



*Prepared for:*

WASTE CONNECTIONS, INC.  
*Connect with the Future*

OMNI WASTE OF OSCEOLA COUNTY, LLC  
1501 Omni Way  
St. Cloud, Florida 34773

# **26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING REPORT**

**J.E.D. Solid Waste Management Facility  
1501 Omni Way  
St. Cloud, Osceola County, Florida 34773**

*Prepared by:*



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August 2017

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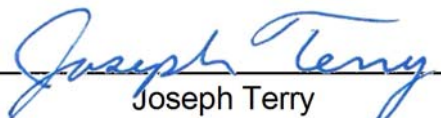
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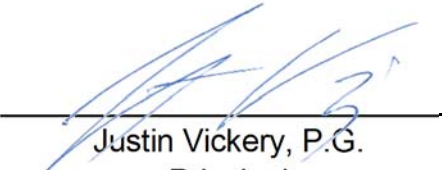
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**26<sup>th</sup> Semi-Annual Water Quality Monitoring Report  
J.E.D. Solid Waste Management Facility  
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**August 2017**

**TABLE OF CONTENTS**

<b>REGISTERED PROFESSIONAL GEOLOGIST CERTIFICATION .....</b>	<b>1</b>
<hr/>	
<b>1 INTRODUCTION .....</b>	<b>2</b>
<hr/>	
1.1 Terms of Reference .....	2
1.2 Overview .....	2
1.3 Site Description.....	2
<b>2 MONITORING WELL DETAILS .....</b>	<b>5</b>
<hr/>	
2.1 Well Layout and Construction .....	5
2.2 Turbidity Issues.....	6
<b>3 MONITORING WELL SAMPLING.....</b>	<b>7</b>
<hr/>	
3.1 Sampling Locations and Procedures .....	7
3.2 Sample Analyses .....	7
<b>4 SAMPLING RESULTS .....</b>	<b>9</b>
<hr/>	
4.1 Field Parameters .....	9
4.2 Laboratory Analytical Results .....	9
4.2.1 Total Metals (Methods 6020B and 6010B).....	9
4.2.2 Ammonia-N (Method 350.1).....	10
4.2.3 TDS (Method SM 2540C).....	11
4.2.4 Chloride (Method 300.0) .....	11
40 CFR Part 258, Appendix I Volatile Compounds (Method 8260).....	11
4.3 Data Validation .....	12
4.4 Impact of Turbidity on Metals Concentrations.....	12

<b>5</b>	<b>GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION .....</b>	<b>13</b>
<hr/>		
5.1	Field Measurements .....	13
5.2	Water Level Contours .....	13
<b>6</b>	<b>SURFACE WATER SAMPLING .....</b>	<b>14</b>
<hr/>		
6.1	Sampling Locations and Procedures .....	14
<b>7</b>	<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>15</b>
<hr/>		
7.1	Sampling Locations .....	15
7.2	Sample Analyses .....	15
<b>8</b>	<b>REFERENCES .....</b>	<b>16</b>
<hr/>		

**LIST OF TABLES**

- Table 1 Summary of Monitoring Well Construction Details
- Table 2 Summary of Final Field Parameter Results and Field Data
- Table 3 Summary of Groundwater Analytical Results
- Table 4 Groundwater Level Measurements

**LIST OF FIGURES**

- Figure 1A “A” Zone (Shallow) Wells – Water Level Contours
- Figure 1B “B” Zone (Intermediate) Wells – Water Level Contours
- Figure 1C “C” Zone (Deep) Wells – Water Level Contours

**LIST OF APPENDICES**

- Appendix A: Water Quality Monitoring Certification – FDEP Form 62-701.900(31)
- Appendix B: Field Sampling Logs
- Appendix C: Field Instrument Calibration Logs
- Appendix D: Chain-of-Custody Forms
- Appendix E: Analytical Laboratory Reports




# REGISTERED PROFESSIONAL GEOLOGIST CERTIFICATION

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I hereby certify that I have directed and supervised the field work and preparation of this document, in accordance with State Rules and Regulations. As a registered professional geologist, I certify that I am a qualified groundwater professional, as defined by the Florida State Board of Professional Geologists. All of the information and laboratory data in this document and in all of the attachments are true, accurate, complete, and in accordance with applicable state rules and regulations.

