | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 2-Hexanone                  | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Iodomethane                 | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Methylene Chloride          | 1.0       | U            | 5.0 | 1.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| 4-Methyl-2-pentanone (MIBK) | 1.0       | U            | 10  | 1.0  | ug/L |   |          | 08/30/14 11:42 | 1       |
| Styrene                     | 0.11      | U            | 1.0 | 0.11 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1,1,2-Tetrachloroethane   | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1,2,2-Tetrachloroethane   | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Tetrachloroethene           | 0.15      | U            | 1.0 | 0.15 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Toluene                     | 0.33      | U            | 1.0 | 0.33 | ug/L |   |          | 08/30/14 11:42 | 1       |
| trans-1,4-Dichloro-2-butene | 0.50      | U            | 2.0 | 0.50 | ug/L |   |          | 08/30/14 11:42 | 1       |
| trans-1,2-Dichloroethene    | 0.20      | U            | 1.0 | 0.20 | ug/L |   |          | 08/30/14 11:42 | 1       |
| trans-1,3-Dichloropropene   | 0.21      | U            | 1.0 | 0.21 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1,1-Trichloroethane       | 0.50      | U            | 1.0 | 0.50 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,1,2-Trichloroethane       | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Trichloroethene             | 0.13      | U            | 1.0 | 0.13 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Trichlorofluoromethane      | 0.25      | U            | 1.0 | 0.25 | ug/L |   |          | 08/30/14 11:42 | 1       |
| 1,2,3-Trichloropropane      | 0.41      | U            | 1.0 | 0.41 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Vinyl acetate               | 0.28      | U            | 2.0 | 0.28 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Vinyl chloride              | 0.18      | U            | 1.0 | 0.18 | ug/L |   |          | 08/30/14 11:42 | 1       |
| Xylenes, Total              | 0.20      | U            | 2.0 | 0.20 | ug/L |   |          | 08/30/14 11:42 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: MB 680-346741/8

Matrix: Water

Analysis Batch: 346741

Client Sample ID: Method Blank

Prep Type: Total/NA

| Surrogate                    | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------------|-----------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 90              |                 | 70 - 130 |          | 08/30/14 11:42 | 1       |

Lab Sample ID: LCS 680-346741/3

Matrix: Water

Analysis Batch: 346741

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-----------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Acetone                     | 250            | 285           |                  | ug/L |   | 114  | 39 - 162        |
| Acrylonitrile               | 500            | 504           |                  | ug/L |   | 101  | 50 - 150        |
| Benzene                     | 50.0           | 48.8          |                  | ug/L |   | 98   | 74 - 123        |
| Bromoform                   | 50.0           | 54.0          |                  | ug/L |   | 108  | 60 - 134        |
| Bromomethane                | 50.0           | 32.3          |                  | ug/L |   | 65   | 10 - 171        |
| 2-Butanone (MEK)            | 250            | 237           |                  | ug/L |   | 95   | 55 - 142        |
| Carbon disulfide            | 50.0           | 47.2          |                  | ug/L |   | 94   | 63 - 142        |
| Carbon tetrachloride        | 50.0           | 52.6          |                  | ug/L |   | 105  | 70 - 131        |
| Chlorobenzene               | 50.0           | 50.9          |                  | ug/L |   | 102  | 79 - 120        |
| Chlorobromomethane          | 50.0           | 47.8          |                  | ug/L |   | 96   | 60 - 136        |
| Chlorodibromomethane        | 50.0           | 50.8          |                  | ug/L |   | 102  | 63 - 134        |
| Chloroethane                | 50.0           | 47.9          |                  | ug/L |   | 96   | 47 - 148        |
| Chloroform                  | 50.0           | 49.9          |                  | ug/L |   | 100  | 76 - 128        |
| Chloromethane               | 50.0           | 45.8          |                  | ug/L |   | 92   | 47 - 151        |
| cis-1,2-Dichloroethene      | 50.0           | 49.4          |                  | ug/L |   | 99   | 78 - 127        |
| cis-1,3-Dichloropropene     | 50.0           | 48.7          |                  | ug/L |   | 97   | 73 - 128        |
| 1,2-Dibromo-3-Chloropropane | 50.0           | 45.8          |                  | ug/L |   | 92   | 57 - 126        |
| Dibromomethane              | 50.0           | 50.0          |                  | ug/L |   | 100  | 75 - 122        |
| 1,2-Dichlorobenzene         | 50.0           | 49.2          |                  | ug/L |   | 98   | 77 - 124        |
| 1,4-Dichlorobenzene         | 50.0           | 49.3          |                  | ug/L |   | 99   | 76 - 124        |
| Dichlorobromomethane        | 50.0           | 49.6          |                  | ug/L |   | 99   | 72 - 129        |
| 1,1-Dichloroethane          | 50.0           | 49.3          |                  | ug/L |   | 99   | 69 - 132        |
| 1,2-Dichloroethane          | 50.0           | 51.2          |                  | ug/L |   | 102  | 75 - 120        |
| 1,1-Dichloroethene          | 50.0           | 51.1          |                  | ug/L |   | 102  | 73 - 134        |
| 1,2-Dichloropropane         | 50.0           | 49.8          |                  | ug/L |   | 100  | 71 - 126        |
| Ethylbenzene                | 50.0           | 50.3          |                  | ug/L |   | 101  | 78 - 125        |
| Ethylene Dibromide          | 50.0           | 48.6          |                  | ug/L |   | 97   | 75 - 127        |
| 2-Hexanone                  | 250            | 231           |                  | ug/L |   | 92   | 52 - 149        |
| Iodomethane                 | 50.0           | 34.3          |                  | ug/L |   | 69   | 50 - 150        |
| Methylene Chloride          | 50.0           | 47.7          |                  | ug/L |   | 95   | 79 - 124        |
| 4-Methyl-2-pentanone (MIBK) | 250            | 231           |                  | ug/L |   | 92   | 51 - 143        |
| Styrene                     | 50.0           | 52.0          |                  | ug/L |   | 104  | 75 - 129        |
| 1,1,1,2-Tetrachloroethane   | 50.0           | 54.3          |                  | ug/L |   | 109  | 68 - 132        |
| 1,1,2,2-Tetrachloroethane   | 50.0           | 48.3          |                  | ug/L |   | 97   | 71 - 127        |
| Tetrachloroethene           | 50.0           | 49.2          |                  | ug/L |   | 98   | 77 - 128        |
| Toluene                     | 50.0           | 48.0          |                  | ug/L |   | 96   | 77 - 125        |
| trans-1,4-Dichloro-2-butene | 50.0           | 61.3          |                  | ug/L |   | 123  | 50 - 150        |
| trans-1,2-Dichloroethene    | 50.0           | 48.6          |                  | ug/L |   | 97   | 78 - 130        |
| trans-1,3-Dichloropropene   | 50.0           | 53.1          |                  | ug/L |   | 106  | 72 - 127        |
| 1,1,1-Trichloroethane       | 50.0           | 55.3          |                  | ug/L |   | 111  | 76 - 126        |
| 1,1,2-Trichloroethane       | 50.0           | 49.7          |                  | ug/L |   | 99   | 69 - 127        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCS 680-346741/3

Matrix: Water

Analysis Batch: 346741

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------------------|-------------|------------|---------------|------|---|------|--------------|
| Trichloroethene        | 50.0        | 48.9       |               | ug/L |   | 98   | 80 - 120     |
| Trichlorofluoromethane | 50.0        | 53.4       |               | ug/L |   | 107  | 66 - 144     |
| 1,2,3-Trichloropropane | 50.0        | 52.6       |               | ug/L |   | 105  | 74 - 126     |
| Vinyl acetate          | 100         | 84.8       |               | ug/L |   | 85   | 10 - 200     |
| Vinyl chloride         | 50.0        | 48.2       |               | ug/L |   | 96   | 58 - 141     |
| Xylenes, Total         | 100         | 102        |               | ug/L |   | 102  | 80 - 124     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| Toluene-d8 (Surr)            | 99            |               | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 100           |               | 70 - 130 |

Lab Sample ID: LCSD 680-346741/4

Matrix: Water

Analysis Batch: 346741

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                     | 250         | 301         |                | ug/L |   | 120  | 39 - 162     | 5   | 50        |
| Acrylonitrile               | 500         | 492         |                | ug/L |   | 98   | 50 - 150     | 3   | 50        |
| Benzene                     | 50.0        | 46.2        |                | ug/L |   | 92   | 74 - 123     | 6   | 30        |
| Bromoform                   | 50.0        | 48.7        |                | ug/L |   | 97   | 60 - 134     | 10  | 30        |
| Bromomethane                | 50.0        | 35.3        |                | ug/L |   | 71   | 10 - 171     | 9   | 50        |
| 2-Butanone (MEK)            | 250         | 261         |                | ug/L |   | 105  | 55 - 142     | 10  | 30        |
| Carbon disulfide            | 50.0        | 45.5        |                | ug/L |   | 91   | 63 - 142     | 4   | 30        |
| Carbon tetrachloride        | 50.0        | 50.1        |                | ug/L |   | 100  | 70 - 131     | 5   | 30        |
| Chlorobenzene               | 50.0        | 48.3        |                | ug/L |   | 97   | 79 - 120     | 5   | 30        |
| Chlorobromomethane          | 50.0        | 47.1        |                | ug/L |   | 94   | 60 - 136     | 2   | 30        |
| Chlorodibromomethane        | 50.0        | 47.3        |                | ug/L |   | 95   | 63 - 134     | 7   | 50        |
| Chloroethane                | 50.0        | 43.9        |                | ug/L |   | 88   | 47 - 148     | 9   | 40        |
| Chloroform                  | 50.0        | 49.5        |                | ug/L |   | 99   | 76 - 128     | 1   | 30        |
| Chloromethane               | 50.0        | 44.5        |                | ug/L |   | 89   | 47 - 151     | 3   | 30        |
| cis-1,2-Dichloroethene      | 50.0        | 48.7        |                | ug/L |   | 97   | 78 - 127     | 1   | 30        |
| cis-1,3-Dichloropropene     | 50.0        | 45.2        |                | ug/L |   | 90   | 73 - 128     | 8   | 30        |
| 1,2-Dibromo-3-Chloropropane | 50.0        | 51.5        |                | ug/L |   | 103  | 57 - 126     | 12  | 50        |
| Dibromomethane              | 50.0        | 48.2        |                | ug/L |   | 96   | 75 - 122     | 4   | 30        |
| 1,2-Dichlorobenzene         | 50.0        | 49.1        |                | ug/L |   | 98   | 77 - 124     | 0   | 30        |
| 1,4-Dichlorobenzene         | 50.0        | 48.1        |                | ug/L |   | 96   | 76 - 124     | 3   | 30        |
| Dichlorobromomethane        | 50.0        | 48.4        |                | ug/L |   | 97   | 72 - 129     | 2   | 30        |
| 1,1-Dichloroethane          | 50.0        | 49.8        |                | ug/L |   | 100  | 69 - 132     | 1   | 30        |
| 1,2-Dichloroethane          | 50.0        | 49.0        |                | ug/L |   | 98   | 75 - 120     | 4   | 30        |
| 1,1-Dichloroethene          | 50.0        | 47.8        |                | ug/L |   | 96   | 73 - 134     | 7   | 30        |
| 1,2-Dichloropropane         | 50.0        | 44.9        |                | ug/L |   | 90   | 71 - 126     | 10  | 30        |
| Ethylbenzene                | 50.0        | 48.3        |                | ug/L |   | 97   | 78 - 125     | 4   | 30        |
| Ethylene Dibromide          | 50.0        | 46.7        |                | ug/L |   | 93   | 75 - 127     | 4   | 30        |
| 2-Hexanone                  | 250         | 230         |                | ug/L |   | 92   | 52 - 149     | 1   | 30        |
| Iodomethane                 | 50.0        | 37.3        |                | ug/L |   | 75   | 50 - 150     | 8   | 50        |
| Methylene Chloride          | 50.0        | 46.7        |                | ug/L |   | 93   | 79 - 124     | 2   | 30        |
| 4-Methyl-2-pentanone (MIBK) | 250         | 232         |                | ug/L |   | 93   | 51 - 143     | 1   | 30        |
| Styrene                     | 50.0        | 49.3        |                | ug/L |   | 99   | 75 - 129     | 5   | 30        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCSD 680-346741/4

Matrix: Water

Analysis Batch: 346741

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte                     | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| 1,1,1,2-Tetrachloroethane   | 50.0        | 49.6        |                | ug/L |   | 99   | 68 - 132     | 9   | 30        |
| 1,1,2,2-Tetrachloroethane   | 50.0        | 46.5        |                | ug/L |   | 93   | 71 - 127     | 4   | 30        |
| Tetrachloroethene           | 50.0        | 47.4        |                | ug/L |   | 95   | 77 - 128     | 4   | 30        |
| Toluene                     | 50.0        | 45.7        |                | ug/L |   | 91   | 77 - 125     | 5   | 30        |
| trans-1,4-Dichloro-2-butene | 50.0        | 58.4        |                | ug/L |   | 117  | 50 - 150     | 5   | 50        |
| trans-1,2-Dichloroethene    | 50.0        | 48.7        |                | ug/L |   | 97   | 78 - 130     | 0   | 30        |
| trans-1,3-Dichloropropene   | 50.0        | 48.9        |                | ug/L |   | 98   | 72 - 127     | 8   | 50        |
| 1,1,1-Trichloroethane       | 50.0        | 54.3        |                | ug/L |   | 109  | 76 - 126     | 2   | 30        |
| 1,1,2-Trichloroethane       | 50.0        | 45.0        |                | ug/L |   | 90   | 69 - 127     | 10  | 30        |
| Trichloroethene             | 50.0        | 46.1        |                | ug/L |   | 92   | 80 - 120     | 6   | 30        |
| Trichlorofluoromethane      | 50.0        | 51.5        |                | ug/L |   | 103  | 66 - 144     | 4   | 30        |
| 1,2,3-Trichloropropane      | 50.0        | 51.4        |                | ug/L |   | 103  | 74 - 126     | 2   | 30        |
| Vinyl acetate               | 100         | 79.3        |                | ug/L |   | 79   | 10 - 200     | 7   | 30        |
| Vinyl chloride              | 50.0        | 45.8        |                | ug/L |   | 92   | 58 - 141     | 5   | 30        |
| Xylenes, Total              | 100         | 95.7        |                | ug/L |   | 96   | 80 - 124     | 7   | 30        |

| Surrogate                    | LCSD %Recovery | LCSD Qualifier | Limits   |
|------------------------------|----------------|----------------|----------|
| Toluene-d8 (Surr)            | 95             |                | 70 - 130 |
| 1,2-Dichloroethane-d4 (Surr) | 98             |                | 70 - 130 |

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

Lab Sample ID: MB 680-345210/3-A

Matrix: Water

Analysis Batch: 345364

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345210

| Analyte | MB Result | MB Qualifier | PQL   | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|--------|------|---|----------------|----------------|---------|
| DBCP    | 0.0050    | U            | 0.020 | 0.0050 | ug/L |   | 08/21/14 14:43 | 08/22/14 02:31 | 1       |
| EDB     | 0.0022    | U            | 0.020 | 0.0022 | ug/L |   | 08/21/14 14:43 | 08/22/14 02:31 | 1       |

| Surrogate         | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------------|--------------|----------|----------------|----------------|---------|
| Pentachloroethane | 112          |              | 60 - 144 | 08/21/14 14:43 | 08/22/14 02:31 | 1       |

Lab Sample ID: LCS 680-345210/4-A

Matrix: Water

Analysis Batch: 345364

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 345210

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| DBCP    | 0.100       | 0.103      |               | ug/L |   | 103  | 70 - 148     |
| EDB     | 0.100       | 0.100      |               | ug/L |   | 100  | 66 - 126     |

| Surrogate         | LCS %Recovery | LCS Qualifier | Limits   |
|-------------------|---------------|---------------|----------|
| Pentachloroethane | 116           |               | 60 - 144 |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: LCSD 680-345210/5-A

Matrix: Water

Analysis Batch: 345364

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 345210

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| DBCP    | 0.100       | 0.107       |                | ug/L |   | 107  | 70 - 148     | 4   | 30        |
| EDB     | 0.100       | 0.101       |                | ug/L |   | 101  | 66 - 126     | 1   | 30        |

| Surrogate         | LCSD %Recovery | LCSD Qualifier | Limits   |
|-------------------|----------------|----------------|----------|
| Pentachloroethane | 114            |                | 60 - 144 |

Lab Sample ID: MB 680-345698/10-A

Matrix: Water

Analysis Batch: 346192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345698

| Analyte | MB Result | MB Qualifier | PQL   | MDL    | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|-------|--------|------|---|----------------|----------------|---------|
| DBCP    | 0.0050    | U            | 0.020 | 0.0050 | ug/L |   | 08/27/14 09:53 | 08/27/14 17:15 | 1       |
| EDB     | 0.0022    | U            | 0.020 | 0.0022 | ug/L |   | 08/27/14 09:53 | 08/27/14 17:15 | 1       |

| Surrogate         | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-------------------|--------------|--------------|----------|----------------|----------------|---------|
| Pentachloroethane | 107          |              | 60 - 144 | 08/27/14 09:53 | 08/27/14 17:15 | 1       |

Lab Sample ID: LCS 680-345698/11-A

Matrix: Water

Analysis Batch: 346192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 345698

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| DBCP    | 0.100       | 0.0973     |               | ug/L |   | 97   | 70 - 148     |
| EDB     | 0.100       | 0.0974     |               | ug/L |   | 97   | 66 - 126     |

| Surrogate         | LCS %Recovery | LCS Qualifier | Limits   |
|-------------------|---------------|---------------|----------|
| Pentachloroethane | 108           |               | 60 - 144 |

Lab Sample ID: LCSD 680-345698/12-A

Matrix: Water

Analysis Batch: 346192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 345698

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| DBCP    | 0.100       | 0.0964      |                | ug/L |   | 96   | 70 - 148     | 1   | 30        |
| EDB     | 0.100       | 0.0930      |                | ug/L |   | 93   | 66 - 126     | 5   | 30        |

| Surrogate         | LCSD %Recovery | LCSD Qualifier | Limits   |
|-------------------|----------------|----------------|----------|
| Pentachloroethane | 106            |                | 60 - 144 |

Lab Sample ID: 640-48951-6 MS

Matrix: Water

Analysis Batch: 346192

Client Sample ID: FIELD BLANK 01 48951

Prep Type: Total/NA

Prep Batch: 345698

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| DBCP    | 0.0055        | U                | 0.106       | 0.119     |              | ug/L |   | 112  | 70 - 148     |
| EDB     | 0.0024        | U                | 0.106       | 0.102     |              | ug/L |   | 97   | 66 - 126     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: 640-48951-6 MS

Matrix: Water

Analysis Batch: 346192

Client Sample ID: FIELD BLANK 01 48951

Prep Type: Total/NA

Prep Batch: 345698

| Surrogate         | MS<br>%Recovery | MS<br>Qualifier | Limits   |
|-------------------|-----------------|-----------------|----------|
| Pentachloroethane | 108             |                 | 60 - 144 |

Lab Sample ID: 640-48951-6 MSD

Matrix: Water

Analysis Batch: 346192

Client Sample ID: FIELD BLANK 01 48951

Prep Type: Total/NA

Prep Batch: 345698

| Analyte           | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | Limit |
|-------------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|-------|
| DBCP              | 0.0055           | U                   | 0.105          | 0.110         |                  | ug/L |   | 104  | 70 - 148        | 8   | 30    |
| EDB               | 0.0024           | U                   | 0.105          | 0.0977        |                  | ug/L |   | 93   | 66 - 126        | 5   | 30    |
| Surrogate         | MSD<br>%Recovery | MSD<br>Qualifier    | Limits         |               |                  |      |   |      |                 |     |       |
| Pentachloroethane | 106              |                     | 60 - 144       |               |                  |      |   |      |                 |     |       |

Lab Sample ID: 640-48951-7 MS

Matrix: Water

Analysis Batch: 346192

Client Sample ID: MWB32S

Prep Type: Total/NA

Prep Batch: 345698

|                   | Sample    | Sample    | Spike    | MS     | MS        |      |   |      | %Rec.    |  |  |
|-------------------|-----------|-----------|----------|--------|-----------|------|---|------|----------|--|--|
| Analyte           | Result    | Qualifier | Added    | Result | Qualifier | Unit | D | %Rec | Limits   |  |  |
| DBCP              | 0.0053    | U         | 0.103    | 0.128  |           | ug/L |   | 124  | 70 - 148 |  |  |
| EDB               | 0.0023    | U         | 0.103    | 0.124  |           | ug/L |   | 120  | 66 - 126 |  |  |
|                   | MS        | MS        |          |        |           |      |   |      |          |  |  |
| Surrogate         | %Recovery | Qualifier | Limits   |        |           |      |   |      |          |  |  |
| Pentachloroethane | 136       |           | 60 - 144 |        |           |      |   |      |          |  |  |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-347113/5

Matrix: Water

Analysis Batch: 347113

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte  | MB<br>Result | MB<br>Qualifier | PQL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------|--------------|-----------------|------|------|------|---|----------|----------------|---------|
| Chloride | 0.25         | U               | 0.50 | 0.25 | mg/L |   |          | 09/03/14 11:18 | 1       |

Lab Sample ID: LCS 680-347113/6

Matrix: Water

Analysis Batch: 347113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |  |  |  |
|----------|----------------|---------------|------------------|------|---|------|-----------------|--|--|--|
| Chloride | 10.0           | 10.0          |                  | mg/L |   | 100  | 90 - 110        |  |  |  |

Lab Sample ID: LCSD 680-347113/7

Matrix: Water

Analysis Batch: 347113

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte  | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | Limit |
|----------|----------------|----------------|-------------------|------|---|------|-----------------|-----|-------|
| Chloride | 10.0           | 10.0           |                   | mg/L |   | 100  | 90 - 110        | 0   | 30    |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 640-48933-4 MS

Matrix: Water

Analysis Batch: 347113

Client Sample ID: MWB22S

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 12            |                  | 10.0        | 22.3      |              | mg/L |   | 101  | 80 - 120     |

Lab Sample ID: 640-48933-4 MSD

Matrix: Water

Analysis Batch: 347113

Client Sample ID: MWB22S

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 12            |                  | 10.0        | 22.4       |               | mg/L |   | 102  | 80 - 120     | 0   | 30        |

Lab Sample ID: MB 680-347223/32

Matrix: Water

Analysis Batch: 347223

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 |   |          | 09/03/14 20:10 | 1       |

Lab Sample ID: LCS 680-347223/33

Matrix: Water

Analysis Batch: 347223

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        | 9.97       |               | mg/L |   | 100  | 90 - 110     |

Lab Sample ID: LCSD 680-347223/34

Matrix: Water

Analysis Batch: 347223

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: 640-48933-9 MS

Matrix: Water

Analysis Batch: 347223

Client Sample ID: MWB29I

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 6.1           |                  | 10.0        | 16.2      |              | mg/L |   | 102  | 80 - 120     |

Lab Sample ID: 640-48933-9 MSD

Matrix: Water

Analysis Batch: 347223

Client Sample ID: MWB29I

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 6.1           |                  | 10.0        | 16.2       |               | mg/L |   | 101  | 80 - 120     | 0   | 30        |

Lab Sample ID: 640-48951-7 MS

Matrix: Water

Analysis Batch: 347223

Client Sample ID: MWB32S

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 27            |                  | 10.0        | 37.0      |              | mg/L |   | 99   | 80 - 120     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

Lab Sample ID: 640-48951-7 MSD  
Matrix: Water  
Analysis Batch: 347223

Client Sample ID: MWB32S  
Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 27            |                  | 10.0        | 37.1       |               | mg/L |   | 100  | 80 - 120     | 0   | 30        |

Lab Sample ID: MB 680-347224/58  
Matrix: Water  
Analysis Batch: 347224

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 |   |          | 09/04/14 02:25 | 1       |

Lab Sample ID: LCS 680-347224/59  
Matrix: Water  
Analysis Batch: 347224

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 680-347224/60  
Matrix: Water  
Analysis Batch: 347224

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: 640-48951-14 MS  
Matrix: Water  
Analysis Batch: 347224

Client Sample ID: MWB21S  
Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Chloride | 6.0           |                  | 10.0        | 16.2      |              | mg/L |   | 102  | 80 - 120     |