  
Justin Vickery, P.G.

  
Stamp

July 31, 2017  
Date

# 1 INTRODUCTION

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## 1.1 Terms of Reference

Environmental Planning Specialists, Inc. (EPS), on behalf of Waste Connections, Inc. (WCI), is pleased to provide this report to the Florida Department of Environmental Protection (FDEP) for the J.E.D. Solid Waste Management (“JED”) facility. This report summarizes and provides interpretation of the water quality monitoring performed in accordance with the Monitoring Plan Implementation Schedule (MPIS) prepared as part of the JED facility permit application. The MPIS requirements are presented in Appendix 3 of the July 12, 2012 FDEP-issued JED facility Operating Permit (Permit No. SO49-0199726-022), which authorizes the development of Phases 1 through 4 at the JED facility and as modified on December 23, 2016 (Permit Modification No. 0199726-032-SO-MM).

EPS has prepared this report for WCI, parent company of Omni Waste of Osceola County, LLC (“Omni”), owner and operator of the JED facility. A completed water quality certification form (FDEP Form 62-701.900[31]) is included in Appendix A.

## 1.2 Overview

The MPIS establishes a water quality monitoring program that measures and reports groundwater and surface water conditions and groundwater flow direction across the JED facility. The 26<sup>th</sup> semi-annual water quality monitoring event was completed between May 16 and May 24, 2017. This report presents the sample locations, sampling procedures, laboratory analyses and results, field data measurements, groundwater level measurements, groundwater flow direction, and surface water quality monitoring. In addition, the current analytical results are compared to applicable Groundwater Cleanup Target Levels (GCTLs) as promulgated in Chapter 62-777, Florida Administrative Code (FAC).

## 1.3 Site Description

The JED facility is located in eastern Osceola County, Florida, west of highway U.S. 441, approximately 6.5 miles south of Holopaw. The facility is a Class I landfill which is linked to highway U.S. 441 by a 2.9-mile access road. The JED facility comprises a total of approximately 2,179 acres. The landfill footprint at build-out will be approximately 360 acres and consist of 23 landfill cells that will provide available waste capacity for a period of approximately 30 years.

In October 2003, the FDEP issued a permit to construct and operate Phase 1 of the JED facility. Phase 1 includes four landfill cells (Cells 1 through 4) located in the northern part of the landfill and encompassing approximately 54 acres. All components of the Phase 1 development have

been constructed. As part of Phase 1, 45 groundwater monitoring wells were installed in 15 clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. The baseline water quality report for the Phase 1 monitoring well network was submitted to the FDEP in May 2004 (Geosyntec Consultants, 2004).

In March 2007, the FDEP issued a permit to construct and operate Phases 2 (Cells 5 through 7) and 3 (Cells 8 through 10), which encompass a total footprint of approximately 72 acres. As part of Phases 2 and 3, and as approved by the FDEP, six existing Phase 1 monitoring wells (MW-14A, B, and C, and MW-15A, B, and C) were decommissioned to allow for the construction of future cells and the construction of a storm water retention basin located within Phases 2 and 3. The decommissioning of the monitoring wells was discussed in the *Phases 2 and 3 Groundwater Monitoring Report* (Geosyntec, 2008). In September 2007, for the development of Phases 2 and 3, 24 additional monitoring wells were installed in eight well clusters (MW-16 through MW-23) around the perimeter of the Phases 2 and 3 development areas.

In April 2008, the FDEP issued a permit to construct and operate Phases 1 through 3 with vertical expansion. In April 2009, the MPIS for the semi-annual water quality monitoring well network was modified for Phases 1 through 3. The modification included a reduction in the number of Phase 3 monitoring wells requiring semi-annual sampling until such time that waste placement commences in one of the Phase 3 cells (i.e., Cells 8, 9, or 10), and the sampling schedule was modified for B-zone (intermediate depth) and C-zone (deep) monitoring wells. The new schedule included:

1. November sampling of C-zone monitoring wells (MW-1C through MW-13C, MW-16C, and MW-19C through MW-23C) and B-zone monitoring well MW-16B with January reporting.
2. May sampling of B-zone monitoring wells (MW-1B through MW-13B, MW-16B, and MW-19B through MW-23B) and C-zone monitoring well MW-16C, with July reporting.

Cell 1 was completed in January 2004, Cell 4 was completed in May 2005, Cell 2 was completed in April 2006, Cell 3 was completed in October 2006, Cell 5 was completed in October 2007, Cell 6 was completed in July 2008, and Cell 7 was completed in August 2010. In August 2011, the FDEP issued a permit to construct a lateral expansion of the facility, which authorized construction of Phases 3 through 8 (Cells 8 through 23). Cell 8 was completed in April 2012. During construction startup of Cell 8 in November 2011, monitoring well cluster MW-22 (A, B and C) was decommissioned to accommodate the perimeter road access to Cell 8. The MW-22 cluster abandonment report was submitted to the FDEP in April 2012. The well cluster was replaced in March 2012 and located on the perimeter access road approximately 800 feet south of well cluster MW-23. The shallow, intermediate and deep monitoring wells were designated MW-22AR, MW-22BR, and MW-22CR, respectively. The *Initial Water Quality Report Monitoring Well Cluster MW-22R* (Geo-Services & Consulting, June 2012) was submitted to the FDEP in July 2012.

The Cell 9 disposal area construction was completed in October 2013. As with previous construction and expansion efforts (e.g., Cell 8 disposal area) well cluster MW-20 was installed in a temporary location on the Phase 3 storm water berm. Cell 9 construction activities included

substantial modifications to the berm and as such, the MW-20 well cluster was abandoned on June 24, 2013. At the same time, the MW-16 well cluster was abandoned at its temporary location. In October 2013, replacement wells MW-16AR, MW-16BR, and MW-16CR were installed in a permanent location on the backside of the perimeter berm near the Cell 9 sump. The monitoring well abandonment and installation report was submitted to the FDEP in November 2013.

On December 24, 2013, a permit minor modification application was submitted to the FDEP to request a modification to the MPIS prior to the initiation of construction of Cell 10 of Phase 3 and Cells 11-13 of Phase 4. The minor modification was approved by the FDEP in January 2014. The major changes include:

- the installation and sampling schedule of monitoring wells for the Phase 3, Cell 10 and Phase 4 construction (includes Cells 11, 12 and 13),
- the removal of the “C” zone wells from the semi-annual sampling schedule, and
- the installation of only “A” and “B” zone wells at the new monitoring well cluster locations.

The January 2014 MPIS modifications were implemented during the 20<sup>th</sup> semi-annual groundwater sampling event in May 2014. In an email dated May 14, 2014, the FDEP, based on review of past semi-annual water quality monitoring reports, removed total phenols analysis from the laboratory parameters list in Requirement 9 of the MPIS.

Construction of the Cell 10 disposal area began in March 2014 which necessitated the abandonment of temporary groundwater monitoring well clusters MW-17, 18, 19, and 21. The wells were located on the Phase 3 interim storm water berm and were abandoned during Cell 10 construction on March 5, 2014. The monitoring well abandonment report was submitted to the FDEP on March 13, 2014. The installation of monitoring well clusters MW-17R, MW-24, MW-25, and MW-26, which are associated with the completion of Cell 10 and initiation of Phase 4 construction activities, was summarized in a report submitted to the FDEP on July 30, 2014.