Lab Sample ID: 640-48951-14 MSD  
Matrix: Water  
Analysis Batch: 347224

Client Sample ID: MWB21S  
Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 6.0           |                  | 10.0        | 16.3       |               | mg/L |   | 103  | 80 - 120     | 1   | 30        |

Lab Sample ID: MB 680-347297/5  
Matrix: Water  
Analysis Batch: 347297

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 |   |          | 09/04/14 09:48 | 1       |

Lab Sample ID: LCS 680-347297/6  
Matrix: Water  
Analysis Batch: 347297

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        | 10.2       |               | mg/L |   | 102  | 90 - 110     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-347297/7

Matrix: Water

Analysis Batch: 347297

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        | 10.2        |                | mg/L |   | 102  | 90 - 110     | 0   | 30        |

Lab Sample ID: 640-48951-9 MS

Matrix: Water

Analysis Batch: 347297

Client Sample ID: MWB34S

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|-----|-----------|
| Chloride | 63            |                  | 20.0        | 79.7      |              | mg/L |   | 85   | 80 - 120     |     |           |

Lab Sample ID: 640-48951-9 MSD

Matrix: Water

Analysis Batch: 347297

Client Sample ID: MWB34S

Prep Type: Total/NA

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Chloride | 63            |                  | 20.0        | 83.0       |               | mg/L |   | 102  | 80 - 120     | 4   | 30        |

## Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-228490/1-A

Matrix: Water

Analysis Batch: 228555

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 228490

| Analyte | MB Result | MB Qualifier | PQL     | MDL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|---------|---------|------|---|----------------|----------------|---------|
| Mercury | 0.000281  | I            | 0.00050 | 0.00020 | ug/L |   | 09/02/14 09:15 | 09/02/14 09:36 | 1       |

Lab Sample ID: LCS 400-228490/2-A

Matrix: Water

Analysis Batch: 228555

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 228490

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Mercury | 0.00500     | 0.00453    |               | ug/L |   | 91   | 79 - 121     |     |           |

Lab Sample ID: LCSD 400-228490/3-A

Matrix: Water

Analysis Batch: 228555

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 228490

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Mercury | 0.00500     | 0.00446     |                | ug/L |   | 89   | 79 - 121     | 2   | 20        |

## Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 680-345416/1-A

Matrix: Water

Analysis Batch: 345970

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte  | MB Result | MB Qualifier | PQL | MDL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Antimony | 2.3       | U            | 5.0 | 2.3 | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Arsenic  | 1.3       | U            | 2.5 | 1.3 | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Barium   | 1.3       | U            | 5.0 | 1.3 | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-345416/1-A

Matrix: Water

Analysis Batch: 345970

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte   | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Beryllium | 0.25      | U            | 0.50 | 0.25  | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Cadmium   | 0.095     | U            | 0.50 | 0.095 | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Chromium  | 2.5       | U            | 5.0  | 2.5   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Cobalt    | 0.15      | U            | 0.50 | 0.15  | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Copper    | 1.1       | U            | 5.0  | 1.1   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Iron      | 33        | U            | 100  | 33    | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Lead      | 0.20      | U            | 1.5  | 0.20  | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Nickel    | 2.0       | U            | 5.0  | 2.0   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Selenium  | 1.0       | U            | 2.5  | 1.0   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Sodium    | 0.25      | U            | 0.50 | 0.25  | mg/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Silver    | 0.25      | U            | 1.0  | 0.25  | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Thallium  | 0.50      | U            | 1.0  | 0.50  | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Vanadium  | 3.8       | U            | 10   | 3.8   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |
| Zinc      | 8.3       | U            | 20   | 8.3   | ug/L |   | 08/22/14 09:59 | 08/25/14 13:43 | 1       |

Lab Sample ID: LCS 680-345416/2-A

Matrix: Water

Analysis Batch: 345970

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Antimony  | 50.0        | 50.6       |               | ug/L |   | 101  | 75 - 125     |
| Arsenic   | 100         | 103        |               | ug/L |   | 103  | 75 - 125     |
| Barium    | 100         | 98.7       |               | ug/L |   | 99   | 75 - 125     |
| Beryllium | 50.0        | 50.4       |               | ug/L |   | 101  | 75 - 125     |
| Cadmium   | 50.0        | 50.3       |               | ug/L |   | 101  | 75 - 125     |
| Chromium  | 100         | 102        |               | ug/L |   | 102  | 75 - 125     |
| Cobalt    | 50.0        | 52.1       |               | ug/L |   | 104  | 75 - 125     |
| Copper    | 100         | 102        |               | ug/L |   | 102  | 75 - 125     |
| Iron      | 5000        | 5530       |               | ug/L |   | 111  | 75 - 125     |
| Lead      | 50.0        | 49.6       |               | ug/L |   | 99   | 75 - 125     |
| Nickel    | 100         | 106        |               | ug/L |   | 106  | 75 - 125     |
| Selenium  | 100         | 105        |               | ug/L |   | 105  | 75 - 125     |
| Sodium    | 5.00        | 5.27       |               | mg/L |   | 105  | 75 - 125     |
| Silver    | 50.0        | 50.7       |               | ug/L |   | 101  | 75 - 125     |
| Thallium  | 40.0        | 38.9       |               | ug/L |   | 97   | 75 - 125     |
| Vanadium  | 100         | 100        |               | ug/L |   | 100  | 75 - 125     |
| Zinc      | 100         | 102        |               | ug/L |   | 102  | 75 - 125     |

Lab Sample ID: 640-48933-9 MS

Matrix: Water

Analysis Batch: 345970

Client Sample ID: MWB29I

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte   | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Antimony  | 2.3           |                  | 50.0        | 53.9      |              | ug/L |   | 108  | 75 - 125     |
| Arsenic   | 1.3           |                  | 100         | 109       |              | ug/L |   | 109  | 75 - 125     |
| Barium    | 43            |                  | 100         | 149       |              | ug/L |   | 105  | 75 - 125     |
| Beryllium | 0.25          |                  | 50.0        | 53.6      |              | ug/L |   | 107  | 75 - 125     |
| Cadmium   | 0.095         |                  | 50.0        | 53.3      |              | ug/L |   | 107  | 75 - 125     |
| Chromium  | 2.5           |                  | 100         | 107       |              | ug/L |   | 107  | 75 - 125     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 640-48933-9 MS

Matrix: Water

Analysis Batch: 345970

Client Sample ID: MWB29I

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Cobalt   | 0.15          |                  | 50.0        | 54.0      |              | ug/L |   | 108  | 75 - 125     |
| Copper   | 1.1           |                  | 100         | 106       |              | ug/L |   | 106  | 75 - 125     |
| Iron     | 510           |                  | 5000        | 6160      |              | ug/L |   | 113  | 75 - 125     |
| Lead     | 0.64          |                  | 50.0        | 53.6      |              | ug/L |   | 106  | 75 - 125     |
| Nickel   | 2.0           |                  | 100         | 109       |              | ug/L |   | 109  | 75 - 125     |
| Selenium | 1.0           |                  | 100         | 107       |              | ug/L |   | 107  | 75 - 125     |
| Sodium   | 4.3           |                  | 5.00        | 9.25      |              | mg/L |   | 98   | 75 - 125     |
| Silver   | 0.25          |                  | 50.0        | 53.3      |              | ug/L |   | 107  | 75 - 125     |
| Thallium | 0.50          |                  | 40.0        | 41.5      |              | ug/L |   | 104  | 75 - 125     |
| Vanadium | 3.8           |                  | 100         | 105       |              | ug/L |   | 105  | 75 - 125     |
| Zinc     | 8.3           |                  | 100         | 106       |              | ug/L |   | 106  | 75 - 125     |

Lab Sample ID: 640-48933-9 MSD

Matrix: Water

Analysis Batch: 345970

Client Sample ID: MWB29I

Prep Type: Total Recoverable

Prep Batch: 345416

| Analyte   | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Antimony  | 2.3           |                  | 50.0        | 53.4       |               | ug/L |   | 107  | 75 - 125     | 1   | 20        |
| Arsenic   | 1.3           |                  | 100         | 108        |               | ug/L |   | 108  | 75 - 125     | 1   | 20        |
| Barium    | 43            |                  | 100         | 149        |               | ug/L |   | 106  | 75 - 125     | 0   | 20        |
| Beryllium | 0.25          |                  | 50.0        | 54.0       |               | ug/L |   | 108  | 75 - 125     | 1   | 20        |
| Cadmium   | 0.095         |                  | 50.0        | 53.5       |               | ug/L |   | 107  | 75 - 125     | 0   | 20        |
| Chromium  | 2.5           |                  | 100         | 107        |               | ug/L |   | 107  | 75 - 125     | 0   | 20        |
| Cobalt    | 0.15          |                  | 50.0        | 54.9       |               | ug/L |   | 110  | 75 - 125     | 2   | 20        |
| Copper    | 1.1           |                  | 100         | 110        |               | ug/L |   | 110  | 75 - 125     | 3   | 20        |
| Iron      | 510           |                  | 5000        | 6320       |               | ug/L |   | 116  | 75 - 125     | 3   | 20        |
| Lead      | 0.64          |                  | 50.0        | 54.2       |               | ug/L |   | 107  | 75 - 125     | 1   | 20        |
| Nickel    | 2.0           |                  | 100         | 111        |               | ug/L |   | 111  | 75 - 125     | 2   | 20        |
| Selenium  | 1.0           |                  | 100         | 109        |               | ug/L |   | 109  | 75 - 125     | 3   | 20        |
| Sodium    | 4.3           |                  | 5.00        | 9.52       |               | mg/L |   | 104  | 75 - 125     | 3   | 20        |
| Silver    | 0.25          |                  | 50.0        | 52.9       |               | ug/L |   | 106  | 75 - 125     | 1   | 20        |
| Thallium  | 0.50          |                  | 40.0        | 41.8       |               | ug/L |   | 105  | 75 - 125     | 1   | 20        |
| Vanadium  | 3.8           |                  | 100         | 106        |               | ug/L |   | 106  | 75 - 125     | 1   | 20        |
| Zinc      | 8.3           |                  | 100         | 107        |               | ug/L |   | 107  | 75 - 125     | 1   | 20        |

Lab Sample ID: MB 680-345742/1-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345742

| Analyte   | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Antimony  | 2.3       | U            | 5.0  | 2.3   | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Arsenic   | 1.3       | U            | 2.5  | 1.3   | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Barium    | 1.3       | U            | 5.0  | 1.3   | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Beryllium | 0.25      | U            | 0.50 | 0.25  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Cadmium   | 0.095     | U            | 0.50 | 0.095 | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Chromium  | 2.5       | U            | 5.0  | 2.5   | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Cobalt    | 0.15      | U            | 0.50 | 0.15  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Copper    | 1.1       | U            | 5.0  | 1.1   | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Iron      | 33        | U            | 100  | 33    | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-345742/1-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345742

| Analyte  | MB Result | MB Qualifier | PQL | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|-----|------|------|---|----------------|----------------|---------|
| Lead     | 0.20      | U            | 1.5 | 0.20 | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Nickel   | 2.0       | U            | 5.0 | 2.0  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Selenium | 1.0       | U            | 2.5 | 1.0  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Silver   | 0.25      | U            | 1.0 | 0.25 | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Thallium | 0.50      | U            | 1.0 | 0.50 | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Vanadium | 3.8       | U            | 10  | 3.8  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |
| Zinc     | 8.3       | U            | 20  | 8.3  | ug/L |   | 08/25/14 13:12 | 08/29/14 05:12 | 1       |

Lab Sample ID: LCS 680-345742/2-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 345742

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------|-------------|------------|---------------|------|---|------|-------------|
| Antimony  | 50.0        | 49.2       |               | ug/L |   | 98   | 75 - 125    |
| Arsenic   | 100         | 102        |               | ug/L |   | 102  | 75 - 125    |
| Barium    | 100         | 98.1       |               | ug/L |   | 98   | 75 - 125    |
| Beryllium | 50.0        | 50.3       |               | ug/L |   | 101  | 75 - 125    |
| Cadmium   | 50.0        | 50.0       |               | ug/L |   | 100  | 75 - 125    |
| Calcium   | 5.00        | 5.26       |               | mg/L |   | 105  | 75 - 125    |
| Chromium  | 100         | 101        |               | ug/L |   | 101  | 75 - 125    |
| Cobalt    | 50.0        | 51.3       |               | ug/L |   | 103  | 75 - 125    |
| Copper    | 100         | 101        |               | ug/L |   | 101  | 75 - 125    |
| Iron      | 5000        | 5240       |               | ug/L |   | 105  | 75 - 125    |
| Lead      | 50.0        | 49.8       |               | ug/L |   | 100  | 75 - 125    |
| Magnesium | 5.00        | 5.17       |               | mg/L |   | 103  | 75 - 125    |
| Nickel    | 100         | 104        |               | ug/L |   | 104  | 75 - 125    |
| Selenium  | 100         | 101        |               | ug/L |   | 101  | 75 - 125    |
| Silver    | 50.0        | 50.1       |               | ug/L |   | 100  | 75 - 125    |
| Thallium  | 40.0        | 39.9       |               | ug/L |   | 100  | 75 - 125    |
| Vanadium  | 100         | 99.4       |               | ug/L |   | 99   | 75 - 125    |
| Zinc      | 100         | 97.7       |               | ug/L |   | 98   | 75 - 125    |

Lab Sample ID: MB 680-345770/1-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345770

| Analyte   | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Antimony  | 2.3       | U            | 5.0  | 2.3   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Arsenic   | 1.3       | U            | 2.5  | 1.3   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Barium    | 1.3       | U            | 5.0  | 1.3   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Beryllium | 0.25      | U            | 0.50 | 0.25  | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Cadmium   | 0.095     | U            | 0.50 | 0.095 | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Chromium  | 2.5       | U            | 5.0  | 2.5   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Cobalt    | 0.15      | U            | 0.50 | 0.15  | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Copper    | 1.1       | U            | 5.0  | 1.1   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Iron      | 33        | U            | 100  | 33    | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Lead      | 0.20      | U            | 1.5  | 0.20  | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Nickel    | 2.0       | U            | 5.0  | 2.0   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Selenium  | 1.0       | U            | 2.5  | 1.0   | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-345770/1-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345770

| Analyte  | MB Result | MB Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|------|------|---|----------------|----------------|---------|
| Sodium   | 0.25      | U            | 0.50 | 0.25 | mg/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Silver   | 0.25      | U            | 1.0  | 0.25 | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Thallium | 0.50      | U            | 1.0  | 0.50 | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Vanadium | 3.8       | U            | 10   | 3.8  | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |
| Zinc     | 8.3       | U            | 20   | 8.3  | ug/L |   | 08/25/14 15:12 | 08/29/14 00:12 | 1       |

Lab Sample ID: LCS 680-345770/2-A

Matrix: Water

Analysis Batch: 346649

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 345770

| Analyte   | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------|-------------|------------|---------------|------|---|------|--------------|
| Antimony  | 50.0        | 50.9       |               | ug/L |   | 102  | 75 - 125     |
| Arsenic   | 100         | 103        |               | ug/L |   | 103  | 75 - 125     |
| Barium    | 100         | 103        |               | ug/L |   | 103  | 75 - 125     |
| Beryllium | 50.0        | 53.0       |               | ug/L |   | 106  | 75 - 125     |
| Cadmium   | 50.0        | 51.8       |               | ug/L |   | 104  | 75 - 125     |
| Chromium  | 100         | 107        |               | ug/L |   | 107  | 75 - 125     |
| Cobalt    | 50.0        | 54.5       |               | ug/L |   | 109  | 75 - 125     |
| Copper    | 100         | 105        |               | ug/L |   | 105  | 75 - 125     |
| Iron      | 5000        | 5440       |               | ug/L |   | 109  | 75 - 125     |
| Lead      | 50.0        | 52.6       |               | ug/L |   | 105  | 75 - 125     |
| Nickel    | 100         | 109        |               | ug/L |   | 109  | 75 - 125     |
| Selenium  | 100         | 101        |               | ug/L |   | 101  | 75 - 125     |
| Sodium    | 5.00        | 5.37       |               | mg/L |   | 107  | 75 - 125     |
| Silver    | 50.0        | 53.1       |               | ug/L |   | 106  | 75 - 125     |
| Thallium  | 40.0        | 42.0       |               | ug/L |   | 105  | 75 - 125     |
| Vanadium  | 100         | 106        |               | ug/L |   | 106  | 75 - 125     |
| Zinc      | 100         | 99.7       |               | ug/L |   | 100  | 75 - 125     |

Lab Sample ID: MB 680-345843/1-A

Matrix: Water

Analysis Batch: 346224

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345843

| Analyte             | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Antimony            | 2.3       | U            | 5.0  | 2.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Antimony  | 2.3       | U            | 5.0  | 2.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Arsenic             | 1.3       | U            | 2.5  | 1.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Arsenic   | 1.3       | U            | 2.5  | 1.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Barium              | 1.3       | U            | 5.0  | 1.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Barium    | 1.3       | U            | 5.0  | 1.3   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Beryllium           | 0.25      | U            | 0.50 | 0.25  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Beryllium | 0.25      | U            | 0.50 | 0.25  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Cadmium             | 0.095     | U            | 0.50 | 0.095 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Cadmium   | 0.095     | U            | 0.50 | 0.095 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Chromium            | 2.5       | U            | 5.0  | 2.5   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Chromium  | 2.5       | U            | 5.0  | 2.5   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Cobalt              | 0.15      | U            | 0.50 | 0.15  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Cobalt    | 0.15      | U            | 0.50 | 0.15  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Copper              | 1.1       | U            | 5.0  | 1.1   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-345843/1-A

Matrix: Water

Analysis Batch: 346224

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 345843

| Analyte            | MB Result | MB Qualifier | PQL  | MDL  | Unit | D | Prepared       | Analyzed       | Dil Fac |
|--------------------|-----------|--------------|------|------|------|---|----------------|----------------|---------|
| Dissolved Copper   | 1.1       | U            | 5.0  | 1.1  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Iron     | 33        | U            | 100  | 33   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Iron               | 33        | U            | 100  | 33   | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Lead     | 0.20      | U            | 1.5  | 0.20 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Lead               | 0.20      | U            | 1.5  | 0.20 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Nickel   | 2.0       | U            | 5.0  | 2.0  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Nickel             | 2.0       | U            | 5.0  | 2.0  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Selenium | 1.0       | U            | 2.5  | 1.0  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Sodium   | 0.25      | U            | 0.50 | 0.25 | mg/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Selenium           | 1.0       | U            | 2.5  | 1.0  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Sodium             | 0.25      | U            | 0.50 | 0.25 | mg/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Silver   | 0.25      | U            | 1.0  | 0.25 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Silver             | 0.25      | U            | 1.0  | 0.25 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Thallium | 0.50      | U            | 1.0  | 0.50 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Thallium           | 0.50      | U            | 1.0  | 0.50 | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Vanadium | 3.8       | U            | 10   | 3.8  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Vanadium           | 3.8       | U            | 10   | 3.8  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Dissolved Zinc     | 8.3       | U            | 20   | 8.3  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |
| Zinc               | 8.3       | U            | 20   | 8.3  | ug/L |   | 08/26/14 07:47 | 08/26/14 16:53 | 1       |

Lab Sample ID: LCS 680-345843/2-A

Matrix: Water

Analysis Batch: 346224

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 345843

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|------|---|------|--------------|
| Antimony            | 50.0        | 47.1       |               | ug/L |   | 94   | 75 - 125     |
| Dissolved Antimony  | 50.0        | 47.1       |               | ug/L |   | 94   | 75 - 125     |
| Arsenic             | 100         | 99.0       |               | ug/L |   | 99   | 75 - 125     |
| Dissolved Arsenic   | 100         | 99.0       |               | ug/L |   | 99   | 75 - 125     |
| Barium              | 100         | 93.5       |               | ug/L |   | 93   | 75 - 125     |
| Dissolved Barium    | 100         | 93.5       |               | ug/L |   | 93   | 75 - 125     |
| Beryllium           | 50.0        | 48.0       |               | ug/L |   | 96   | 75 - 125     |
| Dissolved Beryllium | 50.0        | 48.0       |               | ug/L |   | 96   | 75 - 125     |
| Cadmium             | 50.0        | 47.3       |               | ug/L |   | 95   | 75 - 125     |
| Dissolved Cadmium   | 50.0        | 47.3       |               | ug/L |   | 95   | 75 - 125     |
| Chromium            | 100         | 93.2       |               | ug/L |   | 93   | 75 - 125     |
| Dissolved Chromium  | 100         | 93.2       |               | ug/L |   | 93   | 75 - 125     |
| Cobalt              | 50.0        | 49.2       |               | ug/L |   | 98   | 75 - 125     |
| Dissolved Cobalt    | 50.0        | 49.2       |               | ug/L |   | 98   | 75 - 125     |
| Copper              | 100         | 93.9       |               | ug/L |   | 94   | 75 - 125     |
| Dissolved Copper    | 100         | 93.9       |               | ug/L |   | 94   | 75 - 125     |
| Dissolved Iron      | 5000        | 5290       |               | ug/L |   | 106  | 75 - 125     |
| Iron                | 5000        | 5290       |               | ug/L |   | 106  | 75 - 125     |
| Dissolved Lead      | 50.0        | 46.4       |               | ug/L |   | 93   | 75 - 125     |
| Lead                | 50.0        | 46.4       |               | ug/L |   | 93   | 75 - 125     |
| Dissolved Nickel    | 100         | 97.9       |               | ug/L |   | 98   | 75 - 125     |
| Nickel              | 100         | 97.9       |               | ug/L |   | 98   | 75 - 125     |
| Dissolved Selenium  | 100         | 101        |               | ug/L |   | 101  | 75 - 125     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-345843/2-A

Matrix: Water

Analysis Batch: 346224

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 345843

| Analyte            | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------|-------------|------------|---------------|------|---|------|--------------|
| Dissolved Sodium   | 5.00        | 4.93       |               | mg/L |   | 99   | 75 - 125     |
| Selenium           | 100         | 101        |               | ug/L |   | 101  | 75 - 125     |
| Sodium             | 5.00        | 4.93       |               | mg/L |   | 99   | 75 - 125     |
| Dissolved Silver   | 50.0        | 48.0       |               | ug/L |   | 96   | 75 - 125     |
| Silver             | 50.0        | 48.0       |               | ug/L |   | 96   | 75 - 125     |
| Dissolved Thallium | 40.0        | 36.2       |               | ug/L |   | 90   | 75 - 125     |
| Thallium           | 40.0        | 36.2       |               | ug/L |   | 90   | 75 - 125     |
| Dissolved Vanadium | 100         | 92.8       |               | ug/L |   | 93   | 75 - 125     |
| Vanadium           | 100         | 92.8       |               | ug/L |   | 93   | 75 - 125     |
| Dissolved Zinc     | 100         | 94.6       |               | ug/L |   | 95   | 75 - 125     |
| Zinc               | 100         | 94.6       |               | ug/L |   | 95   | 75 - 125     |

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-345254/1-A

Matrix: Water

Analysis Batch: 345449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345254

| Analyte | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Mercury | 0.091     | U            | 0.20 | 0.091 | ug/L |   | 08/21/14 13:41 | 08/22/14 09:20 | 1       |

Lab Sample ID: LCS 680-345254/2-A

Matrix: Water

Analysis Batch: 345449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 345254

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 2.50        | 2.49       |               | ug/L |   | 100  | 80 - 120     |

Lab Sample ID: 640-48933-1 MS

Matrix: Water

Analysis Batch: 345449

Client Sample ID: MWB29S

Prep Type: Total/NA

Prep Batch: 345254

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Mercury | 0.091         | U                | 1.00        | 1.03      |              | ug/L |   | 103  | 80 - 120     |

Lab Sample ID: 640-48933-1 MSD

Matrix: Water

Analysis Batch: 345449

Client Sample ID: MWB29S

Prep Type: Total/NA

Prep Batch: 345254

| 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        | 1.47       | J             | ug/L |   | 147  | 80 - 120     | 35  | 20        |

Lab Sample ID: MB 680-345643/13-A

Matrix: Water

Analysis Batch: 345923

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345643

| Analyte | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Mercury | 0.091     | U            | 0.20 | 0.091 | ug/L |   | 08/25/14 08:40 | 08/25/14 16:10 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 680-345643/14-A  
Matrix: Water  
Analysis Batch: 345923