Construction of the Cell 11 disposal area began in March 2015. As part of the construction, detection monitoring well clusters MW-27, MW-28, and MW-29 were installed along the outside perimeter of the cell in accordance with the MPIS (revised January 30, 2015, FDEP File No. 0199726-027-SO-MM). Per the FDEP Permit requirements, the well clusters included shallow surficial aquifer monitoring wells (MW-27A, MW-28A, and MW-29A) and intermediate surficial aquifer monitoring wells (MW-27B, MW-28B and MW-29B). The monitoring well installation report was submitted to the FDEP in September 2015.

Construction of Cell 13 began in December 2015. Detection monitoring wells MW-26A and MW-26B, located on the interim Phase 4 storm water berm, required abandonment to accommodate cell construction. The MW-26 cluster was abandoned on June 15, 2016. Monitoring wells MW-31A and MW-31B were installed on June 16, 2016 as replacements for cluster MW-26 and are located along the west perimeter of Cell 13. A report summarizing the monitoring well abandonment and installation activity was submitted to the FDEP in October 2016 (Weibu, LLC, 2016).

## 2 MONITORING WELL DETAILS

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### 2.1 Well Layout and Construction

For the Phase 1 development, 45 groundwater monitoring wells were installed in fifteen clusters (MW-1 through MW-15) around the perimeter of the Phase 1 development area. In accordance with the FDEP permit requirements, monitoring well clusters were located such that the spacing between clusters was no greater than 500 feet. For development of Phases 2 and 3, 24 groundwater monitoring wells were installed in eight clusters (MW-16 through MW-23) around the perimeter of the Phases 2 and 3 development areas. In accordance with the FDEP permit requirements, the monitoring well clusters were located such that the spacing between detection well clusters (MW-16 through MW-21) was approximately 500 feet, and the spacing between background well clusters (MW-22R and MW-23) was approximately 800 feet. Each of these well clusters consists of three groundwater monitoring wells installed (i) across the water table to monitor the upper limit of the surficial aquifer (identified as A-zone [shallow] wells), (ii) within the lower limit of the upper surficial aquifer above the intermediate clay layer (identified as C-zone [deep] wells), and (iii) at an intermediate depth between the shallow and deep wells (identified as B-zone [intermediate] wells). During the Phase 4, Cell 10 construction, four well clusters (MW-17, MW-18, MW-19 and MW-21) were abandoned and three well clusters (MW-24, MW-25 and MW-26) were installed along the Phase 4 interim storm water berm. Monitoring well clusters MW-24 through MW-26 were approximately 1,400 feet apart. In addition, replacement monitoring well cluster MW-17R was installed adjacent to Cell 10. In accordance with the January 2014 MPIS the three new and one replacement well cluster consist of two monitoring wells each, one installed in the A-zone and one in the B-zone.

A layout depicting the location of the shallow (A-zone), intermediate (B-zone) and deep (C-zone) groundwater monitoring wells installed for Phases 1 through 4 are shown on Figure 1A, Figure 1B and Figure 1C, respectively. As shown, groundwater monitoring well clusters MW-1 through MW-13, MW-16R, MW-17R, MW-22R, MW-23, MW-27 through MW-29, and MW-31 were installed along the top of the outer edge of the landfill perimeter berm. The ground surface at the location of the wells in the perimeter berm has an elevation of approximately 92 feet (ft) with respect to National Geodetic Vertical Datum of 1929 (NGVD, 1929). Groundwater monitoring well clusters MW-24 and MW-25 were installed along the Phase 4 interim storm water berm. The ground surface at these two well locations has an elevation of approximately 84 feet NGVD, 1929. The location of each well, in Florida state plane coordinates and latitude/longitude, and elevation were surveyed by a Florida-registered professional land surveyor.

Wells were constructed with 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing and 10 ft of #6-slot (0.006-in.) PVC screen. A 30/45 graded silica sand was placed around the screen to a height of 2 to 3 ft above the top of the screen. A seal of 30/65 graded fine silica sand was placed above the sand filter around the screen. The remaining annular space from the top of the fine sand filter seal to the existing ground surface was grouted using a tremie pipe with a

cement/bentonite mixture containing no more than 5 percent bentonite by dry weight. The PVC well casings were extended approximately 2.5 to 3 ft above the existing ground surface. Surface completion consisted of a protective aluminum casing with a lockable cover set in a concrete pad. Each well was provided with a well cap, padlock, and an identification label. A summary of the monitoring well construction details is presented in Table 1.

## 2.2 Turbidity Issues

As discussed in the baseline water quality reports for the Phases 1 through 4 monitoring networks, the formation around the screened intervals consists primarily of a fine, brown to dark brown, silty sand. Due to the subsurface formation properties, fine-grained and colloidal material are able to pass through the sand filter pack in many wells, primarily in the B-zone and C-zone wells. This is the case even though the wells are constructed using the smallest screen slot size (0.006 in.) commonly available. Most of the intermediate and deep wells had turbidity values in excess of the 20 nephelometric turbidity units (NTUs) criterion even after extended well development and the removal of multiple well volumes.

The difficulty in attaining the desired turbidity criterion was originally discussed at a meeting between Geosyntec Consultants (Geosyntec) and the FDEP on January 12, 2004 during the well development activities associated with the wells installed as part of the Phase 1 development. Geosyntec notified the FDEP again on September 14, 2007 of the elevated turbidity levels observed after extended well development during the development of Phase 2 and 3 monitoring wells. In accordance with these discussions, it was agreed to collect field-filtered (1-micron) and unfiltered samples for metals analyses for any sample with a turbidity value greater than 20 NTUs. The data generated by the dual sampling is expected to help demonstrate (i) what effect turbidity may have on metal analyses (i.e., by comparing total and dissolved metals concentrations) and (ii) whether groundwater samples with turbidities greater than 20 NTUs show higher concentrations of metals than those samples with turbidities less than 20 NTUs.



## 3 MONITORING WELL SAMPLING

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### 3.1 Sampling Locations and Procedures

In accordance with the MPIS, twenty-six monitoring wells installed as part of the Phase 1 development, eight of the monitoring wells installed as part of the Phase 2 and 3 developments, twelve of the monitoring wells installed as part of the Phase 4 development, and three compliance wells were sampled during the 26<sup>th</sup> semi-annual monitoring event. Monitoring wells sampled this event included A and B-zone wells MW-1 through MW-13, MW-16R, MW-17R, MW-22R, MW-23, MW-24, MW-25, MW-27 through MW-29, and MW-31 and A-zone compliance wells CW-1A, CW-2A, and CW-3A. Low-flow sampling techniques were used for groundwater sample collection. Except for the turbidity considerations as described in the previous section, all groundwater sampling was performed in accordance with the current applicable FDEP Standard Operating Procedures (DEP-SOP-001-01, March 2014) for groundwater sampling. Additionally, for quality control purposes, one blind duplicate sample and one equipment blank were collected and analyzed. Peristaltic pumps were used to purge and sample forty-seven of the monitoring wells, and electric submersible pumps were used to sample the remaining two wells. Each monitoring well was purged and sampled using new tubing (silicone and/or high density polyethylene).

During the purging process, a YSI 556 water quality meter equipped with a flow-through cell was used to monitor the following field parameters: pH, temperature, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen. Turbidity levels were measured using a LaMotte 2020e turbidity meter. Field parameters were recorded on sample collection forms, which are included in Appendix B. When the field parameters stabilized within the acceptable tolerances required by the FDEP SOP, well purging was considered complete and groundwater samples were collected.