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 345643

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 2.50        | 2.43       |               | ug/L |   | 97   | 80 - 120     |

Lab Sample ID: MB 680-345653/1-A  
Matrix: Water  
Analysis Batch: 345923

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 345653

| Analyte | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Mercury | 0.091     | U            | 0.20 | 0.091 | ug/L |   | 08/25/14 09:22 | 08/25/14 17:20 | 1       |

Lab Sample ID: LCS 680-345653/2-A  
Matrix: Water  
Analysis Batch: 345923

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 345653

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|------|---|------|--------------|
| Mercury | 2.50        | 2.50       |               | ug/L |   | 100  | 80 - 120     |

## Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Lab Sample ID: MB 680-347388/1  
Matrix: Water  
Analysis Batch: 347388

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 |   |          | 08/29/14 05:12 | 1       |

## Method: 2540 D-2011 - Total Suspended Solids Dried at 103-105°C

Lab Sample ID: MB 680-346189/1  
Matrix: Water  
Analysis Batch: 346189

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 | 5.0       | U            | 5.0 | 5.0 | mg/L |   |          | 08/27/14 13:22 | 1       |

Lab Sample ID: LCS 680-346189/2  
Matrix: Water  
Analysis Batch: 346189

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 | 20.0        | 20.5       |               | mg/L |   | 103  | 80 - 120     |

Lab Sample ID: LCSD 680-346189/3  
Matrix: Water  
Analysis Batch: 346189

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

| Analyte                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Total Suspended Solids | 20.0        | 20.5        |                | mg/L |   | 103  | 80 - 120     | 0   | 25        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 2540C-2011 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 680-345309/1

Matrix: Water

Analysis Batch: 345309

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                | MB<br>Result | MB<br>Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids | 5.0          | U               | 5.0 | 5.0 | mg/L |   |          | 08/21/14 15:06 | 1       |

Lab Sample ID: LCS 680-345309/2

Matrix: Water

Analysis Batch: 345309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Total Dissolved Solids | 109            | 123           |                  | mg/L |   | 113  | 80 - 120        |

Lab Sample ID: LCSD 680-345309/3

Matrix: Water

Analysis Batch: 345309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte                | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | RPD<br>Limit |
|------------------------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Total Dissolved Solids | 109            | 116            |                   | mg/L |   | 106  | 80 - 120        | 6   | 25           |

Lab Sample ID: 640-48933-4 DU

Matrix: Water

Analysis Batch: 345309

Client Sample ID: MWB22S

Prep Type: Total/NA

| Analyte                | Sample<br>Result | Sample<br>Qualifier | DU<br>Result | DU<br>Qualifier | Unit | D | RPD | RPD<br>Limit |
|------------------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Total Dissolved Solids | 190              |                     | 180          |                 | mg/L |   | 5   | 25           |

Lab Sample ID: MB 680-345605/1

Matrix: Water

Analysis Batch: 345605

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                | MB<br>Result | MB<br>Qualifier | PQL | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|------------------------|--------------|-----------------|-----|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids | 5.0          | U               | 5.0 | 5.0 | mg/L |   |          | 08/24/14 14:00 | 1       |

Lab Sample ID: LCS 680-345605/2

Matrix: Water

Analysis Batch: 345605

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|------------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Total Dissolved Solids | 109            | 109           |                  | mg/L |   | 100  | 80 - 120        |

Lab Sample ID: LCSD 680-345605/3

Matrix: Water

Analysis Batch: 345605

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte                | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | RPD<br>Limit |
|------------------------|----------------|----------------|-------------------|------|---|------|-----------------|-----|--------------|
| Total Dissolved Solids | 109            | 111            |                   | mg/L |   | 102  | 80 - 120        | 2   | 25           |

Lab Sample ID: 640-48932-1 DU

Matrix: Water

Analysis Batch: 345605

Client Sample ID: SW-1

Prep Type: Total/NA

| Analyte                | Sample<br>Result | Sample<br>Qualifier | DU<br>Result | DU<br>Qualifier | Unit | D | RPD | RPD<br>Limit |
|------------------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Total Dissolved Solids | 180              |                     | 196          |                 | mg/L |   | 9   | 25           |

TestAmerica Tallahassee

## QC Sample Results

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

TestAmerica Job ID: 640-48932-1

Lab Sample ID: 640-48932-2 DU

Matrix: Water

Analysis Batch: 345605

Client Sample ID: SW-3

Prep Type: Total/NA

| Analyte                | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Total Dissolved Solids | 270           |                  | 278       |              | mg/L |   | 3   | 25    |

Lab Sample ID: MB 680-345934/1

Matrix: Water

Analysis Batch: 345934

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 |   |          | 08/26/14 12:51 | 1       |

Lab Sample ID: LCS 680-345934/2

Matrix: Water

Analysis Batch: 345934

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 | 109         | 107        |               | mg/L |   | 98   | 80 - 120     |

Lab Sample ID: LCSD 680-345934/3

Matrix: Water

Analysis Batch: 345934

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte                | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-------|
| Total Dissolved Solids | 109         | 108         |                | mg/L |   | 99   | 80 - 120     | 1   | 25    |

Lab Sample ID: 640-48951-8 DU

Matrix: Water

Analysis Batch: 345934

Client Sample ID: MWB33S

Prep Type: Total/NA

| Analyte                | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Total Dissolved Solids | 150           |                  | 156       |              | mg/L |   | 1   | 25    |

### Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-345872/36

Matrix: Water

Analysis Batch: 345872

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 |   |          | 08/25/14 16:59 | 1       |

Lab Sample ID: LCS 680-345872/6

Matrix: Water

Analysis Batch: 345872

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        | 0.956      |               | mg/L |   | 96   | 90 - 110     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 680-346025/36

Matrix: Water

Analysis Batch: 346025

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte        | MB<br>Result | MB<br>Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|----------------|--------------|-----------------|-------|-------|------|---|----------|----------------|---------|
| Ammonia (as N) | 0.026        | U               | 0.050 | 0.026 | mg/L |   |          | 08/26/14 11:46 | 1       |

Lab Sample ID: LCS 680-346025/26

Matrix: Water

Analysis Batch: 346025

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte        | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|----------------|----------------|---------------|------------------|------|---|------|-----------------|
| Ammonia (as N) | 1.00           | 0.986         |                  | mg/L |   | 99   | 90 - 110        |

Lab Sample ID: 640-48933-6 MS

Matrix: Water

Analysis Batch: 346025

Client Sample ID: MWB121

Prep Type: Total/NA

| Analyte        | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|----------------|------------------|---------------------|----------------|--------------|-----------------|------|---|------|-----------------|
| Ammonia (as N) | 0.052            |                     | 1.00           | 1.31         | J               | mg/L |   | 126  | 90 - 110        |

Lab Sample ID: 640-48933-6 MSD

Matrix: Water

Analysis Batch: 346025

Client Sample ID: MWB121

Prep Type: Total/NA

| Analyte        | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits | RPD | RPD<br>Limit |
|----------------|------------------|---------------------|----------------|---------------|------------------|------|---|------|-----------------|-----|--------------|
| Ammonia (as N) | 0.052            |                     | 1.00           | 1.31          | J                | mg/L |   | 126  | 90 - 110        | 0   | 30           |

Lab Sample ID: 640-48951-12 DU

Matrix: Water

Analysis Batch: 346025

Client Sample ID: MWB3S

Prep Type: Total/NA

| Analyte        | Sample<br>Result | Sample<br>Qualifier | DU<br>Result | DU<br>Qualifier | Unit | D | RPD | RPD<br>Limit |
|----------------|------------------|---------------------|--------------|-----------------|------|---|-----|--------------|
| Ammonia (as N) | 0.12             |                     | 0.112        |                 | mg/L |   | 6   | 30           |

## Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-345228/13

Matrix: Water

Analysis Batch: 345228

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte      | MB<br>Result | MB<br>Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------------|-----------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate as N | 0.010        | U               | 0.050 | 0.010 | mg/L |   |          | 08/21/14 11:15 | 1       |

Lab Sample ID: LCS 680-345228/16

Matrix: Water

Analysis Batch: 345228

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte              | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|----------------------|----------------|---------------|------------------|------|---|------|-----------------|
| Nitrate Nitrite as N | 1.00           | 1.05          |                  | mg/L |   | 105  | 90 - 110        |
| Nitrite as N         | 0.500          | 0.486         |                  | mg/L |   | 97   | 90 - 110        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: 640-48933-1 MS

Matrix: Water

Analysis Batch: 345228

Client Sample ID: MWB29S

Prep Type: Total/NA

| Analyte              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Nitrate Nitrite as N | 0.010         |                  | 1.00        | 0.947     |              | mg/L |   | 95   | 90 - 110     |
| Nitrite as N         | 0.010         |                  | 0.500       | 0.428     | J            | mg/L |   | 86   | 90 - 110     |

Lab Sample ID: 640-48933-1 MSD

Matrix: Water

Analysis Batch: 345228

Client Sample ID: MWB29S

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 | 0.010         |                  | 1.00        | 0.950      |               | mg/L |   | 95   | 90 - 110     | 0   | 10        |
| Nitrite as N         | 0.010         |                  | 0.500       | 0.427      | J             | mg/L |   | 85   | 90 - 110     | 0   | 10        |

Lab Sample ID: 640-48933-2 DU

Matrix: Water

Analysis Batch: 345228

Client Sample ID: MWB27S

Prep Type: Total/NA

| Analyte      | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|--------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Nitrate as N | 0.010         | U                | 0.010     | U            | mg/L |   | NC  | 30        |

Lab Sample ID: MB 680-345446/23

Matrix: Water

Analysis Batch: 345446

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte      | MB Result | MB Qualifier | PQL   | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|-----------|--------------|-------|-------|------|---|----------|----------------|---------|
| Nitrate as N | 0.010     | U            | 0.050 | 0.010 | mg/L |   |          | 08/22/14 11:47 | 1       |

Lab Sample ID: LCS 680-345446/15

Matrix: Water

Analysis Batch: 345446

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 | 1.00        | 1.01       |               | mg/L |   | 101  | 90 - 110     |
| Nitrite as N         | 0.500       | 0.487      |               | mg/L |   | 97   | 90 - 110     |

Lab Sample ID: 640-48951-2 MS

Matrix: Water

Analysis Batch: 345446

Client Sample ID: MWB31

Prep Type: Total/NA

| Analyte              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Nitrate Nitrite as N | 0.010         |                  | 1.00        | 0.937     |              | mg/L |   | 94   | 90 - 110     |
| Nitrite as N         | 0.010         |                  | 0.500       | 0.449     |              | mg/L |   | 90   | 90 - 110     |

Lab Sample ID: 640-48951-2 MSD

Matrix: Water

Analysis Batch: 345446

Client Sample ID: MWB31

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 | 0.010         |                  | 1.00        | 0.939      |               | mg/L |   | 94   | 90 - 110     | 0   | 10        |
| Nitrite as N         | 0.010         |                  | 0.500       | 0.448      |               | mg/L |   | 90   | 90 - 110     | 0   | 10        |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

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

Lab Sample ID: 640-48951-11 DU

Matrix: Water

Analysis Batch: 345446

Client Sample ID: MWB20S

Prep Type: Total/NA

| Analyte      | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|--------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Nitrate as N | 0.010         | J U              | 0.010     | U            | mg/L |   | NC  | 30    |

Lab Sample ID: MB 680-345533/32

Matrix: Water

Analysis Batch: 345533

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 |   |          | 08/22/14 17:33 | 1       |

Lab Sample ID: LCS 680-345533/14

Matrix: Water

Analysis Batch: 345533

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 | 1.00        | 0.998      |               | mg/L |   | 100  | 90 - 110     |

Lab Sample ID: MB 680-345574/13

Matrix: Water

Analysis Batch: 345574

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 |   |          | 08/23/14 11:37 | 1       |

Lab Sample ID: LCS 680-345574/15

Matrix: Water

Analysis Batch: 345574

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 | 1.00        | 0.998      |               | mg/L |   | 100  | 90 - 110     |

## Method: 365.4 - Phosphorus, Total

Lab Sample ID: MB 680-346979/2-A

Matrix: Water

Analysis Batch: 347234

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 346979

| Analyte    | MB Result | MB Qualifier | PQL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------|-----------|--------------|------|-------|------|---|----------------|----------------|---------|
| Phosphorus | 0.041     | U            | 0.10 | 0.041 | mg/L |   | 09/02/14 16:09 | 09/03/14 13:01 | 1       |

Lab Sample ID: LCS 680-346979/1-A

Matrix: Water

Analysis Batch: 347234

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 346979

| Analyte    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------|-------------|------------|---------------|------|---|------|--------------|
| Phosphorus | 2.00        | 2.09       |               | mg/L |   | 104  | 60 - 140     |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 365.4 - Phosphorus, Total (Continued)

Lab Sample ID: 640-48932-1 MS

Matrix: Water

Analysis Batch: 347234

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 346979

| Analyte    | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Phosphorus | 0.042         | I                | 2.00        | 2.15      |              | mg/L |   | 105  | 60 - 140     |

Lab Sample ID: 640-48932-1 MSD

Matrix: Water

Analysis Batch: 347234

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 346979

| Analyte    | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Phosphorus | 0.042         | I                | 2.00        | 2.09       |               | mg/L |   | 102  | 60 - 140     | 3   | 40        |

Lab Sample ID: 640-48932-2 DU

Matrix: Water

Analysis Batch: 347234

Client Sample ID: SW-3

Prep Type: Total/NA

Prep Batch: 346979

| 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: 5210B-2011 - BOD, 5-Day

Lab Sample ID: USB 680-345581/1

Matrix: Water

Analysis Batch: 345581

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 |   |          | 08/21/14 13:12 | 1       |

Lab Sample ID: LCS 680-345581/2

Matrix: Water

Analysis Batch: 345581

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         | 222        |               | mg/L |   | 112  | 85 - 115     |

Lab Sample ID: LCSD 680-345581/3

Matrix: Water

Analysis Batch: 345581

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 |
|---------------------------|-------------|-------------|----------------|------|---|------|--------------|-----|-----------|
| Biochemical Oxygen Demand | 198         | 224         |                | mg/L |   | 113  | 85 - 115     | 1   | 30        |

## Method: 5310 B-2011 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-346770/3

Matrix: Water

Analysis Batch: 346770

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 | 0.50      | U            | 1.0 | 0.50 | mg/L |   |          | 08/29/14 23:00 | 1       |

TestAmerica Tallahassee

# QC Sample Results

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

TestAmerica Job ID: 640-48932-1

## Method: 5310 B-2011 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 680-346770/4

Matrix: Water

Analysis Batch: 346770

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 | 20.0        | 21.1       |               | mg/L |   | 105  | 80 - 120     |

Lab Sample ID: LCSD 680-346770/5

Matrix: Water

Analysis Batch: 346770

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 | 20.0        | 20.9        |                | mg/L |   | 104  | 80 - 120     | 1   | 25        |

Lab Sample ID: 640-48932-1 MS

Matrix: Water

Analysis Batch: 346770

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 |
|----------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|--------------|
| Total Organic Carbon | 21            |                  | 20.0        | 42.2      |              | mg/L |   | 106  | 80 - 120     |

Lab Sample ID: 640-48932-1 MSD

Matrix: Water

Analysis Batch: 346770

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 |
|----------------------|---------------|------------------|-------------|------------|---------------|------|---|------|--------------|-----|-----------|
| Total Organic Carbon | 21            |                  | 20.0        | 41.4       |               | mg/L |   | 102  | 80 - 120     | 2   | 25        |

## Method: SM 5220D - COD

Lab Sample ID: MB 680-346168/3

Matrix: Water

Analysis Batch: 346168

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 | 5.0       | U            | 10  | 5.0 | mg/L |   |          | 08/27/14 12:32 | 1       |

Lab Sample ID: LCS 680-346168/4

Matrix: Water

Analysis Batch: 346168

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 | 50.0        | 52.5       |               | mg/L |   | 105  | 90 - 110     |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## GC/MS VOA

### Analysis Batch: 346308

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 640-48933-1       | MWB29S                 | Total/NA  | Water  | 8260B  |            |
| 640-48933-2       | MWB27S                 | Total/NA  | Water  | 8260B  |            |
| 640-48933-3       | MWB13S                 | Total/NA  | Water  | 8260B  |            |
| 640-48933-4       | MWB22S                 | Total/NA  | Water  | 8260B  |            |
| 640-48933-5       | MWB12S                 | Total/NA  | Water  | 8260B  |            |
| 640-48933-10      | Trip Blank 48933       | Total/NA  | Water  | 8260B  |            |
| LCS 680-346308/3  | Lab Control Sample     | Total/NA  | Water  | 8260B  |            |
| LCSD 680-346308/4 | Lab Control Sample Dup | Total/NA  | Water  | 8260B  |            |
| MB 680-346308/8   | Method Blank           | Total/NA  | Water  | 8260B  |            |

### Analysis Batch: 346586

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 640-48951-6       | FIELD BLANK 01 48951   | Total/NA  | Water  | 8260B  |            |
| 640-48951-7       | MWB32S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-8       | MWB33S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-9       | MWB34S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-10      | MWB11S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-11      | MWB20S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-12      | MWB3S                  | Total/NA  | Water  | 8260B  |            |
| 640-48951-13      | MWB2S                  | Total/NA  | Water  | 8260B  |            |
| 640-48951-14      | MWB21S                 | Total/NA  | Water  | 8260B  |            |
| 640-48951-15      | TRIP02 BLANK 48951     | Total/NA  | Water  | 8260B  |            |
| LCS 680-346586/4  | Lab Control Sample     | Total/NA  | Water  | 8260B  |            |
| LCSD 680-346586/5 | Lab Control Sample Dup | Total/NA  | Water  | 8260B  |            |
| MB 680-346586/8   | Method Blank           | Total/NA  | Water  | 8260B  |            |

### Analysis Batch: 346741

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 640-48932-1       | SW-1                   | Total/NA  | Water  | 8260B  |            |
| 640-48932-2       | SW-3                   | Total/NA  | Water  | 8260B  |            |
| 640-48932-3       | Trip Blank 48932       | Total/NA  | Water  | 8260B  |            |
| LCS 680-346741/3  | Lab Control Sample     | Total/NA  | Water  | 8260B  |            |
| LCSD 680-346741/4 | Lab Control Sample Dup | Total/NA  | Water  | 8260B  |            |
| MB 680-346741/8   | Method Blank           | Total/NA  | Water  | 8260B  |            |

## GC Semi VOA

### Prep Batch: 345210

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-48932-1         | SW-1                   | Total/NA  | Water  | 8011   |            |
| 640-48932-2         | SW-3                   | Total/NA  | Water  | 8011   |            |
| LCS 680-345210/4-A  | Lab Control Sample     | Total/NA  | Water  | 8011   |            |
| LCSD 680-345210/5-A | Lab Control Sample Dup | Total/NA  | Water  | 8011   |            |
| MB 680-345210/3-A   | Method Blank           | Total/NA  | Water  | 8011   |            |

### Analysis Batch: 345364

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 640-48932-1        | SW-1               | Total/NA  | Water  | 8011   | 345210     |
| 640-48932-2        | SW-3               | Total/NA  | Water  | 8011   | 345210     |
| LCS 680-345210/4-A | Lab Control Sample | Total/NA  | Water  | 8011   | 345210     |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## GC Semi VOA (Continued)

### Analysis Batch: 345364 (Continued)

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| LCSD 680-345210/5-A | Lab Control Sample Dup | Total/NA  | Water  | 8011   | 345210     |
| MB 680-345210/3-A   | Method Blank           | Total/NA  | Water  | 8011   | 345210     |

### Prep Batch: 345698

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 640-48933-1          | MWB29S                 | Total/NA  | Water  | 8011   |            |
| 640-48933-2          | MWB27S                 | Total/NA  | Water  | 8011   |            |
| 640-48933-3          | MWB13S                 | Total/NA  | Water  | 8011   |            |
| 640-48933-4          | MWB22S                 | Total/NA  | Water  | 8011   |            |
| 640-48933-5          | MWB12S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-6          | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   |            |
| 640-48951-6 MS       | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   |            |
| 640-48951-6 MSD      | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   |            |
| 640-48951-7          | MWB32S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-7 MS       | MWB32S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-8          | MWB33S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-9          | MWB34S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-10         | MWB11S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-11         | MWB20S                 | Total/NA  | Water  | 8011   |            |
| 640-48951-12         | MWB3S                  | Total/NA  | Water  | 8011   |            |
| 640-48951-13         | MWB2S                  | Total/NA  | Water  | 8011   |            |
| 640-48951-14         | MWB21S                 | Total/NA  | Water  | 8011   |            |
| LCS 680-345698/11-A  | Lab Control Sample     | Total/NA  | Water  | 8011   |            |
| LCSD 680-345698/12-A | Lab Control Sample Dup | Total/NA  | Water  | 8011   |            |
| MB 680-345698/10-A   | Method Blank           | Total/NA  | Water  | 8011   |            |

### Analysis Batch: 346192

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 640-48933-1          | MWB29S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48933-2          | MWB27S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48933-3          | MWB13S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48933-4          | MWB22S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48933-5          | MWB12S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-6          | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-6 MS       | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-6 MSD      | FIELD BLANK 01 48951   | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-7          | MWB32S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-7 MS       | MWB32S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-8          | MWB33S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-9          | MWB34S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-10         | MWB11S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-11         | MWB20S                 | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-12         | MWB3S                  | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-13         | MWB2S                  | Total/NA  | Water  | 8011   | 345698     |
| 640-48951-14         | MWB21S                 | Total/NA  | Water  | 8011   | 345698     |
| LCS 680-345698/11-A  | Lab Control Sample     | Total/NA  | Water  | 8011   | 345698     |
| LCSD 680-345698/12-A | Lab Control Sample Dup | Total/NA  | Water  | 8011   | 345698     |
| MB 680-345698/10-A   | Method Blank           | Total/NA  | Water  | 8011   | 345698     |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## HPLC/IC

### Analysis Batch: 347113

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 640-48933-1       | MWB29S                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-2       | MWB27S                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-3       | MWB13S                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-4       | MWB22S                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-4 MS    | MWB22S                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-4 MSD   | MWB22S                 | Total/NA  | Water  | 300.0  |            |
| LCS 680-347113/6  | Lab Control Sample     | Total/NA  | Water  | 300.0  |            |
| LCSD 680-347113/7 | Lab Control Sample Dup | Total/NA  | Water  | 300.0  |            |
| MB 680-347113/5   | Method Blank           | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 347223

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 640-48933-6        | MWB12I                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-7        | MWB13I                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-8        | MWB27I                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-9        | MWB29I                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-9 MS     | MWB29I                 | Total/NA  | Water  | 300.0  |            |
| 640-48933-9 MSD    | MWB29I                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-1        | MWB2I                  | Total/NA  | Water  | 300.0  |            |
| 640-48951-2        | MWB3I                  | Total/NA  | Water  | 300.0  |            |
| 640-48951-3        | MWB11I (R)             | Total/NA  | Water  | 300.0  |            |
| 640-48951-4        | MWB34I                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-5        | MWB32I                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-6        | FIELD BLANK 01 48951   | Total/NA  | Water  | 300.0  |            |
| 640-48951-7        | MWB32S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-7 MS     | MWB32S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-7 MSD    | MWB32S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-8        | MWB33S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-10       | MWB11S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-11       | MWB20S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-12       | MWB3S                  | Total/NA  | Water  | 300.0  |            |
| LCS 680-347223/33  | Lab Control Sample     | Total/NA  | Water  | 300.0  |            |
| LCSD 680-347223/34 | Lab Control Sample Dup | Total/NA  | Water  | 300.0  |            |
| MB 680-347223/32   | Method Blank           | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 347224

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 640-48951-13       | MWB2S                  | Total/NA  | Water  | 300.0  |            |
| 640-48951-14       | MWB21S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-14 MS    | MWB21S                 | Total/NA  | Water  | 300.0  |            |
| 640-48951-14 MSD   | MWB21S                 | Total/NA  | Water  | 300.0  |            |
| LCS 680-347224/59  | Lab Control Sample     | Total/NA  | Water  | 300.0  |            |
| LCSD 680-347224/60 | Lab Control Sample Dup | Total/NA  | Water  | 300.0  |            |
| MB 680-347224/58   | Method Blank           | Total/NA  | Water  | 300.0  |            |

### Analysis Batch: 347297

| Lab Sample ID   | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| 640-48933-5     | MWB12S           | Total/NA  | Water  | 300.0  |            |
| 640-48951-9     | MWB34S           | Total/NA  | Water  | 300.0  |            |
| 640-48951-9 MS  | MWB34S           | Total/NA  | Water  | 300.0  |            |
| 640-48951-9 MSD | MWB34S           | Total/NA  | Water  | 300.0  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## HPLC/IC (Continued)

### Analysis Batch: 347297 (Continued)

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| LCS 680-347297/6  | Lab Control Sample     | Total/NA  | Water  | 300.0  |            |
| LCSD 680-347297/7 | Lab Control Sample Dup | Total/NA  | Water  | 300.0  |            |
| MB 680-347297/5   | Method Blank           | Total/NA  | Water  | 300.0  |            |

## Metals

### Prep Batch: 228490

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-48932-1         | SW-1                   | Total/NA  | Water  | 1631E  |            |
| 640-48932-2         | SW-3                   | Total/NA  | Water  | 1631E  |            |
| LCS 400-228490/2-A  | Lab Control Sample     | Total/NA  | Water  | 1631E  |            |
| LCSD 400-228490/3-A | Lab Control Sample Dup | Total/NA  | Water  | 1631E  |            |
| MB 400-228490/1-A   | Method Blank           | Total/NA  | Water  | 1631E  |            |

### Analysis Batch: 228555

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 640-48932-1         | SW-1                   | Total/NA  | Water  | 1631E  | 228490     |
| 640-48932-2         | SW-3                   | Total/NA  | Water  | 1631E  | 228490     |
| LCS 400-228490/2-A  | Lab Control Sample     | Total/NA  | Water  | 1631E  | 228490     |
| LCSD 400-228490/3-A | Lab Control Sample Dup | Total/NA  | Water  | 1631E  | 228490     |
| MB 400-228490/1-A   | Method Blank           | Total/NA  | Water  | 1631E  | 228490     |

### Prep Batch: 345254

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 640-48933-1        | MWB29S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-1 MS     | MWB29S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-1 MSD    | MWB29S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-2        | MWB27S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-3        | MWB13S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-4        | MWB22S             | Total/NA  | Water  | 7470A  |            |
| 640-48933-5        | MWB12S             | Total/NA  | Water  | 7470A  |            |
| LCS 680-345254/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |
| MB 680-345254/1-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |

### Prep Batch: 345416

| Lab Sample ID      | Client Sample ID   | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 640-48933-1        | MWB29S             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-2        | MWB27S             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-3        | MWB13S             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-4        | MWB22S             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-5        | MWB12S             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-6        | MWB12I             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-7        | MWB13I             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-8        | MWB27I             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-9        | MWB29I             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-9 MS     | MWB29I             | Total Recoverable | Water  | 3005A  |            |
| 640-48933-9 MSD    | MWB29I             | Total Recoverable | Water  | 3005A  |            |
| LCS 680-345416/2-A | Lab Control Sample | Total Recoverable | Water  | 3005A  |            |
| MB 680-345416/1-A  | Method Blank       | Total Recoverable | Water  | 3005A  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## Metals (Continued)

### Analysis Batch: 345449

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 640-48933-1        | MWB29S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-1 MS     | MWB29S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-1 MSD    | MWB29S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-2        | MWB27S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-3        | MWB13S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-4        | MWB22S             | Total/NA  | Water  | 7470A  | 345254     |
| 640-48933-5        | MWB12S             | Total/NA  | Water  | 7470A  | 345254     |
| LCS 680-345254/2-A | Lab Control Sample | Total/NA  | Water  | 7470A  | 345254     |
| MB 680-345254/1-A  | Method Blank       | Total/NA  | Water  | 7470A  | 345254     |

### Prep Batch: 345643

| Lab Sample ID       | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|---------------------|--------------------|-----------|--------|--------|------------|
| 640-48951-14        | MWB21S             | Total/NA  | Water  | 7470A  |            |
| LCS 680-345643/14-A | Lab Control Sample | Total/NA  | Water  | 7470A  |            |
| MB 680-345643/13-A  | Method Blank       | Total/NA  | Water  | 7470A  |            |

### Prep Batch: 345653

| Lab Sample ID      | Client Sample ID     | Prep Type | Matrix | Method | Prep Batch |
|--------------------|----------------------|-----------|--------|--------|------------|
| 640-48951-6        | FIELD BLANK 01 48951 | Total/NA  | Water  | 7470A  |            |
| 640-48951-7        | MWB32S               | Total/NA  | Water  | 7470A  |            |
| 640-48951-8        | MWB33S               | Total/NA  | Water  | 7470A  |            |
| 640-48951-9        | MWB34S               | Total/NA  | Water  | 7470A  |            |
| 640-48951-10       | MWB11S               | Total/NA  | Water  | 7470A  |            |
| 640-48951-11       | MWB20S               | Total/NA  | Water  | 7470A  |            |
| 640-48951-12       | MWB3S                | Total/NA  | Water  | 7470A  |            |
| 640-48951-13       | MWB2S                | Total/NA  | Water  | 7470A  |            |
| LCS 680-345653/2-A | Lab Control Sample   | Total/NA  | Water  | 7470A  |            |
| MB 680-345653/1-A  | Method Blank         | Total/NA  | Water  | 7470A  |            |

### Prep Batch: 345742

| Lab Sample ID      | Client Sample ID   | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 640-48932-1        | SW-1               | Total Recoverable | Water  | 3005A  |            |
| 640-48932-2        | SW-3               | Total Recoverable | Water  | 3005A  |            |
| LCS 680-345742/2-A | Lab Control Sample | Total Recoverable | Water  | 3005A  |            |
| MB 680-345742/1-A  | Method Blank       | Total Recoverable | Water  | 3005A  |            |

### Prep Batch: 345770

| Lab Sample ID      | Client Sample ID     | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|----------------------|-------------------|--------|--------|------------|
| 640-48951-1        | MWB2I                | Total Recoverable | Water  | 3005A  |            |
| 640-48951-2        | MWB3I                | Total Recoverable | Water  | 3005A  |            |
| 640-48951-3        | MWB11I (R)           | Total Recoverable | Water  | 3005A  |            |
| 640-48951-4        | MWB34I               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-5        | MWB32I               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-6        | FIELD BLANK 01 48951 | Total Recoverable | Water  | 3005A  |            |
| 640-48951-7        | MWB32S               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-8        | MWB33S               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-9        | MWB34S               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-10       | MWB11S               | Total Recoverable | Water  | 3005A  |            |
| 640-48951-11       | MWB20S               | Total Recoverable | Water  | 3005A  |            |
| LCS 680-345770/2-A | Lab Control Sample   | Total Recoverable | Water  | 3005A  |            |
| MB 680-345770/1-A  | Method Blank         | Total Recoverable | Water  | 3005A  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## Metals (Continued)

### Prep Batch: 345843

| Lab Sample ID      | Client Sample ID   | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 640-48951-12       | MWB3S              | Total Recoverable | Water  | 3005A  |            |
| 640-48951-13       | MWB2S              | Dissolved         | Water  | 3005A  |            |
| 640-48951-13       | MWB2S              | Total Recoverable | Water  | 3005A  |            |
| 640-48951-14       | MWB21S             | Total Recoverable | Water  | 3005A  |            |
| LCS 680-345843/2-A | Lab Control Sample | Total Recoverable | Water  | 3005A  |            |
| MB 680-345843/1-A  | Method Blank       | Total Recoverable | Water  | 3005A  |            |

### Analysis Batch: 345923

| Lab Sample ID       | Client Sample ID     | Prep Type | Matrix | Method | Prep Batch |
|---------------------|----------------------|-----------|--------|--------|------------|
| 640-48951-6         | FIELD BLANK 01 48951 | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-7         | MWB32S               | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-8         | MWB33S               | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-9         | MWB34S               | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-10        | MWB11S               | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-11        | MWB20S               | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-12        | MWB3S                | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-13        | MWB2S                | Total/NA  | Water  | 7470A  | 345653     |
| 640-48951-14        | MWB21S               | Total/NA  | Water  | 7470A  | 345643     |
| LCS 680-345643/14-A | Lab Control Sample   | Total/NA  | Water  | 7470A  | 345643     |
| LCS 680-345653/2-A  | Lab Control Sample   | Total/NA  | Water  | 7470A  | 345653     |
| MB 680-345643/13-A  | Method Blank         | Total/NA  | Water  | 7470A  | 345643     |
| MB 680-345653/1-A   | Method Blank         | Total/NA  | Water  | 7470A  | 345653     |

### Analysis Batch: 345970

| Lab Sample ID      | Client Sample ID   | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 640-48933-1        | MWB29S             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-2        | MWB27S             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-3        | MWB13S             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-4        | MWB22S             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-5        | MWB12S             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-6        | MWB12I             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-7        | MWB13I             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-8        | MWB27I             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-9        | MWB29I             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-9 MS     | MWB29I             | Total Recoverable | Water  | 6020   | 345416     |
| 640-48933-9 MSD    | MWB29I             | Total Recoverable | Water  | 6020   | 345416     |
| LCS 680-345416/2-A | Lab Control Sample | Total Recoverable | Water  | 6020   | 345416     |
| MB 680-345416/1-A  | Method Blank       | Total Recoverable | Water  | 6020   | 345416     |

### Analysis Batch: 346224

| Lab Sample ID      | Client Sample ID   | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|--------------------|-------------------|--------|--------|------------|
| 640-48951-12       | MWB3S              | Total Recoverable | Water  | 6020   | 345843     |
| 640-48951-13       | MWB2S              | Dissolved         | Water  | 6020   | 345843     |
| 640-48951-13       | MWB2S              | Total Recoverable | Water  | 6020   | 345843     |
| 640-48951-14       | MWB21S             | Total Recoverable | Water  | 6020   | 345843     |
| LCS 680-345843/2-A | Lab Control Sample | Total Recoverable | Water  | 6020   | 345843     |
| MB 680-345843/1-A  | Method Blank       | Total Recoverable | Water  | 6020   | 345843     |

### Analysis Batch: 346649

| Lab Sample ID | Client Sample ID | Prep Type         | Matrix | Method | Prep Batch |
|---------------|------------------|-------------------|--------|--------|------------|
| 640-48932-1   | SW-1             | Total Recoverable | Water  | 6020   | 345742     |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## Metals (Continued)

### Analysis Batch: 346649 (Continued)

| Lab Sample ID      | Client Sample ID     | Prep Type         | Matrix | Method | Prep Batch |
|--------------------|----------------------|-------------------|--------|--------|------------|
| 640-48932-2        | SW-3                 | Total Recoverable | Water  | 6020   | 345742     |
| 640-48951-1        | MWB2I                | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-2        | MWB3I                | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-3        | MWB11I (R)           | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-4        | MWB34I               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-5        | MWB32I               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-6        | FIELD BLANK 01 48951 | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-7        | MWB32S               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-8        | MWB33S               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-9        | MWB34S               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-10       | MWB11S               | Total Recoverable | Water  | 6020   | 345770     |
| 640-48951-11       | MWB20S               | Total Recoverable | Water  | 6020   | 345770     |
| LCS 680-345742/2-A | Lab Control Sample   | Total Recoverable | Water  | 6020   | 345742     |
| LCS 680-345770/2-A | Lab Control Sample   | Total Recoverable | Water  | 6020   | 345770     |
| MB 680-345742/1-A  | Method Blank         | Total Recoverable | Water  | 6020   | 345742     |
| MB 680-345770/1-A  | Method Blank         | Total Recoverable | Water  | 6020   | 345770     |

### Analysis Batch: 347388

| Lab Sample ID   | Client Sample ID | Prep Type | Matrix | Method   | Prep Batch |
|-----------------|------------------|-----------|--------|----------|------------|
| 640-48932-1     | SW-1             | Total/NA  | Water  | SM 2340B |            |
| 640-48932-2     | SW-3             | Total/NA  | Water  | SM 2340B |            |
| MB 680-347388/1 | Method Blank     | Total/NA  | Water  | SM 2340B |            |

## General Chemistry

### Analysis Batch: 111398

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method       | Prep Batch |
|---------------|------------------|-----------|--------|--------------|------------|
| 640-48932-1   | SW-1             | Total/NA  | Water  | UnionizedNH3 |            |
| 640-48932-2   | SW-3             | Total/NA  | Water  | UnionizedNH3 |            |

### Analysis Batch: 345228

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 640-48932-1       | SW-1               | Total/NA  | Water  | 353.2  |            |
| 640-48932-2       | SW-3               | Total/NA  | Water  | 353.2  |            |
| 640-48933-1       | MWB29S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-1 MS    | MWB29S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-1 MSD   | MWB29S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-2       | MWB27S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-2 DU    | MWB27S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-3       | MWB13S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-4       | MWB22S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-5       | MWB12S             | Total/NA  | Water  | 353.2  |            |
| 640-48933-6       | MWB12I             | Total/NA  | Water  | 353.2  |            |
| 640-48933-7       | MWB13I             | Total/NA  | Water  | 353.2  |            |
| 640-48933-8       | MWB27I             | Total/NA  | Water  | 353.2  |            |
| 640-48933-9       | MWB29I             | Total/NA  | Water  | 353.2  |            |
| LCS 680-345228/16 | Lab Control Sample | Total/NA  | Water  | 353.2  |            |
| MB 680-345228/13  | Method Blank       | Total/NA  | Water  | 353.2  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## General Chemistry (Continued)

### Analysis Batch: 345309

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method     | Prep Batch |
|-------------------|------------------------|-----------|--------|------------|------------|
| 640-48933-1       | MWB29S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-2       | MWB27S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-3       | MWB13S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-4       | MWB22S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-4 DU    | MWB22S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-5       | MWB12S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-6       | MWB12I                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-7       | MWB13I                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-8       | MWB27I                 | Total/NA  | Water  | 2540C-2011 |            |
| LCS 680-345309/2  | Lab Control Sample     | Total/NA  | Water  | 2540C-2011 |            |
| LCSD 680-345309/3 | Lab Control Sample Dup | Total/NA  | Water  | 2540C-2011 |            |
| MB 680-345309/1   | Method Blank           | Total/NA  | Water  | 2540C-2011 |            |

### Analysis Batch: 345446

| Lab Sample ID     | Client Sample ID     | Prep Type | Matrix | Method | Prep Batch |
|-------------------|----------------------|-----------|--------|--------|------------|
| 640-48951-2 MS    | MWB3I                | Total/NA  | Water  | 353.2  |            |
| 640-48951-2 MSD   | MWB3I                | Total/NA  | Water  | 353.2  |            |
| 640-48951-3       | MWB11I (R)           | Total/NA  | Water  | 353.2  |            |
| 640-48951-4       | MWB34I               | Total/NA  | Water  | 353.2  |            |
| 640-48951-5       | MWB32I               | Total/NA  | Water  | 353.2  |            |
| 640-48951-6       | FIELD BLANK 01 48951 | Total/NA  | Water  | 353.2  |            |
| 640-48951-7       | MWB32S               | Total/NA  | Water  | 353.2  |            |
| 640-48951-8       | MWB33S               | Total/NA  | Water  | 353.2  |            |
| 640-48951-9       | MWB34S               | Total/NA  | Water  | 353.2  |            |
| 640-48951-10      | MWB11S               | Total/NA  | Water  | 353.2  |            |
| 640-48951-11      | MWB20S               | Total/NA  | Water  | 353.2  |            |
| 640-48951-11 DU   | MWB20S               | Total/NA  | Water  | 353.2  |            |
| LCS 680-345446/15 | Lab Control Sample   | Total/NA  | Water  | 353.2  |            |
| MB 680-345446/23  | Method Blank         | Total/NA  | Water  | 353.2  |            |

### Analysis Batch: 345533

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 640-48932-1       | SW-1               | Total/NA  | Water  | 353.2  |            |
| LCS 680-345533/14 | Lab Control Sample | Total/NA  | Water  | 353.2  |            |
| MB 680-345533/32  | Method Blank       | Total/NA  | Water  | 353.2  |            |

### Analysis Batch: 345564

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 640-48951-1   | MWB2I            | Total/NA  | Water  | 353.2  |            |
| 640-48951-2   | MWB3I            | Total/NA  | Water  | 353.2  |            |
| 640-48951-12  | MWB3S            | Total/NA  | Water  | 353.2  |            |
| 640-48951-13  | MWB2S            | Total/NA  | Water  | 353.2  |            |
| 640-48951-14  | MWB21S           | Total/NA  | Water  | 353.2  |            |

### Analysis Batch: 345574

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------|--------|------------|
| 640-48932-2       | SW-3               | Total/NA  | Water  | 353.2  |            |
| LCS 680-345574/15 | Lab Control Sample | Total/NA  | Water  | 353.2  |            |
| MB 680-345574/13  | Method Blank       | Total/NA  | Water  | 353.2  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## General Chemistry (Continued)

### Analysis Batch: 345581

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method     | Prep Batch |
|-------------------|------------------------|-----------|--------|------------|------------|
| 640-48932-1       | SW-1                   | Total/NA  | Water  | 5210B-2011 |            |
| 640-48932-2       | SW-3                   | Total/NA  | Water  | 5210B-2011 |            |
| LCS 680-345581/2  | Lab Control Sample     | Total/NA  | Water  | 5210B-2011 |            |
| LCSD 680-345581/3 | Lab Control Sample Dup | Total/NA  | Water  | 5210B-2011 |            |
| USB 680-345581/1  | Method Blank           | Total/NA  | Water  | 5210B-2011 |            |

### Analysis Batch: 345605

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method     | Prep Batch |
|-------------------|------------------------|-----------|--------|------------|------------|
| 640-48932-1       | SW-1                   | Total/NA  | Water  | 2540C-2011 |            |
| 640-48932-1 DU    | SW-1                   | Total/NA  | Water  | 2540C-2011 |            |
| 640-48932-2       | SW-3                   | Total/NA  | Water  | 2540C-2011 |            |
| 640-48932-2 DU    | SW-3                   | Total/NA  | Water  | 2540C-2011 |            |
| 640-48933-9       | MWB29I                 | Total/NA  | Water  | 2540C-2011 |            |
| LCS 680-345605/2  | Lab Control Sample     | Total/NA  | Water  | 2540C-2011 |            |
| LCSD 680-345605/3 | Lab Control Sample Dup | Total/NA  | Water  | 2540C-2011 |            |
| MB 680-345605/1   | Method Blank           | Total/NA  | Water  | 2540C-2011 |            |

### Analysis Batch: 345872

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 640-48933-1      | MWB29S             | Total/NA  | Water  | 350.1  |            |
| 640-48933-2      | MWB27S             | Total/NA  | Water  | 350.1  |            |
| 640-48933-3      | MWB13S             | Total/NA  | Water  | 350.1  |            |
| 640-48933-4      | MWB22S             | Total/NA  | Water  | 350.1  |            |
| 640-48933-5      | MWB12S             | Total/NA  | Water  | 350.1  |            |
| LCS 680-345872/6 | Lab Control Sample | Total/NA  | Water  | 350.1  |            |
| MB 680-345872/36 | Method Blank       | Total/NA  | Water  | 350.1  |            |

### Analysis Batch: 345934

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method     | Prep Batch |
|-------------------|------------------------|-----------|--------|------------|------------|
| 640-48951-1       | MWB2I                  | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-2       | MWB3I                  | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-3       | MWB11I (R)             | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-4       | MWB34I                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-5       | MWB32I                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-6       | FIELD BLANK 01 48951   | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-7       | MWB32S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-8       | MWB33S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-8 DU    | MWB33S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-9       | MWB34S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-10      | MWB11S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-11      | MWB20S                 | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-12      | MWB3S                  | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-13      | MWB2S                  | Total/NA  | Water  | 2540C-2011 |            |
| 640-48951-14      | MWB21S                 | Total/NA  | Water  | 2540C-2011 |            |
| LCS 680-345934/2  | Lab Control Sample     | Total/NA  | Water  | 2540C-2011 |            |
| LCSD 680-345934/3 | Lab Control Sample Dup | Total/NA  | Water  | 2540C-2011 |            |
| MB 680-345934/1   | Method Blank           | Total/NA  | Water  | 2540C-2011 |            |

### Analysis Batch: 346025

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 640-48933-6   | MWB12I           | Total/NA  | Water  | 350.1  |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## General Chemistry (Continued)

### Analysis Batch: 346025 (Continued)

| Lab Sample ID     | Client Sample ID     | Prep Type | Matrix | Method | Prep Batch |
|-------------------|----------------------|-----------|--------|--------|------------|
| 640-48933-6 MS    | MWB12I               | Total/NA  | Water  | 350.1  |            |
| 640-48933-6 MSD   | MWB12I               | Total/NA  | Water  | 350.1  |            |
| 640-48933-7       | MWB13I               | Total/NA  | Water  | 350.1  |            |
| 640-48933-8       | MWB27I               | Total/NA  | Water  | 350.1  |            |
| 640-48933-9       | MWB29I               | Total/NA  | Water  | 350.1  |            |
| 640-48951-1       | MWB2I                | Total/NA  | Water  | 350.1  |            |
| 640-48951-2       | MWB3I                | Total/NA  | Water  | 350.1  |            |
| 640-48951-3       | MWB11I (R)           | Total/NA  | Water  | 350.1  |            |
| 640-48951-4       | MWB34I               | Total/NA  | Water  | 350.1  |            |
| 640-48951-5       | MWB32I               | Total/NA  | Water  | 350.1  |            |
| 640-48951-6       | FIELD BLANK 01 48951 | Total/NA  | Water  | 350.1  |            |
| 640-48951-7       | MWB32S               | Total/NA  | Water  | 350.1  |            |
| 640-48951-8       | MWB33S               | Total/NA  | Water  | 350.1  |            |
| 640-48951-9       | MWB34S               | Total/NA  | Water  | 350.1  |            |
| 640-48951-10      | MWB11S               | Total/NA  | Water  | 350.1  |            |
| 640-48951-11      | MWB20S               | Total/NA  | Water  | 350.1  |            |
| 640-48951-12      | MWB3S                | Total/NA  | Water  | 350.1  |            |
| 640-48951-12 DU   | MWB3S                | Total/NA  | Water  | 350.1  |            |
| 640-48951-13      | MWB2S                | Total/NA  | Water  | 350.1  |            |
| 640-48951-14      | MWB21S               | Total/NA  | Water  | 350.1  |            |
| LCS 680-346025/26 | Lab Control Sample   | Total/NA  | Water  | 350.1  |            |
| MB 680-346025/36  | Method Blank         | Total/NA  | Water  | 350.1  |            |

### Analysis Batch: 346168

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|------------------|--------------------|-----------|--------|----------|------------|
| 640-48932-1      | SW-1               | Total/NA  | Water  | SM 5220D |            |
| 640-48932-2      | SW-3               | Total/NA  | Water  | SM 5220D |            |
| LCS 680-346168/4 | Lab Control Sample | Total/NA  | Water  | SM 5220D |            |
| MB 680-346168/3  | Method Blank       | Total/NA  | Water  | SM 5220D |            |

### Analysis Batch: 346189

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 640-48932-1       | SW-1                   | Total/NA  | Water  | 2540 D-2011 |            |
| 640-48932-2       | SW-3                   | Total/NA  | Water  | 2540 D-2011 |            |
| LCS 680-346189/2  | Lab Control Sample     | Total/NA  | Water  | 2540 D-2011 |            |
| LCSD 680-346189/3 | Lab Control Sample Dup | Total/NA  | Water  | 2540 D-2011 |            |
| MB 680-346189/1   | Method Blank           | Total/NA  | Water  | 2540 D-2011 |            |

### Analysis Batch: 346704

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method         | Prep Batch |
|---------------|------------------|-----------|--------|----------------|------------|
| 640-48932-1   | SW-1             | Total/NA  | Water  | Total Nitrogen |            |
| 640-48932-2   | SW-3             | Total/NA  | Water  | Total Nitrogen |            |

### Analysis Batch: 346770

| Lab Sample ID     | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 640-48932-1       | SW-1                   | Total/NA  | Water  | 5310 B-2011 |            |
| 640-48932-1 MS    | SW-1                   | Total/NA  | Water  | 5310 B-2011 |            |
| 640-48932-1 MSD   | SW-1                   | Total/NA  | Water  | 5310 B-2011 |            |
| 640-48932-2       | SW-3                   | Total/NA  | Water  | 5310 B-2011 |            |
| LCS 680-346770/4  | Lab Control Sample     | Total/NA  | Water  | 5310 B-2011 |            |
| LCSD 680-346770/5 | Lab Control Sample Dup | Total/NA  | Water  | 5310 B-2011 |            |

TestAmerica Tallahassee

# QC Association Summary

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

TestAmerica Job ID: 640-48932-1

## General Chemistry (Continued)

### Analysis Batch: 346770 (Continued)

| Lab Sample ID   | Client Sample ID | Prep Type | Matrix | Method      | Prep Batch |
|-----------------|------------------|-----------|--------|-------------|------------|
| MB 680-346770/3 | Method Blank     | Total/NA  | Water  | 5310 B-2011 |            |

### Prep Batch: 346979

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method    | Prep Batch |
|--------------------|--------------------|-----------|--------|-----------|------------|
| 640-48932-1        | SW-1               | Total/NA  | Water  | Digestion |            |
| 640-48932-1 MS     | SW-1               | Total/NA  | Water  | Digestion |            |
| 640-48932-1 MSD    | SW-1               | Total/NA  | Water  | Digestion |            |
| 640-48932-2        | SW-3               | Total/NA  | Water  | Digestion |            |
| 640-48932-2 DU     | SW-3               | Total/NA  | Water  | Digestion |            |
| LCS 680-346979/1-A | Lab Control Sample | Total/NA  | Water  | Digestion |            |
| MB 680-346979/2-A  | Method Blank       | Total/NA  | Water  | Digestion |            |

### Analysis Batch: 347234

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 640-48932-1        | SW-1               | Total/NA  | Water  | 365.4  | 346979     |
| 640-48932-1 MS     | SW-1               | Total/NA  | Water  | 365.4  | 346979     |
| 640-48932-1 MSD    | SW-1               | Total/NA  | Water  | 365.4  | 346979     |
| 640-48932-2        | SW-3               | Total/NA  | Water  | 365.4  | 346979     |
| 640-48932-2 DU     | SW-3               | Total/NA  | Water  | 365.4  | 346979     |
| LCS 680-346979/1-A | Lab Control Sample | Total/NA  | Water  | 365.4  | 346979     |
| MB 680-346979/2-A  | Method Blank       | Total/NA  | Water  | 365.4  | 346979     |

## Field Service / Mobile Lab

### Analysis Batch: 111383

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method         | Prep Batch |
|---------------|------------------|-----------|--------|----------------|------------|
| 640-48932-1   | SW-1             | Total/NA  | Water  | Field Sampling |            |
| 640-48932-2   | SW-3             | Total/NA  | Water  | Field Sampling |            |
| 640-48933-1   | MWB29S           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-2   | MWB27S           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-3   | MWB13S           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-4   | MWB22S           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-5   | MWB12S           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-6   | MWB12I           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-7   | MWB13I           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-8   | MWB27I           | Total/NA  | Water  | Field Sampling |            |
| 640-48933-9   | MWB29I           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-1   | MWB2I            | Total/NA  | Water  | Field Sampling |            |
| 640-48951-2   | MWB3I            | Total/NA  | Water  | Field Sampling |            |
| 640-48951-3   | MWB11I (R)       | Total/NA  | Water  | Field Sampling |            |
| 640-48951-4   | MWB34I           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-5   | MWB32I           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-7   | MWB32S           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-8   | MWB33S           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-9   | MWB34S           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-10  | MWB11S           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-11  | MWB20S           | Total/NA  | Water  | Field Sampling |            |
| 640-48951-12  | MWB3S            | Total/NA  | Water  | Field Sampling |            |
| 640-48951-13  | MWB2S            | Total/NA  | Water  | Field Sampling |            |
| 640-48951-14  | MWB21S           | Total/NA  | Water  | Field Sampling |            |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: SW-1**

**Date Collected: 08/20/14 07:40**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48932-1**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346741       | 08/30/14 18:36       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345210       | 08/21/14 14:43       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 345364       | 08/22/14 06:50       | SSP     | TAL SAV |
| Total/NA          | Prep       | 1631E          |     |                 | 228490       | 08/22/14 15:25       | VLC     | TAL PEN |
| Total/NA          | Analysis   | 1631E          |     | 1               | 228555       | 09/02/14 11:39       | VLC     | TAL PEN |
| Total Recoverable | Prep       | 3005A          |     |                 | 345742       | 08/25/14 13:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 06:18       | BWR     | TAL SAV |
| Total/NA          | Analysis   | SM 2340B       |     | 1               | 347388       | 08/29/14 06:18       | BCB     | TAL SAV |
| Total/NA          | Analysis   | 2540 D-2011    |     | 1               | 346189       | 08/27/14 14:36       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345605       | 08/24/14 14:00       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:42       | GRX     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345533       | 08/22/14 17:30       | GRX     | TAL SAV |
| Total/NA          | Prep       | Digestion      |     |                 | 346979       | 09/02/14 16:09       | ASH     | TAL SAV |
| Total/NA          | Analysis   | 365.4          |     | 1               | 347234       | 09/03/14 13:02       | AJO     | TAL SAV |
| Total/NA          | Analysis   | 5210B-2011     |     | 1               | 345581       | 08/21/14 13:12       | OLB     | TAL SAV |
| Total/NA          | Analysis   | 5310 B-2011    |     | 1               | 346770       | 08/30/14 00:17       | PAT     | TAL SAV |
| Total/NA          | Analysis   | SM 5220D       |     | 1               | 346168       | 08/27/14 12:32       | JRJ     | TAL SAV |
| Total/NA          | Analysis   | Total Nitrogen |     | 1               | 346704       | 08/29/14 16:04       | AJO     | TAL SAV |
| Total/NA          | Analysis   | UnionizedNH3   |     | 1               | 111398       | 09/04/14 07:19       | TJW     | TAL TAL |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 07:40       | FDS     | TAL TAL |

**Client Sample ID: SW-3**

**Date Collected: 08/20/14 08:15**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48932-2**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B        |     | 1               | 346741       | 08/30/14 19:02       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011         |     |                 | 345210       | 08/21/14 14:43       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011         |     | 1               | 345364       | 08/22/14 07:02       | SSP     | TAL SAV |
| Total/NA          | Prep       | 1631E        |     |                 | 228490       | 08/22/14 15:25       | VLC     | TAL PEN |
| Total/NA          | Analysis   | 1631E        |     | 1               | 228555       | 09/02/14 11:47       | VLC     | TAL PEN |
| Total Recoverable | Prep       | 3005A        |     |                 | 345742       | 08/25/14 13:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020         |     | 1               | 346649       | 08/29/14 06:40       | BWR     | TAL SAV |
| Total/NA          | Analysis   | SM 2340B     |     | 1               | 347388       | 08/29/14 06:40       | BCB     | TAL SAV |
| Total/NA          | Analysis   | 2540 D-2011  |     | 1               | 346189       | 08/27/14 14:19       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011   |     | 1               | 345605       | 08/24/14 14:00       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 353.2        |     | 1               | 345228       | 08/21/14 11:45       | GRX     | TAL SAV |
| Total/NA          | Analysis   | 353.2        |     | 1               | 345574       | 08/23/14 11:52       | GRX     | TAL SAV |
| Total/NA          | Prep       | Digestion    |     |                 | 346979       | 09/02/14 16:09       | ASH     | TAL SAV |
| Total/NA          | Analysis   | 365.4        |     | 1               | 347234       | 09/03/14 13:05       | AJO     | TAL SAV |
| Total/NA          | Analysis   | 5210B-2011   |     | 1               | 345581       | 08/21/14 13:12       | OLB     | TAL SAV |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

## Client Sample ID: SW-3

Lab Sample ID: 640-48932-2

Date Collected: 08/20/14 08:15

Matrix: Water

Date Received: 08/21/14 08:15

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 5310 B-2011    |     | 1               | 346770       | 08/30/14 00:59       | PAT     | TAL SAV |
| Total/NA  | Analysis   | SM 5220D       |     | 1               | 346168       | 08/27/14 12:32       | JRJ     | TAL SAV |
| Total/NA  | Analysis   | Total Nitrogen |     | 1               | 346704       | 08/29/14 16:04       | AJO     | TAL SAV |
| Total/NA  | Analysis   | UnionizedNH3   |     | 1               | 111398       | 09/04/14 07:19       | TJW     | TAL TAL |
| Total/NA  | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 08:15       | FDS     | TAL TAL |

## Client Sample ID: Trip Blank 48932

Lab Sample ID: 640-48932-3

Date Collected: 08/20/14 00:00

Matrix: Water

Date Received: 08/21/14 08:15

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260B        |     | 1               | 346741       | 08/30/14 13:01       | MMT     | TAL SAV |

## Client Sample ID: MWB29S

Lab Sample ID: 640-48933-1

Date Collected: 08/19/14 18:39

Matrix: Water

Date Received: 08/21/14 08:15

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346308       | 08/28/14 16:28       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 17:51       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347113       | 09/03/14 18:15       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 19:22       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345254       | 08/21/14 13:41       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345449       | 08/22/14 09:32       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 345872       | 08/25/14 16:50       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:22       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 18:38       | FDS     | TAL TAL |

## Client Sample ID: MWB27S

Lab Sample ID: 640-48933-2

Date Collected: 08/19/14 17:29

Matrix: Water

Date Received: 08/21/14 08:15

| Prep Type         | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B        |     | 1               | 346308       | 08/28/14 16:54       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011         |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011         |     | 1               | 346192       | 08/27/14 18:03       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0        |     | 1               | 347113       | 09/03/14 18:29       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A        |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020         |     | 1               | 345970       | 08/25/14 19:29       | BWR     | TAL SAV |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB27S**

**Lab Sample ID: 640-48933-2**

**Date Collected: 08/19/14 17:29**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 7470A          |     |                 | 345254       | 08/21/14 13:41       | JKL     | TAL SAV |
| Total/NA  | Analysis   | 7470A          |     | 1               | 345449       | 08/22/14 09:41       | JKL     | TAL SAV |
| Total/NA  | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA  | Analysis   | 350.1          |     | 1               | 345872       | 08/25/14 16:50       | JME     | TAL SAV |
| Total/NA  | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:26       | GRX     | TAL SAV |
| Total/NA  | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 17:28       | FDS     | TAL TAL |

**Client Sample ID: MWB13S**

**Lab Sample ID: 640-48933-3**

**Date Collected: 08/19/14 16:19**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346308       | 08/28/14 17:19       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 18:15       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347113       | 09/03/14 18:44       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 19:37       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345254       | 08/21/14 13:41       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345449       | 08/22/14 09:44       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 345872       | 08/25/14 16:50       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:33       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 16:18       | FDS     | TAL TAL |

**Client Sample ID: MWB22S**

**Lab Sample ID: 640-48933-4**

**Date Collected: 08/19/14 15:10**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346308       | 08/28/14 17:45       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 18:27       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347113       | 09/03/14 18:58       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 19:44       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345254       | 08/21/14 13:41       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345449       | 08/22/14 09:46       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 345872       | 08/25/14 16:50       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:34       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 15:09       | FDS     | TAL TAL |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB12S**

**Date Collected: 08/19/14 14:33**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48933-5**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346308       | 08/28/14 18:11       | MMT     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 18:39       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 2               | 347297       | 09/04/14 11:05       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 19:51       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345254       | 08/21/14 13:41       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345449       | 08/22/14 09:49       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 345872       | 08/25/14 16:50       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:36       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 14:32       | FDS     | TAL TAL |

**Client Sample ID: MWB12I**

**Date Collected: 08/19/14 14:03**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48933-6**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 20:54       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 19:59       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 10:56       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:37       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 14:02       | FDS     | TAL TAL |

**Client Sample ID: MWB13I**

**Date Collected: 08/19/14 15:45**

**Date Received: 08/21/14 08:15**

**Lab Sample ID: 640-48933-7**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 21:08       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 20:06       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 10:57       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:38       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 15:44       | FDS     | TAL TAL |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB271**

**Lab Sample ID: 640-48933-8**

**Date Collected: 08/19/14 16:59**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 21:22       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 20:14       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345309       | 08/21/14 15:06       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 10:57       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:39       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 16:58       | FDS     | TAL TAL |

**Client Sample ID: MWB291**

**Lab Sample ID: 640-48933-9**

**Date Collected: 08/19/14 18:05**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 21:37       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345416       | 08/22/14 09:59       | BJB     | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 345970       | 08/25/14 14:05       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345605       | 08/24/14 14:00       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:06       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345228       | 08/21/14 11:40       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/19/14 18:04       | FDS     | TAL TAL |

**Client Sample ID: Trip Blank 48933**

**Lab Sample ID: 640-48933-10**

**Date Collected: 08/19/14 00:00**

**Matrix: Water**

**Date Received: 08/21/14 08:15**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260B        |     | 1               | 346308       | 08/28/14 12:41       | MMT     | TAL SAV |

**Client Sample ID: MWB21**

**Lab Sample ID: 640-48951-1**

**Date Collected: 08/20/14 09:51**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 22:20       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 02:16       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:06       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345564       | 08/22/14 11:58       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 09:50       | FDS     | TAL TAL |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB31**

**Lab Sample ID: 640-48951-2**

**Date Collected: 08/20/14 11:26**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 22:34       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 02:23       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:06       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345564       | 08/22/14 11:39       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 11:25       | FDS     | TAL TAL |

**Client Sample ID: MWB11I (R)**

**Lab Sample ID: 640-48951-3**

**Date Collected: 08/20/14 12:34**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 22:49       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 02:31       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:06       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:49       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 12:33       | FDS     | TAL TAL |

**Client Sample ID: MWB34I**

**Lab Sample ID: 640-48951-4**

**Date Collected: 08/20/14 13:39**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/03/14 23:03       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 02:52       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:36       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:51       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 13:38       | FDS     | TAL TAL |

**Client Sample ID: MWB32I**

**Lab Sample ID: 640-48951-5**

**Date Collected: 08/20/14 15:21**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 300.0        |     | 1               | 347223       | 09/03/14 23:46       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A        |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB321**

**Lab Sample ID: 640-48951-5**

**Date Collected: 08/20/14 15:21**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 03:00       | BWR     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:36       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:55       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 15:20       | FDS     | TAL TAL |

**Client Sample ID: FIELD BLANK 01 48951**

**Lab Sample ID: 640-48951-6**

**Date Collected: 08/20/14 16:05**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B        |     | 1               | 346586       | 08/29/14 15:25       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011         |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011         |     | 1               | 346192       | 08/27/14 18:51       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0        |     | 1               | 347223       | 09/04/14 00:01       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A        |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020         |     | 1               | 346649       | 08/29/14 03:07       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A        |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A        |     | 1               | 345923       | 08/25/14 18:19       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011   |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1        |     | 1               | 346025       | 08/26/14 10:57       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2        |     | 1               | 345446       | 08/22/14 11:57       | GRX     | TAL SAV |

**Client Sample ID: MWB325**

**Lab Sample ID: 640-48951-7**

**Date Collected: 08/20/14 15:52**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 15:54       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 19:03       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/04/14 00:15       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 03:14       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:36       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:56       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 15:51       | FDS     | TAL TAL |

TestAmerica Tallahassee

## Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB33S**

**Lab Sample ID: 640-48951-8**

**Date Collected: 08/20/14 14:45**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 16:23       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 19:15       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/04/14 00:58       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 03:22       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:25       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:36       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:53       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 14:44       | FDS     | TAL TAL |

**Client Sample ID: MWB34S**

**Lab Sample ID: 640-48951-9**

**Date Collected: 08/20/14 14:12**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 16:53       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 19:27       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 2               | 347297       | 09/04/14 11:21       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 03:29       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:28       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 2               | 346025       | 08/26/14 11:43       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:52       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 14:11       | FDS     | TAL TAL |

**Client Sample ID: MWB11S**

**Lab Sample ID: 640-48951-10**

**Date Collected: 08/20/14 13:04**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B        |     | 1               | 346586       | 08/29/14 17:22       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011         |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011         |     | 1               | 346192       | 08/27/14 19:39       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0        |     | 1               | 347223       | 09/04/14 01:27       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A        |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020         |     | 1               | 346649       | 08/29/14 03:36       | BWR     | TAL SAV |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB11S**

**Lab Sample ID: 640-48951-10**

**Date Collected: 08/20/14 13:04**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA  | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:30       | JKL     | TAL SAV |
| Total/NA  | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA  | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:36       | JME     | TAL SAV |
| Total/NA  | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:50       | GRX     | TAL SAV |
| Total/NA  | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 13:03       | FDS     | TAL TAL |

**Client Sample ID: MWB20S**

**Lab Sample ID: 640-48951-11**

**Date Collected: 08/20/14 12:00**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 17:52       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 19:51       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/04/14 01:42       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345770       | 08/25/14 15:12       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346649       | 08/29/14 03:44       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:33       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:39       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345446       | 08/22/14 11:43       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 11:59       | FDS     | TAL TAL |

**Client Sample ID: MWB3S**

**Lab Sample ID: 640-48951-12**

**Date Collected: 08/20/14 10:54**

**Matrix: Water**

**Date Received: 08/22/14 08:20**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 18:21       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 20:03       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347223       | 09/04/14 01:56       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345843       | 08/26/14 07:47       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346224       | 08/26/14 17:52       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:42       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 10:57       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345564       | 08/22/14 12:02       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 10:53       | FDS     | TAL TAL |

TestAmerica Tallahassee

# Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

**Client Sample ID: MWB2S**

**Date Collected: 08/20/14 10:20**

**Date Received: 08/22/14 08:20**

**Lab Sample ID: 640-48951-13**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 18:50       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 20:15       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347224       | 09/04/14 03:08       | DAS     | TAL SAV |
| Dissolved         | Prep       | 3005A          |     |                 | 345843       | 08/26/14 07:47       | SP      | TAL SAV |
| Dissolved         | Analysis   | 6020           |     | 1               | 346224       | 08/26/14 18:22       | BWR     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345843       | 08/26/14 07:47       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346224       | 08/26/14 18:15       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345653       | 08/25/14 09:22       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 18:45       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:14       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345564       | 08/22/14 12:04       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 10:19       | FDS     | TAL TAL |

**Client Sample ID: MWB21S**

**Date Collected: 08/20/14 09:18**

**Date Received: 08/22/14 08:20**

**Lab Sample ID: 640-48951-14**

**Matrix: Water**

| Prep Type         | Batch Type | Batch Method   | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-------------------|------------|----------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA          | Analysis   | 8260B          |     | 1               | 346586       | 08/29/14 19:20       | TF1     | TAL SAV |
| Total/NA          | Prep       | 8011           |     |                 | 345698       | 08/27/14 09:53       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 8011           |     | 1               | 346192       | 08/27/14 20:26       | SSP     | TAL SAV |
| Total/NA          | Analysis   | 300.0          |     | 1               | 347224       | 09/04/14 03:22       | DAS     | TAL SAV |
| Total Recoverable | Prep       | 3005A          |     |                 | 345843       | 08/26/14 07:47       | SP      | TAL SAV |
| Total Recoverable | Analysis   | 6020           |     | 1               | 346224       | 08/26/14 18:29       | BWR     | TAL SAV |
| Total/NA          | Prep       | 7470A          |     |                 | 345643       | 08/25/14 08:40       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 7470A          |     | 1               | 345923       | 08/25/14 16:36       | JKL     | TAL SAV |
| Total/NA          | Analysis   | 2540C-2011     |     | 1               | 345934       | 08/26/14 12:51       | LBH     | TAL SAV |
| Total/NA          | Analysis   | 350.1          |     | 1               | 346025       | 08/26/14 11:14       | JME     | TAL SAV |
| Total/NA          | Analysis   | 353.2          |     | 1               | 345564       | 08/22/14 12:03       | GRX     | TAL SAV |
| Total/NA          | Analysis   | Field Sampling |     | 1               | 111383       | 08/20/14 09:17       | FDS     | TAL TAL |

**Client Sample ID: TRIP02 BLANK 48951**

**Date Collected: 08/20/14 00:00**

**Date Received: 08/22/14 08:20**

**Lab Sample ID: 640-48951-15**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260B        |     | 1               | 346586       | 08/29/14 14:56       | TF1     | TAL SAV |

TestAmerica Tallahassee

Lab Chronicle

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

TestAmerica Job ID: 640-48932-1

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

|    |
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# Certification Summary

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

TestAmerica Job ID: 640-48932-1

## 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           | 06-30-15        |
| Georgia    | State Program | 4          |                  | 06-30-15        |
| Louisiana  | NELAP         | 6          | 30663            | 06-30-15        |
| New Jersey | NELAP         | 2          | FL012            | 06-30-15        |
| Texas      | NELAP         | 6          | T104704459-11-2  | 03-31-15        |

## 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            | 06-30-15        |
| Arizona                | State Program | 9          | AZ0710           | 01-11-15        |
| Arkansas DEQ           | State Program | 6          | 88-0689          | 09-01-14 *      |
| Florida                | NELAP         | 4          | E81010           | 06-30-15        |
| Georgia                | State Program | 4          | N/A              | 06-30-15        |
| Illinois               | NELAP         | 5          | 200041           | 10-09-14        |
| Iowa                   | State Program | 7          | 367              | 08-01-14 *      |
| Kansas                 | NELAP         | 7          | E-10253          | 10-31-14        |
| Kentucky (UST)         | State Program | 4          | 53               | 06-30-14 *      |
| Louisiana              | NELAP         | 6          | 30976            | 06-30-15        |
| Maryland               | State Program | 3          | 233              | 09-30-14        |
| Massachusetts          | State Program | 1          | M-FL094          | 06-30-15        |
| Michigan               | State Program | 5          | 9912             | 06-30-14 *      |
| New Jersey             | NELAP         | 2          | FL006            | 06-30-15        |
| North Carolina (WW/SW) | State Program | 4          | 314              | 12-31-14        |
| Oklahoma               | State Program | 6          | 9810             | 08-31-14 *      |
| Pennsylvania           | NELAP         | 3          | 68-00467         | 01-31-15        |
| Rhode Island           | State Program | 1          | LAO00307         | 12-30-14        |
| South Carolina         | State Program | 4          | 96026            | 06-30-14 *      |
| Tennessee              | State Program | 4          | TN02907          | 06-30-15        |
| Texas                  | NELAP         | 6          | T104704286-12-5  | 09-30-14        |
| USDA                   | Federal       |            | P330-13-00193    | 07-01-16        |
| Virginia               | NELAP         | 3          | 460166           | 06-14-15        |
| West Virginia DEP      | State Program | 3          | 136              | 06-30-15        |

## Laboratory: TestAmerica Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

| Authority                                                                                                        | Program     | EPA Region | Certification ID     | Expiration Date |
|------------------------------------------------------------------------------------------------------------------|-------------|------------|----------------------|-----------------|
| Florida                                                                                                          | NELAP       | 4          | E87052               | 06-30-15        |
| The following analytes are included in this report, but certification is not offered by the governing authority: |             |            |                      |                 |
| Analysis Method                                                                                                  | Prep Method | Matrix     | Analyte              |                 |
| 353.2                                                                                                            |             | Water      | Nitrate Nitrite as N |                 |
| Total Nitrogen                                                                                                   |             | Water      | Nitrogen, Total      |                 |

\* Certification renewal pending - certification considered valid.

TestAmerica Tallahassee

## Method Summary

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

TestAmerica Job ID: 640-48932-1

| Method                             | Method Description                        | Protocol | Laboratory |
|------------------------------------|-------------------------------------------|----------|------------|
| 8260B                              | Volatile Organic Compounds (GC/MS)        | SW846    | TAL SAV    |
| 8011                               | EDB, DBCP, and 1,2,3-TCP (GC)             | SW846    | TAL SAV    |
| 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    |
| 2540 D-2011                        | Total Suspended Solids Dried at 103-105°C | SM       | TAL SAV    |
| 2540C-2011                         | Total Dissolved Solids (Dried at 180 °C)  | 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    |
| 5210B-2011                         | BOD, 5-Day                                | SM       | TAL SAV    |
| 5310 B-2011                        | Organic Carbon, Total (TOC)               | SM       | TAL SAV    |
| SM 5220D                           | COD                                       | SM       | TAL SAV    |
| Total Nitrogen                     | Nitrogen, Total                           | EPA      | TAL SAV    |
| UnionizedNH3                       | Ammonia, Unionized                        | FL-DEP   | TAL TAL    |
| Field Sampling                     | Field Sampling                            | EPA      | TAL TAL    |
| 9222D Fecal Coliform               | SM 9222D Fecal Coliform by MF             | NONE     |            |
| (Diversified) Chlorophyll a (ENCO) | SM 10200H Chlorophyll-A                   | NONE     | ENCO       |

### 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

TestAmerica Tallahassee

## Sample Summary

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

TestAmerica Job ID: 640-48932-1

| Lab Sample ID | Client Sample ID     | Matrix | Collected      | Received       |
|---------------|----------------------|--------|----------------|----------------|
| 640-48932-1   | SW-1                 | Water  | 08/20/14 07:40 | 08/21/14 08:15 |
| 640-48932-2   | SW-3                 | Water  | 08/20/14 08:15 | 08/21/14 08:15 |
| 640-48932-3   | Trip Blank 48932     | Water  | 08/20/14 00:00 | 08/21/14 08:15 |
| 640-48933-1   | MWB29S               | Water  | 08/19/14 18:39 | 08/21/14 08:15 |
| 640-48933-2   | MWB27S               | Water  | 08/19/14 17:29 | 08/21/14 08:15 |
| 640-48933-3   | MWB13S               | Water  | 08/19/14 16:19 | 08/21/14 08:15 |
| 640-48933-4   | MWB22S               | Water  | 08/19/14 15:10 | 08/21/14 08:15 |
| 640-48933-5   | MWB12S               | Water  | 08/19/14 14:33 | 08/21/14 08:15 |
| 640-48933-6   | MWB12I               | Water  | 08/19/14 14:03 | 08/21/14 08:15 |
| 640-48933-7   | MWB13I               | Water  | 08/19/14 15:45 | 08/21/14 08:15 |
| 640-48933-8   | MWB27I               | Water  | 08/19/14 16:59 | 08/21/14 08:15 |
| 640-48933-9   | MWB29I               | Water  | 08/19/14 18:05 | 08/21/14 08:15 |
| 640-48933-10  | Trip Blank 48933     | Water  | 08/19/14 00:00 | 08/21/14 08:15 |
| 640-48951-1   | MWB2I                | Water  | 08/20/14 09:51 | 08/22/14 08:20 |
| 640-48951-2   | MWB3I                | Water  | 08/20/14 11:26 | 08/22/14 08:20 |
| 640-48951-3   | MWB11I (R)           | Water  | 08/20/14 12:34 | 08/22/14 08:20 |
| 640-48951-4   | MWB34I               | Water  | 08/20/14 13:39 | 08/22/14 08:20 |
| 640-48951-5   | MWB32I               | Water  | 08/20/14 15:21 | 08/22/14 08:20 |
| 640-48951-6   | FIELD BLANK 01 48951 | Water  | 08/20/14 16:05 | 08/22/14 08:20 |
| 640-48951-7   | MWB32S               | Water  | 08/20/14 15:52 | 08/22/14 08:20 |
| 640-48951-8   | MWB33S               | Water  | 08/20/14 14:45 | 08/22/14 08:20 |
| 640-48951-9   | MWB34S               | Water  | 08/20/14 14:12 | 08/22/14 08:20 |
| 640-48951-10  | MWB11S               | Water  | 08/20/14 13:04 | 08/22/14 08:20 |
| 640-48951-11  | MWB20S               | Water  | 08/20/14 12:00 | 08/22/14 08:20 |
| 640-48951-12  | MWB3S                | Water  | 08/20/14 10:54 | 08/22/14 08:20 |
| 640-48951-13  | MWB2S                | Water  | 08/20/14 10:20 | 08/22/14 08:20 |
| 640-48951-14  | MWB21S               | Water  | 08/20/14 09:18 | 08/22/14 08:20 |
| 640-48951-15  | TRIP02 BLANK 48951   | Water  | 08/20/14 00:00 | 08/22/14 08:20 |

TestAmerica Tallahassee

DELT Project # 140820-01

0  
1  
2  
3  
4  
5

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TAL-8210 (0713)

9/11/2014

# Project Login Form

DELI Project Number: 140820.01 Client Name: Test American

Date Received: 08/20/14 Received by: AAA PLF Completed by: JMO

## 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      | 1-0                | 3.4                  |
| 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)?                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2 If Yes, were the custody seals intact? If no, see comments below.                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3 Were custody seals used for sample containers(s)?                                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4 If Yes, were the custody seals intact? If no, see comments below.                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5 Did custody papers accompany samples? (such as COC, specifics, etc.)                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6 Were the custody papers properly filled out?                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 Were the sample containers received in good condition? (If no, see comments)           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 8 Were the sample container labels properly filled out? (date, time, preservation, etc.) | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 9 Were the labels on the sample containers and custody papers consistent?                | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 10 Were the samples in the correct containers for analysis?                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 11 Were the correct preservations used for each sample container according to analysis?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 12 Were the samples received within the appropriate holding times?                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 13 Were pH preservation checks made?                                                     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 14 Were the sample containers provided by DEL, Inc.?                                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 15 Was this a sample kit provided by DEL, Inc.? If Yes, DEL, Inc. Kit #: <u>NA</u>       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 16 Were the VOA vials free of headspace? (No bubbles present)                            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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:

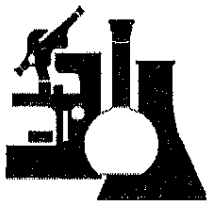
Note: VOA vials will not be checked for pH at sample login. The testing laboratory will perform that check during analysis. The pH of microbiological samples will not be checked, due to the risk of contamination. The pH of Oil & Grease samples will not be checked during sample login, due to the potential 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? |
|---------------|------------|---------------------|-----------------|------------------------------------------|----------------------------------------------------|--------------------|--------------|-------------------------------|
| 28557         | Fecal Coli | 1                   | -               | Yes <u>No</u>                            | -                                                  | -                  | -            | 100ml P                       |
| -28558        |            |                     |                 | 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:



## Diversified Environmental Laboratories, Inc.

Amy Atkins  
Test America  
2846 Industrial Plaza Drive  
Tallahassee, FL 32301

August 26, 2014

Re: DELI Project Number: **140820.01**  
Client PO Number:  
Client Project Description: **Trail Ridge Landfill**

Dear Ms. Atkins:

Enclosed is the report of laboratory analysis for the following samples:

| Sample Number | Sample Description | Date/Time Collected | Date/Time Received |
|---------------|--------------------|---------------------|--------------------|
| 28557         | SW-1               | 08/20/14 07:40      | 08/20/14 10:35     |
| 28558         | SW-3               | 08/20/14 08:15      | 08/20/14 10:35     |

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.

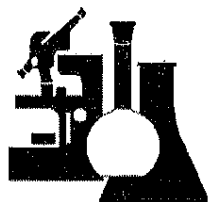
Cover Page 1 of 1

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](mailto:info@delilab.com)  
Website [www.delilab.com](http://www.delilab.com)



# Diversified Environmental Laboratories, Inc

## Case Narrative

August 26, 2014

Test America  
Amy Atkins

Re: DELI Project Number: 140820.01  
Client Project Description: Trail Ridge Landfill

Enclosed is the case narrative for the above referenced project:

Three dilutions were set for sample 28557 (1:4, 1:10 and 1:50). The 1:50 dilution was the only one that fell within the method range and therefore was the only dilution used in the calculation.

Three dilutions were set for sample 28558 (1:4, 1:10 and 1:50). The 1:4 dilution was smeared and therefore not used in the calculation. The result for sample 28558 is based on the average of 2 dilutions at 1:10 and 1:50, both of which were outside the method range. The data was therefore flagged.

**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.  
3653 Regent Boulevard  
Suite 509  
Jacksonville, FL 32224



Phone 904.807.9625  
Fax 904.807.9627  
Email [info@delilab.com](mailto:info@delilab.com)  
Website [www.delilab.com](http://www.delilab.com)



# Diversified Environmental Laboratories, Inc.

## Report of Laboratory Analysis

|                        |
|------------------------|
| DELI<br>Project Number |
| <b>140820.01</b>       |

|                     |
|---------------------|
| <b>Test America</b> |
|---------------------|

|                             |
|-----------------------------|
| Project Description         |
| <b>Trail Ridge Landfill</b> |

Report Date: August 26, 2014

DELI Sample Number 28557  
Sample Designation SW-1

Matrix Non Potable Water  
Date/Time Collected 08/20/14 07:40

| Parameters      | Method    | Results | Footnote | Units     | DF | MDL | PQL | Prep Date/Time | Analyst | Analysis Date/Time |
|-----------------|-----------|---------|----------|-----------|----|-----|-----|----------------|---------|--------------------|
| Coliform, Fecal | SM 9222 D | 1350    |          | cfu/100mL | 50 | 50  | 50  |                | JMD/ADA | 08/20/14 10:45     |





# Diversified Environmental Laboratories, Inc.

## Report of Laboratory Analysis

|                        |
|------------------------|
| DELI<br>Project Number |
| <b>140820.01</b>       |

|                             |
|-----------------------------|
| <b>Test America</b>         |
| Project Description         |
| <b>Trail Ridge Landfill</b> |

Report Date: August 26, 2014

DELI Sample Number 28558  
Sample Designation SW-3

Matrix Non Potable Water  
Date/Time Collected 08/20/14 08:15

| Parameters      | Method    | Results | Footnote | Units     | DF | MDL | PQL | Prep Date/Time | Analyst | Analysis Date/Time |
|-----------------|-----------|---------|----------|-----------|----|-----|-----|----------------|---------|--------------------|
| Coliform, Fecal | SM 9222 D | 158     | B        | cfu/100mL | 10 | 10  | 10  |                | JMD/ADA | 08/20/14 10:45     |





# Diversified Environmental Laboratories, Inc.

## Report of Laboratory Analysis

|                        |
|------------------------|
| DELI<br>Project Number |
| <b>140820.01</b>       |

|                     |
|---------------------|
| <b>Test America</b> |
|---------------------|

|                             |
|-----------------------------|
| Project Description         |
| <b>Trail Ridge Landfill</b> |

Report Date: August 26, 2014

### Footnotes

|    |                                                                |
|----|----------------------------------------------------------------|
| B  | Results based upon colony counts outside the acceptable range. |
| NA | Not Applicable                                                 |
| ND | Not Detected/None Detected                                     |





|                               |       |                    |          |           |       |                            |  |          |         |          |       |                           |  |         |            |
|-------------------------------|-------|--------------------|----------|-----------|-------|----------------------------|--|----------|---------|----------|-------|---------------------------|--|---------|------------|
| Batch No: B7546               |       | Associated Samples |          |           |       |                            |  |          |         |          |       |                           |  |         |            |
| TestCode: Coli Fec (MF) 9222D |       | 28557, 28558       |          |           |       |                            |  |          |         |          |       |                           |  |         |            |
| Compound                      | Blank | LCS Spike          | LCS %Rec | LCSD %Rec | RPD % | ---QC Limits---<br>RPD LCS |  | MS Spike | MS %Rec | MSD %Rec | RPD % | ---QC Limits---<br>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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Website [www.delilab.com](http://www.delilab.com)



# **ENCO Laboratories**

**Accurate. Timely. Responsive. Innovative.**

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945

Friday, August 29, 2014

Test America - Tampa (TE022)

Attn: Amy Atkins

6712 Benjamin Road, Suite 100

Tampa, FL 33634

**RE: Laboratory Results for**

**Project Number: 640-48932, Project Name/Desc: Test America -**

**ENCO Workorder(s): A404901**

Dear Amy Atkins,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, August 21, 2014.

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,

David Camacho

Project Manager

Enclosure(s)



www.encolabs.com

### SAMPLE SUMMARY/LABORATORY CHRONICLE

|                        |                           |                                |                                 |
|------------------------|---------------------------|--------------------------------|---------------------------------|
| <b>Client ID:</b> SW-1 | <b>Lab ID:</b> A404901-01 | <b>Sampled:</b> 08/20/14 07:40 | <b>Received:</b> 08/21/14 08:55 |
|------------------------|---------------------------|--------------------------------|---------------------------------|

| <u>Parameter</u> | <u>Hold Date/Time(s)</u> | <u>Prep Date/Time(s)</u> | <u>Analysis Date/Time(s)</u> |
|------------------|--------------------------|--------------------------|------------------------------|
| SM 10200H-2001   | 08/22/14 07:40 09/04/14  | 08/21/14 11:30           | 08/26/14 15:00               |

|                        |                           |                                |                                 |
|------------------------|---------------------------|--------------------------------|---------------------------------|
| <b>Client ID:</b> SW-3 | <b>Lab ID:</b> A404901-02 | <b>Sampled:</b> 08/20/14 08:15 | <b>Received:</b> 08/21/14 08:55 |
|------------------------|---------------------------|--------------------------------|---------------------------------|

| <u>Parameter</u> | <u>Hold Date/Time(s)</u> | <u>Prep Date/Time(s)</u> | <u>Analysis Date/Time(s)</u> |
|------------------|--------------------------|--------------------------|------------------------------|
| SM 10200H-2001   | 08/22/14 08:15 09/04/14  | 08/21/14 11:30           | 08/26/14 15:00               |



www.encolabs.com

### SAMPLE DETECTION SUMMARY

Client ID: SW-1 Lab ID: A404901-01

| Analyte       | Results | Flag | MDL  | PQL  | Units | Method         | Notes |
|---------------|---------|------|------|------|-------|----------------|-------|
| Chlorophyll a | 0.67    |      | 0.50 | 0.50 | mg/m3 | SM 10200H-2001 |       |

Client ID: SW-3 Lab ID: A404901-02

| Analyte       | Results | Flag | MDL  | PQL  | Units | Method         | Notes |
|---------------|---------|------|------|------|-------|----------------|-------|
| Chlorophyll a | 2.1     |      | 0.50 | 0.50 | mg/m3 | SM 10200H-2001 |       |

# ANALYTICAL RESULTS

**Description:** SW-1 **Lab Sample ID:** A404901-01 **Received:** 08/21/14 08:55  
**Matrix:** Water **Sampled:** 08/20/14 07:40 **Work Order:** A404901  
**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]^ | 0.67    |      | mg/m3 | 1  | 0.50 | 0.50 | 4H21041 | SM 10200H-2001 | 08/26/14 15:00 | M1N |       |

**Description:** SW-3 **Lab Sample ID:** A404901-02 **Received:** 08/21/14 08:55  
**Matrix:** Water **Sampled:** 08/20/14 08:15 **Work Order:** A404901  
**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]^ | 2.1     |      | mg/m3 | 1  | 0.50 | 0.50 | 4H21041 | SM 10200H-2001 | 08/26/14 15:00 | M1N |       |

# QUALITY CONTROL DATA

## Classical Chemistry Parameters - Quality Control

Batch 4H21041 - NO PREP

Blank (4H21041-BLK1)

Prepared: 08/21/2014 11:30 Analyzed: 08/26/2014 15:00

| Analyte       | Result | Flaq | POL  | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Chlorophyll a | 0.50   | U    | 0.50 | mg/m3 |             |               |      |             |     |           |       |

Duplicate (4H21041-DUP1)

Prepared: 08/21/2014 11:30 Analyzed: 08/26/2014 15:00

Source: A404895-01

| Analyte       | Result | Flaq | POL  | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------------|--------|------|------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
| Chlorophyll a | 8.0    |      | 0.50 | mg/m3 |             | 8.0           |      |             | 0   | 25        |       |

## FLAGS/NOTES AND DEFINITIONS

|            |                                                                                                                                                                                                         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PQL</b> | PQL: Practical Quantitation Limit.                                                                                                                                                                      |
| <b>B</b>   | Results are based upon membrane filter colony counts that are outside the method indicated ideal range.                                                                                                 |
| <b>I</b>   | The reported value is between the laboratory method detection limit (MDL) and the practical quantitation limit (PQL).                                                                                   |
| <b>J</b>   | Estimated value.                                                                                                                                                                                        |
| <b>K</b>   | Off-scale low; Actual value is known to be less than the value given.                                                                                                                                   |
| <b>L</b>   | Off-scale high; Actual value is known to be greater than value given.                                                                                                                                   |
| <b>M</b>   | Presence of analyte is verified but not quantified; the actual value is less than the MRL but greater than the MDL.                                                                                     |
| <b>N</b>   | Presumptive evidence of presence of material.                                                                                                                                                           |
| <b>O</b>   | Sampled, but analysis lost or not performed.                                                                                                                                                            |
| <b>Q</b>   | Sample exceeded the accepted holding time.                                                                                                                                                              |
| <b>T</b>   | 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.                                 |
| <b>U</b>   | Indicates that the compound was analyzed for but not detected.                                                                                                                                          |
| <b>V</b>   | Indicates that the analyte was detected in both the sample and the associated method blank.                                                                                                             |
| <b>Y</b>   | The laboratory analysis was from an improperly preserved sample. The data may not be accurate.                                                                                                          |
| <b>Z</b>   | Too many colonies were present (TNTC); the numeric value represents the filtration volume.                                                                                                              |
| <b>?</b>   | 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. |
| <b>*</b>   | Not reported due to interference.                                                                                                                                                                       |

2846 Industrial Plaza Drive

Tallahassee, FL 32301  
Phone: 850.878.3994 Fax:

## Chain of Custody Record

017349

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING  
**TestAmerica Laboratories, Inc.**

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:[illegible]



| SAMPLING DATA                                                                                                                                                                                                               |              |               |        |                                                                                                                 |                               |                                                      |  |                                                  |  |                                       |  |                         |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------|-----------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------|--|--------------------------------------------------|--|---------------------------------------|--|-------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION:<br>DAN ARMOUR / PRO-TECH                                                                                                                                                                  |              |               |        | SAMPLER(S) SIGNATURE(S):<br> |                               |                                                      |  | SAMPLING INITIATED AT: 0815                      |  | SAMPLING ENDED AT: NR                 |  |                         |  |
| PUMP OR TUBING DEPTH IN WELL (feet): NA                                                                                                                                                                                     |              |               |        | TUBING MATERIAL CODE: NA                                                                                        |                               | FIELD-FILTERED: Y <input checked="" type="radio"/> N |  | FILTER SIZE:<br>µm<br>Filtration Equipment Type: |  |                                       |  |                         |  |
| FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)                                                                                                                                                                    |              |               |        |                                                                                                                 |                               | DUPLICATE: Y <input checked="" type="radio"/> 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:<br>SW-3 = SURFACE WATER POINT No stream                                                                                                                                                                            |              |               |        |                                                                                                                 |                               |                                                      |  |                                                  |  |                                       |  |                         |  |
| 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 = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify) |              |               |        |                                                                                                                 |                               |                                                      |  |                                                  |  |                                       |  |                         |  |

640-48951



Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB 273</b>       | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                             |                                                         |                                                                 |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                            | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>5.5</b> feet to <b>15.5</b> feet | STATIC DEPTH TO WATER (feet): <b>7.15</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                           |                                                         |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>128.42</b>                                                                                                                                                                                                                                                 |                                                         | GROUNDWATER ELEVATION (ft NGVD):                                |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br><b>= (15.50 feet - 7.15 feet) X 0.163 gallons/foot = 1.36 gallons</b>                                                                                     |                                                         |                                                                 |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br><b>= 0.3 gallons + (0.006 gallons/foot X 15.50 feet) + 0.05 gallons = 0.44 gallons</b>                                                    |                                                         |                                                                 |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.50</b>                                                                                                                                                                                                                                   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.50</b> | PURGING INITIATED AT: <b>1709</b>                               | PURGING ENDED AT: <b>1727</b>             | TOTAL VOLUME PURGED (gallons): <b>3.00</b> |                     |            |                                           |                                                         |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                        | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                  | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (ohm-cm units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (ohm-cm units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1719                                                                                                                                                                                                                                                                                        | 1.50                                                    | 1.50                                                            | 0.15                                      | 7.26                                       | 5.17                | 25.0       | 206                                       | 0.0                                                     | 3.34             | 61       |       |      |
| 1722                                                                                                                                                                                                                                                                                        | 0.45                                                    | 1.95                                                            | 0.15                                      | 7.27                                       | 5.17                | 24.9       | 206                                       | 0.0                                                     | 3.68             | 62       |       |      |
| 1725                                                                                                                                                                                                                                                                                        | 0.45                                                    | 2.40                                                            | 0.15                                      | 7.27                                       | 5.15                | 24.9       | 205                                       | 0.0                                                     | 3.72             | 60       |       |      |
| 1728                                                                                                                                                                                                                                                                                        | 0.45                                                    | 2.85                                                            | 0.15                                      | 7.27                                       | 5.15                | 24.9       | 205                                       | 0.0                                                     | 3.69             | 61       | 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<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |              |               |        | SAMPLER(S) SIGNATURE(S):                                       |                               |          |  | SAMPLING INITIATED AT: <b>1729</b>                                     |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>13.50</b>                                                                                                                                                                          |              |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> <b>μm</b> |  | FILTER SIZE:                 |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |              |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>                |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                                        |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                                        |  |                              |  |
| <b>* SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                         |              |               |        |                                                                |                               |          |  |                                                                        |  |                              |  |
| REMARKS: <b>No Shale</b>                                                                                                                                                                                                   |              |               |        |                                                                |                               |          |  |                                                                        |  |                              |  |
| 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; RFP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB133</b>        | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           |                 |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|-------------|-------------------------------------------|---------------------------------------------------------|------------------|-----------|-----------------|------|
| WELL DIAMETER (inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                   | TUBING DIAMETER (inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>4.56</b> feet to <b>26.56</b> feet | STATIC DEPTH TO WATER (feet): <b>16.72</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |             |                                           |                                                         |                  |           |                 |      |
| WELL ELEVATION TOG (11 NGVD): <b>126.06</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (11 NGVD): <b>109.34</b>                    |                                            |                                            |                     |             |                                           |                                                         |                  |           |                 |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= ( <b>26.56</b> feet - <b>16.72</b> feet ) X <b>0.163</b> gallons/foot = <b>1.60</b> gallons                                                                                                                                                                                                    |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           |                 |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>6.006</b> gallons/foot X <b>26.56</b> feet ) + <b>0.05</b> gallons = <b>0.51</b> gallons                                                                                                                                                             |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           |                 |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21.56</b>                                                                                                                                                                                                                                                                                                                                                                          | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21.56</b> | PURGING INITIATED AT: <b>1600</b>                                 | PURGING ENDED AT: <b>1619</b>              | TOTAL VOLUME PURGED (gallons): <b>3.42</b> |                     |             |                                           |                                                         |                  |           |                 |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                               | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                    | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C)  | COND. (ohm-cm units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (ohm-cm units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV)  | COLOR           | ODOR |
| <b>1609</b>                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>1.62</b>                                             | <b>1.62</b>                                                       | <b>0.18</b>                                | <b>17.31</b>                               | <b>5.88</b>         | <b>16.4</b> | <b>325</b>                                | <b>0.3</b>                                              | <b>8.84</b>      | <b>88</b> |                 |      |
| <b>1612</b>                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>0.54</b>                                             | <b>2.16</b>                                                       | <b>0.18</b>                                | <b>17.31</b>                               | <b>5.90</b>         | <b>16.5</b> | <b>329</b>                                | <b>0.4</b>                                              | <b>9.62</b>      | <b>89</b> |                 |      |
| <b>1615</b>                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>0.54</b>                                             | <b>2.70</b>                                                       | <b>0.18</b>                                | <b>17.32</b>                               | <b>5.88</b>         | <b>16.5</b> | <b>325</b>                                | <b>0.4</b>                                              | <b>9.11</b>      | <b>89</b> |                 |      |
| <b>1618</b>                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>0.54</b>                                             | <b>3.24</b>                                                       | <b>0.18</b>                                | <b>17.32</b>                               | <b>5.89</b>         | <b>16.5</b> | <b>329</b>                                | <b>0.4</b>                                              | <b>9.41</b>      | <b>89</b> | <b>YELLOW -</b> |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           | <b>BROWN</b>    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           | <b>TINT</b>     |      |
| 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" = 6.88<br>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" = 0.018<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                   |                                            |                                            |                     |             |                                           |                                                         |                  |           |                 |      |

SAMPLING DATA

|                                                                                                                                                                                                                             |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------|----------------------------------------------------------------|-------------------------------|----------|--|--------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                              |              |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                    |                               |          |  | SAMPLING INITIATED AT: <b>1619</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>21.56</b>                                                                                                                                                                           |              |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>NR</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                    |              |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |              |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                              | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
|                                                                                                                                                                                                                             |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE C-O-2 AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                        |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                   |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| MATERIAL CODES: AG = Amber Glass; CQ = 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; RFPF = 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: ± 6% 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MW13225</b>       | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                         |                                                              |                                            |                                            |                     |            |                                          |                                                        |                  |          |       |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|------------|------------------------------------------|--------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                  | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>16</b> feet to <b>26</b> feet | STATIC DEPTH TO WATER (feet): <b>12.57</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                          |                                                        |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>126.97</b>                                                                                                                                                                                                                                                                                                                                                                                       |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>114.46</b>               |                                            |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet --      feet) X      gallons/foot =      gallons                                                                                                                                                                                                                                  |                                                         |                                                              |                                            |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>26.00</b> feet) + <b>0.05</b> gallons = <b>0.5</b> gallons                                                                                                                                                              |                                                         |                                                              |                                            |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21.00</b>                                                                                                                                                                                                                                                                                                                                                                         | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21.00</b> | PURGING INITIATED AT: <b>1450</b>                            | PURGING ENDED AT: <b>1510</b>              | TOTAL VOLUME PURGED (gallons): <b>3.60</b> |                     |            |                                          |                                                        |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                              | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                               | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (micro units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1500                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.80                                                    | 1.80                                                         | 0.18                                       | 12.96                                      | 5.96                | 25.8       | 273                                      | 0.1                                                    | 4.58             | 4        |       |      |
| 1503                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.54                                                    | 2.34                                                         | 0.18                                       | 12.97                                      | 5.95                | 25.7       | 273                                      | 0.1                                                    | 3.82             | 2        |       |      |
| 1506                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.54                                                    | 2.88                                                         | 0.18                                       | 12.97                                      | 5.97                | 25.7       | 273                                      | 0.1                                                    | 3.80             | 2        |       |      |
| 1509                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.54                                                    | 3.42                                                         | 0.18                                       | 12.97                                      | 5.98                | 25.7       | 274                                      | 0.1                                                    | 3.61             | 1        | 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; 8" = 2.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                              |                                            |                                            |                     |            |                                          |                                                        |                  |          |       |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |            |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------|----------------------------------------------------------------|-------------------------------|----------|--|--------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |            |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                    |                               |          |  | SAMPLING INITIATED AT: <b>1510</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>21.00</b>                                                                                                                                                                          |            |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>NR</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |            |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |            |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                         |            |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                  |            |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| 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; RFP = 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 82-160, 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)

640-48951

Revision Date: February 12, 2009

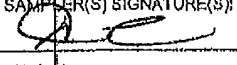
Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB123</b>        | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                  |                                            |                                            |                     |            |                                           |                                                         |                  |          |        |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|--------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                   | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>14.5</b> feet to <b>24.5</b> feet | STATIC DEPTH TO WATER (feet): <b>10.90</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                           |                                                         |                  |          |        |      |
| WELL ELEVATION TOC (ft NGVD): <b>124.63</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>113.73</b>                   |                                            |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                                                                                                                                                                   |                                                         |                                                                  |                                            |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>24.50</b> feet) + <b>0.05</b> gallons = <b>0.5</b> gallons                                                                                                                                                               |                                                         |                                                                  |                                            |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b>                                                                                                                                                                                                                                                                                                                                                                          | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b> | PURGING INITIATED AT: <b>1414</b>                                | PURGING ENDED AT: <b>1433</b>              | TOTAL VOLUME PURGED (gallons): <b>3.40</b> |                     |            |                                           |                                                         |                  |          |        |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                               | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                   | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (ohm-cm units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (ohm-cm units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOR |
| 1423                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.70                                                    | 1.70                                                             | 0.17                                       | 11.08                                      | 5.78                | 25.7       | 408                                       | 0.2                                                     | 6.29             | 68       |        |      |
| 1426                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.51                                                    | 2.21                                                             | 0.17                                       | 11.08                                      | 5.77                | 25.9       | 409                                       | 0.3                                                     | 5.43             | 65       |        |      |
| 1429                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.51                                                    | 2.72                                                             | 0.17                                       | 11.08                                      | 5.77                | 25.6       | 408                                       | 0.3                                                     | 5.29             | 64       |        |      |
| 1432                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.51                                                    | 3.23                                                             | 0.17                                       | 11.08                                      | 5.78                | 25.6       | 408                                       | 0.3                                                     | 5.23             | 63       | SET.   |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                  |                                            |                                            |                     |            |                                           |                                                         |                  |          | 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<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                  |                                            |                                            |                     |            |                                           |                                                         |                  |          |        |      |

SAMPLING DATA

|                                                                                                                                                                                                                             |              |                                                                                                              |        |                                                              |                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------|-------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                              |              | SAMPLER(S) SIGNATURE(S):  |        | SAMPLING INITIATED AT: <b>1433</b>                           | SAMPLING ENDED AT: <b>NR</b>  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>19.50</b>                                                                                                                                                                           |              | TUBING MATERIAL CODE: <b>T</b>                                                                               |        | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> | FILTER SIZE: <b>NR</b>        |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                    |              | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced)                                               |        | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |                               |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |              | SAMPLE PRESERVATION                                                                                          |        | INTENDED ANALYSIS AND/OR METHOD                              | SAMPLING EQUIPMENT CODE       |
| SAMPLE ID CODE                                                                                                                                                                                                              | # CONTAINERS | MATERIAL CODE                                                                                                | VOLUME | PRESERVATIVE USED                                            | TOTAL VOL ADDED IN FIELD (mL) |
|                                                                                                                                                                                                                             |              |                                                                                                              |        |                                                              |                               |
| <b>* SEE SAMPLE C-O-L AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                        |              |                                                                                                              |        |                                                              |                               |
| REMARKS: <b>No Shred</b>                                                                                                                                                                                                    |              |                                                                                                              |        |                                                              |                               |
| 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; RFPF = Reverse Flow Peristaltic Pump; 9M = 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: ± 6% 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB12I</b>        | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                           |                                                         |                                                                |                                           |                                            |                     |            |                                |                                                     |                  |          |       |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|--------------------------------|-----------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                          | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>6.5</b> feet to <b>7.5</b> feet | STATIC DEPTH TO WATER (feet): <b>7.98</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                |                                                     |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>124.62</b>                                                                                                                                                                                                                                               |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>116.64</b>                 |                                           |                                            |                     |            |                                |                                                     |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= { } feet - { } feet X { } gallons/foot = { } gallons                                                                                                  |                                                         |                                                                |                                           |                                            |                     |            |                                |                                                     |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>71.50</b> feet) + <b>0.05</b> gallons = <b>0.78</b> gallons                     |                                                         |                                                                |                                           |                                            |                     |            |                                |                                                     |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>66.50</b>                                                                                                                                                                                                                                 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>66.50</b> | PURGING INITIATED AT: <b>1342</b>                              | PURGING ENDED AT: <b>1403</b>             | TOTAL VOLUME PURGED (gallons): <b>5.68</b> |                     |            |                                |                                                     |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                      | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                 | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1353                                                                                                                                                                                                                                                                                      | 3.08                                                    | 3.08                                                           | 0.28                                      | 8.08                                       | 5.32                | 25.9       | 38                             | 0.0                                                 | 4.31             | -129     |       |      |
| 1356                                                                                                                                                                                                                                                                                      | 0.84                                                    | 3.92                                                           | 0.28                                      | 8.08                                       | 5.35                | 25.9       | 39                             | 0.0                                                 | 3.99             | -131     |       |      |
| 1359                                                                                                                                                                                                                                                                                      | 0.84                                                    | 4.76                                                           | 0.28                                      | 8.08                                       | 5.34                | 25.8       | 37                             | 0.1                                                 | 3.44             | -132     |       |      |
| 1402                                                                                                                                                                                                                                                                                      | 0.84                                                    | 5.60                                                           | 0.28                                      | 8.08                                       | 5.35                | 25.8       | 39                             | 0.1                                                 | 3.71             | -133     | NONE  |      |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal/Ft): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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: <b>DAN ARMOUR / PRD-TECH</b>                                                                                                                                                              |              |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                    |                               |          |  | SAMPLING INITIATED AT: <b>1403</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>66.50</b>                                                                                                                                                                           |              |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>µm</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                    |              |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                              |              |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                              | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                        |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                   |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| 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; RFPF = 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

640-48951



Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB27I</b>        | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                  |                                           |                                            |                     |            |                         |                                                      |                  |          |       |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------|------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                   | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>52.5</b> feet to <b>62.5</b> feet | STATIC DEPTH TO WATER (feet): <b>6.62</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                         |                                                      |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>128.63</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>122.01</b>                   |                                           |                                            |                     |            |                         |                                                      |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                                                                                                                                                                   |                                                         |                                                                  |                                           |                                            |                     |            |                         |                                                      |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>62.50</b> feet) + <b>0.05</b> gallons = <b>0.43</b> gallons                                                                                                                                                              |                                                         |                                                                  |                                           |                                            |                     |            |                         |                                                      |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>57.50</b>                                                                                                                                                                                                                                                                                                                                                                          | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>57.50</b> | PURGING INITIATED AT: <b>1638</b>                                | PURGING ENDED AT: <b>1659</b>             | TOTAL VOLUME PURGED (gallons): <b>5.46</b> |                     |            |                         |                                                      |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                               | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                   | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (ohm-cm) or µS/cm | DISSOLVED OXYGEN (circle units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1649                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.86                                                    | 2.86                                                             | 0.26                                      | 6.79                                       | 5.54                | 22.0       | 51                      | 0.0                                                  | 4.51             | 37       |       |      |
| 1652                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.78                                                    | 3.64                                                             | 0.26                                      | 6.79                                       | 5.52                | 22.0       | 50                      | 0.0                                                  | 4.44             | 37       |       |      |
| 1655                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.78                                                    | 4.42                                                             | 0.26                                      | 6.79                                       | 5.52                | 21.9       | 50                      | 0.0                                                  | 4.62             | 37       |       |      |
| 1658                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.78                                                    | 5.20                                                             | 0.26                                      | 6.80                                       | 5.55                | 21.9       | 51                      | 0.0                                                  | 4.59             | 37       | 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<br>TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                  |                                           |                                            |                     |            |                         |                                                      |                  |          |       |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |            |               |        |                                                                |                                |          |  |                                                              |  |                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------|----------------------------------------------------------------|--------------------------------|----------|--|--------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / BRO-TECH</b>                                                                                                                                                             |            |               |        | SAMPLER(S) SIGNATURE(S):                                       |                                |          |  | SAMPLING INITIATED AT: <b>1659</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>57.50</b>                                                                                                                                                                          |            |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                                |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>µm</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |            |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                                |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |            |               |        | SAMPLE PRESERVATION                                            |                                |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL. ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE 6-0-6 AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |            |               |        |                                                                |                                |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SHEET</b>                                                                                                                                                                                                   |            |               |        |                                                                |                                |          |  |                                                              |  |                              |  |
| 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; RFP = 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 ± 6 NTU or ± 10% (whichever is greater)

**640-50 640-48951** Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB29I</b>        | SAMPLE ID: | DATE: <b>8-19-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                             |                                                         |                                                                  |                                           |                                            |                     |            |                                          |                                                        |                  |          |       |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|------------------------------------------|--------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                            | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>53.5</b> feet to <b>63.5</b> feet | STATIC DEPTH TO WATER (feet): <b>7.72</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                          |                                                        |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>138.08</b>                                                                                                                                                                                                                                                 |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>130.66</b>                   |                                           |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                            |                                                         |                                                                  |                                           |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>63.50</b> feet) + <b>0.05</b> gallons = <b>0.73</b> gallons                       |                                                         |                                                                  |                                           |                                            |                     |            |                                          |                                                        |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>58.50</b>                                                                                                                                                                                                                                   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>58.50</b> | PURGING INITIATED AT: <b>1744</b>                                | PURGING ENDED AT: <b>1805</b>             | TOTAL VOLUME PURGED (gallons): <b>5.25</b> |                     |            |                                          |                                                        |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                        | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                   | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (micro units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1955                                                                                                                                                                                                                                                                                        | 2.75                                                    | 2.75                                                             | 0.25                                      | 7.57                                       | 5.17                | 23.6       | 40                                       | 0.2                                                    | 5.64             | 61       |       |      |
| 1758                                                                                                                                                                                                                                                                                        | 0.45                                                    | 3.50                                                             | 0.25                                      | 7.57                                       | 5.19                | 23.6       | 40                                       | 0.2                                                    | 4.27             | 64       |       |      |
| 1801                                                                                                                                                                                                                                                                                        | 0.75                                                    | 4.25                                                             | 0.25                                      | 7.57                                       | 5.20                | 23.5       | 41                                       | 0.2                                                    | 3.86             | 64       |       |      |
| 1804                                                                                                                                                                                                                                                                                        | 0.75                                                    | 5.00                                                             | 0.25                                      | 7.58                                       | 5.17                | 23.5       | 41                                       | 0.2                                                    | 3.30             | 64       | 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<br>TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |              |               |        | SAMPLER(S) SIGNATURE(S):                                       |                               |          |  | SAMPLING INITIATED AT: <b>1805</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>58.50</b>                                                                                                                                                                          |              |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>10</b> μm    |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |              |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                              | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SHED</b>                                                                                                                                                                                                    |              |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| 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; RPP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB2I</b>         | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                         |                                                                  |                                            |                                            |                     |            |                                       |                                                     |                  |          |       |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|------------|---------------------------------------|-----------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                  | TUBING DIAMETER (inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>51.5</b> feet to <b>61.5</b> feet | STATIC DEPTH TO WATER (feet): <b>11.50</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                       |                                                     |                  |          |       |      |
| WELL ELEVATION TOG (H NGVD): <b>145.73</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (H NGVD): <b>134.23</b>                    |                                            |                                            |                     |            |                                       |                                                     |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                                                                                                                                                                  |                                                         |                                                                  |                                            |                                            |                     |            |                                       |                                                     |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME.<br>(only fill out if applicable)<br>= <b>0.8</b> gallons + ( <b>0.006</b> gallons/foot X <b>61.50</b> feet) + <b>0.05</b> gallons = <b>0.72</b> gallons                                                                                                                                                            |                                                         |                                                                  |                                            |                                            |                     |            |                                       |                                                     |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>56.50</b>                                                                                                                                                                                                                                                                                                                                                                         | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>56.50</b> | PURGING INITIATED AT: <b>0930</b>                                | PURGING ENDED AT: <b>0951</b>              | TOTAL VOLUME PURGED (gallons): <b>5.25</b> |                     |            |                                       |                                                     |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                              | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                   | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro units) µmhos/cm or µS/cm | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 0941                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.75                                                    | 2.75                                                             | 0.25                                       | 11.62                                      | 4.81                | 21.5       | 40                                    | 0.4                                                 | 3.30             | 54       |       |      |
| 0944                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.35                                                    | 3.10                                                             | 0.25                                       | 11.63                                      | 4.82                | 21.5       | 41                                    | 0.3                                                 | 3.49             | 54       |       |      |
| 0947                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.35                                                    | 4.25                                                             | 0.25                                       | 11.63                                      | 4.82                | 21.5       | 40                                    | 0.3                                                 | 2.64             | 55       |       |      |
| 0950                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.95                                                    | 5.00                                                             | 0.25                                       | 11.64                                      | 4.82                | 21.5       | 41                                    | 0.3                                                 | 3.07             | 55       | NDNR  |      |
| 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<br>TUBING INSIDE DIA. CAPACITY (Gal./FT): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0025; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                  |                                            |                                            |                     |            |                                       |                                                     |                  |          |       |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |            |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------|----------------------------------------------------------------|-------------------------------|----------|--|--------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRD-TECH</b>                                                                                                                                                             |            |               |        | SAMPLER(S) SIGNATURE(S):                                       |                               |          |  | SAMPLING INITIATED AT: <b>0951</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>56.50</b>                                                                                                                                                                          |            |               |        | TUBING MATERIAL CODE: <b>T</b>                                 |                               |          |  | FIELD FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>µm</b>       |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |            |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |            |               |        | SAMPLE PRESERVATION                                            |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | 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: <b>NO SCREEN</b>                                                                                                                                                                                                  |            |               |        |                                                                |                               |          |  |                                                              |  |                              |  |
| 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; RFP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB3I</b>         | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                             |                                                         |                                                              |                                            |                                            |                     |            |                                            |                                                          |                  |          |       |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|------------|--------------------------------------------|----------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                            | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>52</b> feet to <b>62</b> feet | STATIC DEPTH TO WATER (feet): <b>14.03</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                            |                                                          |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>151.86</b>                                                                                                                                                                                                                                                 |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>137.83</b>               |                                            |                                            |                     |            |                                            |                                                          |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                            |                                                         |                                                              |                                            |                                            |                     |            |                                            |                                                          |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>62.00</b> feet) + <b>0.05</b> gallons = <b>0.92</b> gallons                       |                                                         |                                                              |                                            |                                            |                     |            |                                            |                                                          |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>57.00</b>                                                                                                                                                                                                                                   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>57.00</b> | PURGING INITIATED AT: <b>1105</b>                            | PURGING ENDED AT: <b>1126</b>              | TOTAL VOLUME PURGED (gallons): <b>5.46</b> |                     |            |                                            |                                                          |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                        | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                               | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (circles units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circles units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1116                                                                                                                                                                                                                                                                                        | 2.86                                                    | 2.86                                                         | 0.26                                       | 14.97                                      | 4.85                | 21.3       | 40                                         | 0.0                                                      | 2.26             | 53       |       |      |
| 1119                                                                                                                                                                                                                                                                                        | 0.78                                                    | 3.64                                                         | 0.26                                       | 14.97                                      | 4.85                | 21.2       | 40                                         | 0.0                                                      | 2.14             | 54       |       |      |
| 1123                                                                                                                                                                                                                                                                                        | 0.78                                                    | 4.42                                                         | 0.26                                       | 14.78                                      | 4.83                | 21.1       | 40                                         | 0.0                                                      | 2.13             | 54       |       |      |
| 1125                                                                                                                                                                                                                                                                                        | 0.78                                                    | 5.20                                                         | 0.26                                       | 14.88                                      | 4.83                | 21.1       | 40                                         | 0.0                                                      | 2.08             | 53       | 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" = 6.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 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: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |              |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                 |                                |          |  | SAMPLING INITIATED AT: <b>1126</b>                        |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>57.00</b>                                                                                                                                                                          |              |               |        | TUBING MATERIAL CODE: <b>T</b>                              |                                |          |  | FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N) |  | FILTER SIZE:      μm         |  |
| FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> (N)                                                                                                                                                      |              |               |        | TUBING Y <input checked="" type="checkbox"/> (N) (replaced) |                                |          |  | DUPLICATE: Y <input checked="" type="checkbox"/> (N)      |  | Filtration Equipment Type:   |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              |               |        | SAMPLE PRESERVATION                                         |                                |          |  | INTENDED ANALYSIS AND/OR METHOD                           |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                           | TOTAL VOL. ADDED IN FIELD (mL) | FINAL pH |  |                                                           |  |                              |  |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |              |               |        |                                                             |                                |          |  |                                                           |  |                              |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                  |              |               |        |                                                             |                                |          |  |                                                           |  |                              |  |
| 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; RFP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MHB 117 (R)</b>   | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

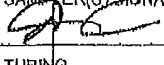
PURGING DATA

|                                                                                                                                                                                                                                                                       |                                                         |                                                              |                                            |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|--------------------------------------------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                      | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>45</b> feet to <b>55</b> feet | STATIC DEPTH TO WATER (feet): <b>12.21</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |
| WELL ELEVATION TOC (ft NGVD): <b>120.43</b>                                                                                                                                                                                                                           |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>108.22</b>               |                                            |                                            |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet --      feet ) X      gallons/foot =      gallons                                                                     |                                                         |                                                              |                                            |                                            |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>55.00</b> feet) + <b>0.05</b> gallons = <b>0.68</b> gallons |                                                         |                                                              |                                            |                                            |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>50.00</b>                                                                                                                                                                                                             | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>50.00</b> | PURGING INITIATED AT: <b>1213</b>                            | PURGING ENDED AT: <b>1234</b>              | TOTAL VOLUME PURGED (gallons): <b>5.04</b> |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-------|------|
| 1224 | 2.64                    | 2.64                           | 0.24             | 12.28                 | 4.85                | 24.3       | 36                                        | 0.0                                                     | 5.14             | 30       |       |      |
| 1229 | 0.72                    | 2.36                           | 0.24             | 12.28                 | 4.88                | 24.3       | 36                                        | 0.0                                                     | 4.48             | 32       |       |      |
| 1230 | 0.72                    | 4.08                           | 0.24             | 12.28                 | 4.86                | 24.3       | 36                                        | 0.0                                                     | 4.25             | 30       |       |      |
| 1233 | 0.72                    | 4.80                           | 0.24             | 12.28                 | 4.86                | 24.4       | 36                                        | 0.0                                                     | 3.97             | 29       | None  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 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" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 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: <b>DAN ARMOUR / BRD-TECH</b>                     |  | SAMPLER(S) SIGNATURE(S):  |  | SAMPLING INITIATED AT: <b>1234</b>                                     | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>50.00</b>                                  |  | TUBING MATERIAL CODE: <b>T</b>                                                                               |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> <b>NO</b> | FILTER SIZE: <b>NR</b>       |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/> <b>NO</b> |  | TUBING <b>Y</b> <input checked="" type="checkbox"/> <b>NO</b> (replaced)                                     |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/> <b>NO</b>      |                              |

| 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 |                                 |                                       |                         |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                               |          |                                 |                                       |                         |

|                                                                                                                                                                                                                             |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| REMARKS: <b>NO SHEEN</b>                                                                                                                                                                                                    |  |
| MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicons; 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: ± 6% 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)

640-48951

Revision Date: February 12, 2009

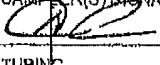
Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB34E</b>        | SAMPLE ID: | DATE: <b>8.20.14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                             |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-------|------|
| WELL DIAMETER (inches): <b>2</b>                                                                                                                                                                                                                                                            | TUBING DIAMETER (inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH <b>43.95</b> feet to <b>53.95</b> feet | STATIC DEPTH TO WATER (feet): <b>9.05</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                           |                                                         |                  |          |       |      |
| WELL ELEVATION TOC (ft NGVD): <b>125.80</b>                                                                                                                                                                                                                                                 |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>116.75</b>                    |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                            |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>6.006</b> gallons/foot X <b>53.95</b> feet) + <b>0.05</b> gallons = <b>6.62</b> gallons                       |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>48.95</b>                                                                                                                                                                                                                                   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>48.95</b> | PURGING INITIATED AT: <b>1318</b>                                 | PURGING ENDED AT: <b>1339</b>             | TOTAL VOLUME PURGED (gallons): <b>5.04</b> |                     |            |                                           |                                                         |                  |          |       |      |
| TIME                                                                                                                                                                                                                                                                                        | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                    | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (ohm-cm units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (ohm-cm units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
| 1329                                                                                                                                                                                                                                                                                        | 2.64                                                    | 2.64                                                              | 0.24                                      | 9.15                                       | 5.39                | 25.8       | 43                                        | 0.0                                                     | 3.92             | 58       |       |      |
| 1332                                                                                                                                                                                                                                                                                        | 0.72                                                    | 3.36                                                              | 0.24                                      | 9.15                                       | 5.38                | 25.8       | 43                                        | 0.0                                                     | 3.41             | 60       |       |      |
| 1335                                                                                                                                                                                                                                                                                        | 0.72                                                    | 4.08                                                              | 0.24                                      | 9.15                                       | 5.38                | 25.7       | 43                                        | 0.0                                                     | 3.50             | 60       |       |      |
| 1338                                                                                                                                                                                                                                                                                        | 0.72                                                    | 4.80                                                              | 0.24                                      | 9.16                                       | 5.38                | 25.7       | 43                                        | 0.0                                                     | 3.44             | 59       | 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" = 6.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.018 |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |
| PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)                                                                                                                                                         |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |       |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |              |               |        |                                                                                                              |                               |          |  |                                                                        |  |                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------|--------------------------------------------------------------------------------------------------------------|-------------------------------|----------|--|------------------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |              |               |        | SAMPLER(S) SIGNATURE(S):  |                               |          |  | SAMPLING INITIATED AT: <b>1339</b>                                     |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>48.95</b>                                                                                                                                                                          |              |               |        | TUBING MATERIAL CODE: <b>T</b>                                                                               |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> <b>μm</b> |  | FILTER SIZE:                 |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |              |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced)                                               |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>                |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              |               |        | SAMPLE PRESERVATION                                                                                          |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                                        |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                                                                            | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                                        |  |                              |  |
| <b>* SEE SAMPLE 2-0-6 AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |              |               |        |                                                                                                              |                               |          |  |                                                                        |  |                              |  |
| REMARKS: <b>NO JHSA</b>                                                                                                                                                                                                    |              |               |        |                                                                                                              |                               |          |  |                                                                        |  |                              |  |
| MATERIAL CODES: 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; RPP = 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)

640-98951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB32 I</b>       | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                             |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |           |      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|-----------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                            | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH <b>89.56</b> feet to <b>64.56</b> feet | STATIC DEPTH TO WATER (feet): <b>7.78</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                           |                                                         |                  |          |           |      |
| WELL ELEVATION TOG (ft NGVD): <b>124.79</b>                                                                                                                                                                                                                                                 |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>117.01</b>                    |                                           |                                            |                     |            |                                           |                                                         |                  |          |           |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                                            |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |           |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.13</b> gallons + ( <b>0.006</b> gallons/foot X <b>64.56</b> feet) + <b>0.05</b> gallons = <b>0.74</b> gallons                      |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |           |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>59.56</b>                                                                                                                                                                                                                                   | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>59.56</b> | PURGING INITIATED AT: <b>1500</b>                                 | PURGING ENDED AT: <b>1521</b>             | TOTAL VOLUME PURGED (gallons): <b>5.40</b> |                     |            |                                           |                                                         |                  |          |           |      |
| TIME                                                                                                                                                                                                                                                                                        | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                    | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR     | ODOR |
| 1511                                                                                                                                                                                                                                                                                        | 2.26                                                    | 2.26                                                              | 0.26                                      | 7.93                                       | 5.29                | 22.0       | 41                                        | 0.0                                                     | 9.07             | 22       |           |      |
| 1514                                                                                                                                                                                                                                                                                        | 0.78                                                    | 3.04                                                              | 0.26                                      | 7.94                                       | 5.28                | 22.0       | 41                                        | 0.0                                                     | 9.33             | 21       |           |      |
| 1517                                                                                                                                                                                                                                                                                        | 0.78                                                    | 4.42                                                              | 0.26                                      | 7.94                                       | 5.30                | 22.0       | 41                                        | 0.0                                                     | 8.88             | 22       |           |      |
| 1520                                                                                                                                                                                                                                                                                        | 0.78                                                    | 5.14                                                              | 0.26                                      | 7.94                                       | 5.30                | 23.0       | 41                                        | 0.0                                                     | 9.02             | 23       | YES       |      |
|                                                                                                                                                                                                                                                                                             |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          | WATERSHED |      |
|                                                                                                                                                                                                                                                                                             |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          | TINT      |      |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 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: <b>DAW ARMOUR / PRD-TECH</b>                                                                                                                                                             |              |               |        | SAMPLER(S) SIGNATURE(S):                         |                               |          |  | SAMPLING INITIATED AT: <b>1521</b>                                                     |  | SAMPLING ENDED AT: <b>NR</b>          |  |                         |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>59.56</b>                                                                                                                                                                          |              |               |        | TUBING MATERIAL CODE: <b>T</b>                   |                               |          |  | FIELD-FILTERED: Y <input checked="" type="checkbox"/><br>μm Filtration Equipment Type: |  | FILTER SIZE:                          |  |                         |  |
| FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/><br>TUBING Y <input checked="" type="checkbox"/> (replaced)                                                                                               |              |               |        | DUPLICATE: Y <input checked="" type="checkbox"/> |                               |          |  |                                                                                        |  |                                       |  |                         |  |
| 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 |  |                                                                                        |  |                                       |  |                         |  |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |              |               |        |                                                  |                               |          |  |                                                                                        |  |                                       |  |                         |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                  |              |               |        |                                                  |                               |          |  |                                                                                        |  |                                       |  |                         |  |
| 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; RFP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB323</b>        | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                       |                                                         |                                                                 |                                           |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------|--------------------------------------------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                      | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>9.9</b> feet to <b>19.9</b> feet | STATIC DEPTH TO WATER (feet): <b>8.88</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |
| WELL ELEVATION TOC (ft NGVD): <b>124.64</b>                                                                                                                                                                                                                           |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>115.76</b>                  |                                           |                                            |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (      feet -      feet ) X      gallons/foot =      gallons                                                                      |                                                         |                                                                 |                                           |                                            |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>19.90</b> feet) + <b>0.05</b> gallons = <b>0.47</b> gallons |                                                         |                                                                 |                                           |                                            |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>14.90</b>                                                                                                                                                                                                             | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>14.90</b> | PURGING INITIATED AT: <b>1532</b>                               | PURGING ENDED AT: <b>1552</b>             | TOTAL VOLUME PURGED (gallons): <b>3.40</b> |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units) μmhos/cm or μS/cm | DISSOLVED OXYGEN (micro units) mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|---------------------------------------|-----------------------------------------------------|------------------|----------|-------|------|
| 1543 | 1.70                    | 1.70                           | 0.17             | 9.97                  | 5.15                | 24.0       | 178                                   | 0.3                                                 | 6.70             | 44       |       |      |
| 1545 | 0.51                    | 2.21                           | 0.17             | 9.97                  | 5.13                | 24.0       | 177                                   | 0.3                                                 | 6.84             | 42       |       |      |
| 1548 | 0.51                    | 2.72                           | 0.17             | 9.77                  | 5.13                | 24.0       | 176                                   | 0.4                                                 | 6.24             | 42       |       |      |
| 1551 | 0.51                    | 3.23                           | 0.17             | 9.98                  | 5.15                | 23.9       | 175                                   | 0.4                                                 | 6.39             | 44       | Brown | Tint |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 6.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

|                                                                          |  |                                                                |  |                                                              |                              |
|--------------------------------------------------------------------------|--|----------------------------------------------------------------|--|--------------------------------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>           |  | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                    |  | SAMPLING INITIATED AT: <b>1552</b>                           | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>14.90</b>                        |  | TUBING MATERIAL CODE: <b>T</b>                                 |  | FIELD FILTERED: <b>Y</b> <input checked="" type="checkbox"/> | FILTER SIZE: <b>μm</b>       |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/> |  | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |                              |

| 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 |                                 |                                       |                         |
| <b>* SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                                |          |                                 |                                       |                         |

REMARKS: **NO SCREEN**

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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB335</b>        | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                  |                                            |                                            |                     |            |                                             |                                                          |                  |          |        |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------|------------|---------------------------------------------|----------------------------------------------------------|------------------|----------|--------|------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                   | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>10.3</b> feet to <b>20.3</b> feet | STATIC DEPTH TO WATER (feet): <b>10.61</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                             |                                                          |                  |          |        |      |
| WELL ELEVATION TOC (ft NGVD): <b>125.90</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>115.29</b>                   |                                            |                                            |                     |            |                                             |                                                          |                  |          |        |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>$= (20.30 \text{ feet} - 10.61 \text{ feet}) \times 0.163 \text{ gallons/foot} = 1.58 \text{ gallons}$                                                                                                                                                                                           |                                                         |                                                                  |                                            |                                            |                     |            |                                             |                                                          |                  |          |        |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>$= 0.3 \text{ gallons} + (0.006 \text{ gallons/foot} \times 20.30 \text{ feet}) + 0.05 \text{ gallons} = 0.49 \text{ gallons}$                                                                                                                                                   |                                                         |                                                                  |                                            |                                            |                     |            |                                             |                                                          |                  |          |        |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>15.30</b>                                                                                                                                                                                                                                                                                                                                                                          | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>15.30</b> | PURGING INITIATED AT: <b>1435</b>                                | PURGING ENDED AT: <b>1445</b>              | TOTAL VOLUME PURGED (gallons): <b>3.20</b> |                     |            |                                             |                                                          |                  |          |        |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                               | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                   | PURGE RATE (gpm)                           | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (micro-units)<br>(µmhos/cm. or µS/cm) | DISSOLVED OXYGEN (micro-units)<br>(mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOR |
| 1435                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.60                                                    | 1.60                                                             | 0.16                                       | 10.72                                      | 5.66                | 24.2       | 270                                         | 0.1                                                      | 1.82             | 29       |        |      |
| 1438                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 2.08                                                             | 0.16                                       | 10.72                                      | 5.66                | 24.2       | 266                                         | 0.1                                                      | 1.61             | 33       |        |      |
| 1441                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 2.56                                                             | 0.16                                       | 10.72                                      | 5.67                | 24.2       | 269                                         | 0.1                                                      | 1.64             | 33       | slt.   |      |
| 1444                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 3.04                                                             | 0.16                                       | 10.72                                      | 5.67                | 24.2       | 268                                         | 0.1                                                      | 1.78             | 33       | Yellow | TWT  |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 6.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.018<br>PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                  |                                            |                                            |                     |            |                                             |                                                          |                  |          |        |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |            |               |        |                                                                 |                               |          |  |                                                              |  |                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------|--------|-----------------------------------------------------------------|-------------------------------|----------|--|--------------------------------------------------------------|--|------------------------------|--|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |            |               |        | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                     |                               |          |  | SAMPLING INITIATED AT: <b>1445</b>                           |  | SAMPLING ENDED AT: <b>NR</b> |  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>15.30</b>                                                                                                                                                                          |            |               |        | TUBING MATERIAL CODE: <b>T</b>                                  |                               |          |  | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> |  | FILTER SIZE: <b>0</b>        |  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |            |               |        | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced): |                               |          |  | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>      |  |                              |  |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |            |               |        | SAMPLE PRESERVATION                                             |                               |          |  | INTENDED ANALYSIS AND/OR METHOD                              |  | SAMPLING EQUIPMENT CODE      |  |
| SAMPLE ID CODE                                                                                                                                                                                                             | CONTAINERS | MATERIAL CODE | VOLUME | PRESERVATIVE USED                                               | TOTAL VOL ADDED IN FIELD (mL) | FINAL pH |  |                                                              |  |                              |  |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                       |            |               |        |                                                                 |                               |          |  |                                                              |  |                              |  |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                  |            |               |        |                                                                 |                               |          |  |                                                              |  |                              |  |
| 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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = 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 62-100, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB 343</b>       | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |        |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|---------------------|------------|-------------------------------------------|---------------------------------------------------------|------------------|----------|--------|------|
| WELL DIAMETER (inches): <b>2</b>                                                                                                                                                                                                                                                                                                                                                                                                   | TUBING DIAMETER (inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>8.36</b> feet to <b>18.36</b> feet | STATIC DEPTH TO WATER (feet): <b>9.88</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |                     |            |                                           |                                                         |                  |          |        |      |
| WELL ELEVATION TOC (ft NGVD): <b>125.78</b>                                                                                                                                                                                                                                                                                                                                                                                        |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>115.90</b>                    |                                           |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= (18.36 feet - 9.88 feet) X 0.163 gallons/foot = <b>1.38</b> gallons                                                                                                                                                                                                                            |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= 0.3 gallons + (0.006 gallons/foot X 18.36 feet) + 0.05 gallons = <b>0.46</b> gallons                                                                                                                                                                                           |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |        |      |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.36</b>                                                                                                                                                                                                                                                                                                                                                                          | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.36</b> | PURGING INITIATED AT: <b>1352</b>                                 | PURGING ENDED AT: <b>1412</b>             | TOTAL VOLUME PURGED (gallons): <b>3.20</b> |                     |            |                                           |                                                         |                  |          |        |      |
| TIME                                                                                                                                                                                                                                                                                                                                                                                                                               | VOLUME PURGED (gallons)                                 | CUMUL. VOLUME PURGED (gallons)                                    | PURGE RATE (gpm)                          | DEPTH TO WATER (feet)                      | pH (standard units) | TEMP. (°C) | COND. (circle units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (circle units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR  | ODOR |
| 1402                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.60                                                    | 1.60                                                              | 0.16                                      | 10.68                                      | 6.11                | 25.0       | 719                                       | 0.0                                                     | 1.65             | -34      |        |      |
| 1405                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 2.08                                                              | 0.16                                      | 10.68                                      | 6.11                | 25.0       | 708                                       | 0.0                                                     | 1.42             | -35      |        |      |
| 1408                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 2.56                                                              | 0.16                                      | 10.68                                      | 6.12                | 25.0       | 704                                       | 0.0                                                     | 1.49             | -35      |        |      |
| 1411                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.48                                                    | 3.04                                                              | 0.16                                      | 10.69                                      | 6.10                | 25.0       | 702                                       | 0.0                                                     | 1.31             | -34      | YELLOW | TINT |
| WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88<br>TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016<br>PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify) |                                                         |                                                                   |                                           |                                            |                     |            |                                           |                                                         |                  |          |        |      |

SAMPLING DATA

|                                                                                                                                                                                                                            |              |                                                                |        |                                                                        |                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------|--------|------------------------------------------------------------------------|-------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>                                                                                                                                                             |              | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>                    |        | SAMPLING INITIATED AT: <b>1412</b>                                     | SAMPLING ENDED AT: <b>NR</b>  |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>13.36</b>                                                                                                                                                                          |              | TUBING MATERIAL CODE: <b>T</b>                                 |        | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> <b>μm</b> | FILTER SIZE:                  |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/>                                                                                                                                                   |              | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |        | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/>                |                               |
| SAMPLE CONTAINER SPECIFICATION                                                                                                                                                                                             |              | SAMPLE PRESERVATION                                            |        | INTENDED ANALYSIS AND/OR METHOD                                        | SAMPLING EQUIPMENT CODE       |
| SAMPLE ID CODE                                                                                                                                                                                                             | # CONTAINERS | MATERIAL CODE                                                  | VOLUME | PRESERVATIVE USED                                                      | TOTAL VOL ADDED IN FIELD (mL) |
|                                                                                                                                                                                                                            |              |                                                                |        |                                                                        |                               |
| <b>* SEE SAMPLE LOG AND BOTTLE ORDER WORKSHEET</b>                                                                                                                                                                         |              |                                                                |        |                                                                        |                               |
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                  |              |                                                                |        |                                                                        |                               |
| 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; RFP = 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)

640-48951

Revision Date: February 12, 2009

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWB115</b>        | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                                  |                                                         |                                                                 |                                            |                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------|--------------------------------------------|
| WELL DIAMETER (inches): <b>2</b>                                                                                                                                                                                                                                                 | TUBING DIAMETER (inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>9.5</b> feet to <b>19.5</b> feet | STATIC DEPTH TO WATER (feet): <b>12.39</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>       |
| WELL ELEVATION TOC (ft NGVD): <b>120.81</b>                                                                                                                                                                                                                                      |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>108.42</b>                  |                                            |                                            |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>$= (19.50 \text{ feet} - 12.39 \text{ feet}) \times 0.163 \text{ gallons/foot} = 1.16 \text{ gallons}$                                         |                                                         |                                                                 |                                            |                                            |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>$= 0.3 \text{ gallons} + (0.006 \text{ gallons/foot} \times 19.50 \text{ feet}) + 0.05 \text{ gallons} = 0.47 \text{ gallons}$ |                                                         |                                                                 |                                            |                                            |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>14.50</b>                                                                                                                                                                                                                        | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>14.50</b> | PURGING INITIATED AT: <b>1245</b>                               | PURGING ENDED AT: <b>1304</b>              | TOTAL VOLUME PURGED (gallons): <b>3.23</b> |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro mhos/cm or µS/cm) | DISSOLVED OXYGEN (micro mhos/cm or mg/L or % saturation) | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|--------------------------------|----------------------------------------------------------|------------------|----------|-------|------|
| 1254 | 1.53                    | 1.53                           | 0.17             | 12.44                 | 4.04                | 23.2       | 174                            | 0.0                                                      | 2.32             | 231      |       |      |
| 1257 | 0.61                    | 2.14                           | 0.17             | 12.44                 | 4.02                | 23.1       | 174                            | 0.0                                                      | 2.48             | 230      |       |      |
| 1300 | 0.51                    | 2.65                           | 0.17             | 12.45                 | 4.04                | 23.2       | 174                            | 0.0                                                      | 2.44             | 230      |       |      |
| 1303 | 0.51                    | 3.16                           | 0.17             | 12.45                 | 4.03                | 23.3       | 174                            | 0.0                                                      | 2.52             | 228      | 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" = 5.86  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 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: <b>DAN ARMOUR / PRO-TECH</b> |  | SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> |  | SAMPLING INITIATED AT: <b>1304</b> | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>14.50</b>              |  | TUBING MATERIAL CODE: <b>T</b>              |  | FIELD-FILTERED: <b>Y</b> (N)       | FILTER SIZE: <b>µm</b>       |
| FIELD DECONTAMINATION: PUMP <b>Y</b> (N)                       |  | TUBING <b>Y</b> (N) (replaced)              |  | DUPLICATE: <b>Y</b> (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 |                                 |                                       |                         |
| <b>* SEE SAMPLE C-O-L AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                               |          |                                 |                                       |                         |

REMARKS: **NO SCREEN**

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; RFP = 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:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

640-48951

Revision Date: February 12, 2009







Form FD 9000-24  
GROUNDWATER SAMPLING LOG

|                               |            |                                        |  |
|-------------------------------|------------|----------------------------------------|--|
| SITE NAME: <b>TRAIL RIDGE</b> |            | SITE LOCATION: <b>JACKSONVILLE, FL</b> |  |
| WELL NO: <b>MWBZ15</b>        | SAMPLE ID: | DATE: <b>8-20-14</b>                   |  |

PURGING DATA

|                                                                                                                                                                                                                                                                        |                                                         |                                                             |                                            |                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------|---------------------------------------------|
| WELL DIAMETER (Inches): <b>2</b>                                                                                                                                                                                                                                       | TUBING DIAMETER (Inches): <b>3/8</b>                    | WELL SCREEN INTERVAL DEPTH: <b>8</b> feet to <b>18</b> feet | STATIC DEPTH TO WATER (feet): <b>10.91</b> | PURGE PUMP TYPE OR BAILER: <b>BP</b>        |
| WELL ELEVATION TOC (ft NGVD): <b>122.84</b>                                                                                                                                                                                                                            |                                                         | GROUNDWATER ELEVATION (ft NGVD): <b>111.93</b>              |                                            |                                             |
| WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY<br>(only fill out if applicable)<br>= ( <b>18.00</b> feet - <b>10.91</b> feet ) X <b>0.113</b> gallons/foot = <b>1.16</b> gallons                                        |                                                         |                                                             |                                            |                                             |
| EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME<br>(only fill out if applicable)<br>= <b>0.3</b> gallons + ( <b>0.006</b> gallons/foot X <b>18.00</b> feet ) + <b>0.05</b> gallons = <b>0.46</b> gallons |                                                         |                                                             |                                            |                                             |
| INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b>                                                                                                                                                                                                              | FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b> | PURGING INITIATED AT: <b>0858</b>                           | PURGING ENDED AT: <b>0918</b>              | TOTAL VOLUME PURGED (gallons): <b>13.20</b> |

| TIME | VOLUME PURGED (gallons) | CUMUL. VOLUME PURGED (gallons) | PURGE RATE (gpm) | DEPTH TO WATER (feet) | pH (standard units) | TEMP. (°C) | COND. (micro units)<br>μmhos/cm or μS/cm | DISSOLVED OXYGEN (micro units)<br>mg/L or % saturation | TURBIDITY (NTUs) | ORP (mV) | COLOR | ODOR |
|------|-------------------------|--------------------------------|------------------|-----------------------|---------------------|------------|------------------------------------------|--------------------------------------------------------|------------------|----------|-------|------|
| 0908 | 1.10                    | 1.60                           | 0.16             | 11.40                 | 5.14                | 25.3       | 42                                       | 0.0                                                    | 4.49             | 48       |       |      |
| 0911 | 0.42                    | 2.08                           | 0.16             | 11.40                 | 5.17                | 25.1       | 42                                       | 0.0                                                    | 4.26             | 45       |       |      |
| 0914 | 0.48                    | 2.56                           | 0.16             | 11.41                 | 5.15                | 25.1       | 42                                       | 0.0                                                    | 4.10             | 45       |       |      |
| 0917 | 0.48                    | 3.04                           | 0.16             | 11.41                 | 5.16                | 25.1       | 43                                       | 0.0                                                    | 3.92             | 46       | NONE  |      |

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

|                                                                          |  |                                                                |                                                              |                                                         |                              |
|--------------------------------------------------------------------------|--|----------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------|------------------------------|
| SAMPLED BY (PRINT) / AFFILIATION: <b>DAN ARMOUR / PRO-TECH</b>           |  | SAMPLER(S) SIGNATURE(S):                                       |                                                              | SAMPLING INITIATED AT: <b>0918</b>                      | SAMPLING ENDED AT: <b>NR</b> |
| PUMP OR TUBING DEPTH IN WELL (feet): <b>13.00</b>                        |  | TUBING MATERIAL CODE: <b>T</b>                                 | FIELD-FILTERED: <b>Y</b> <input checked="" type="checkbox"/> | FILTER SIZE: <b>NR</b>                                  |                              |
| FIELD DECONTAMINATION: PUMP <b>Y</b> <input checked="" type="checkbox"/> |  | TUBING <b>Y</b> <input checked="" type="checkbox"/> (replaced) |                                                              | DUPLICATE: <b>Y</b> <input checked="" type="checkbox"/> |                              |

| 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 |                                 |                                       |                         |
| <b>* SEE SAMPLE C-O-C AND BOTTLE ORDER WORKSHEET</b> |              |               |        |                     |                               |          |                                 |                                       |                         |

|                                                                                                                                                                                                                             |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| REMARKS: <b>NO SCREEN</b>                                                                                                                                                                                                   |  |
| 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; RPPP = 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)

640-48951

Revision Date: February 12, 2009

**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: ALM  
 Checked by: SSG  
 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)                                                                             |
| $\Delta h$       | Difference of hydraulic head                                                                                   |
| $\Delta s$       | 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 |

**Appendix C**  
**Hydraulic Gradient Calculations**  
**Trail Ridge Landfill, Jacksonville, Florida**  
**FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628**

Made by: ALM  
 Checked by: SSG  
 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:**

$$i = \frac{140' \text{ contour} - \text{MWB-22(S)}}{2500'} = \frac{140' - 114.40'}{2500'}$$

|                           |
|---------------------------|
| $i = 0.010 \text{ ft/ft}$ |
|---------------------------|

**Intermediate gradient:**

$$i = \frac{135' \text{ contour} - \text{MWB-12(I)}}{2200'} = \frac{135' - 116.64'}{2200'}$$

|                           |
|---------------------------|
| $i = 0.008 \text{ ft/ft}$ |
|---------------------------|

**Deep gradient:**

$$i = \frac{\text{MWB-31(D)} - 120' \text{ contour}}{2300} = \frac{137.26' - 120'}{2300}$$

|                           |
|---------------------------|
| $i = 0.008 \text{ ft/ft}$ |
|---------------------------|

**Average gradient:**

|                           |
|---------------------------|
| $i = 0.009 \text{ ft/ft}$ |
|---------------------------|

**Appendix C**  
**Hydraulic Gradient Calculations**  
**Trail Ridge Landfill, Jacksonville, Florida**  
**FDEP Permit 0013493-017-SO / WACS ID Number NED/16/00033628**

|             |            |
|-------------|------------|
| Made by:    | <u>ALM</u> |
| Checked by: | <u>SSG</u> |
| Reviewd by: | <u>RWP</u> |

**Horizontal Hydraulic Gradients:**

|                                     |       |       |
|-------------------------------------|-------|-------|
| Shallow horizontal gradient is      | 0.010 | ft/ft |
| Intermediate horizontal gradient is | 0.008 | ft/ft |
| Deep horizontal gradient is         | 0.008 | ft/ft |
| Average horizontal gradient is      | 0.009 | 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**  
**GROUNDWATER 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 0013493-025-SO-01

(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.

10-2-2014  
(Date)

[Signature]  
(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.atkins@testamaricainc.com

Northwest District  
160 Government Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. 200 B  
Jacksonville, FL 32256-7590  
904-807-3300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
13051 N. Telecom Pky.  
Tempe Terrace, FL  
813-632-7600

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33902-2549  
239-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600

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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| Asia          | + 852 2562 3658   |
| 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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