The calibration of the water quality monitoring instruments was checked daily and re-calibrated when necessary. Water quality instrument calibration forms are presented in Appendix C. Samples were placed in coolers and packed with bagged ice for transport to the analytical laboratory. Chain-of-Custody (COC) forms were completed and accompanied the samples to the analytical laboratory. All COC forms are included in Appendix D. A trip blank was included with each cooler and security seals affixed to every cooler shipped.

### 3.2 Sample Analyses

Samples were analyzed by Advanced Environmental Laboratories (AEL) in Jacksonville, Florida in accordance with the National Environmental Laboratory Accreditation Conference (NELAC) standards. AEL holds certification from the Florida Department of Health (FDOH) for the analytical test methods used for this project and is certified in the State of Florida for analysis of environmental samples.

Groundwater samples were analyzed by AEL for total ammonia as nitrogen (N), chlorides, nitrate, total dissolved solids (TDS), iron, mercury, sodium, and the 40 Code of Federal Regulations (CFR) Part 258 Appendix I parameters. Other required parameters (i.e., pH, temperature, conductivity, turbidity, ORP, and dissolved oxygen) were measured in the field during collection of the groundwater samples.



## 4 SAMPLING RESULTS

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### 4.1 Field Parameters

Table 2 provides a summary of the field measurements of selected water quality parameters utilized determining sample stability for this semi-annual monitoring event. The secondary drinking water standard (SDWS) range for pH is 6.5 to 8.5 standard units (SU). The groundwater pH was below the SDWS in all site wells sampled during this event with pH values ranging from 3.87 to 5.68 SU. The groundwater pH values measured at the site have historically been below the SDWS lower limit of 6.5 SU.

### 4.2 Laboratory Analytical Results

The analytical laboratory results for this groundwater sampling event are included in Appendix E. Analytical results have been summarized in Table 3 to show all parameters where a constituent concentration was reported above the laboratory practical quantitation limit (PQL) in at least one monitoring well. Any parameter exceeding the applicable FDEP Groundwater Cleanup Target Level (GCTL), Primary Drinking Water Standard (PDWS), or SDWS has been highlighted orange. Detections reported above the PQL but below the GCTL/PDWS/SDWS have been highlighted green and detections between the PQL and laboratory method detection limit (MDL) are highlighted blue. The following discussion regarding groundwater quality is limited to those parameters where the GCTL was exceeded in at least one groundwater monitoring well and has been organized by analytical method.

#### 4.2.1 Total Metals (Methods 6020B and 6010B)

##### 4.2.1.1 Arsenic

Arsenic was detected above the GCTL of 10 micrograms per liter ( $\mu\text{g/L}$ ) in compliance well CW-1A (120  $\mu\text{g/L}$ ). Arsenic has historically exceeded the GCTL in this well, including during the initial sampling event in December 2013. CW-1A was installed to delineate the area west of MW-3A, which typically has an arsenic concentration much less than 10  $\mu\text{g/L}$ . Therefore, this localized arsenic detection appears to be naturally occurring. Another potential source may be a utility pole located approximately 20 feet from CW-1A, which may have been treated with an arsenic compound such as chromated copper arsenate (CCA).

##### 4.2.1.2 Iron

Iron was detected above the SDWS of 300  $\mu\text{g/L}$  in twenty-one of the A-zone monitoring wells sampled, with the concentrations ranging between 400 and 28,000  $\mu\text{g/L}$  and the highest concentration being from MW-12A. Iron was detected above the SDWS in twenty-one of the B-zone monitoring wells sampled this event, with concentrations ranging between 360 and 48,000  $\mu\text{g/L}$  and the highest concentration being from MW-8B. Iron was detected in all three

compliance wells with concentrations ranging from 400 to 19,000 µg/L. Iron has historically exceeded the SDWS in most wells at the site for all monitoring events, including the baseline events. The iron concentrations reported for the 26<sup>th</sup> semi-annual event are consistent with period of record data.

#### 4.2.1.3 Lead

Lead was detected above the PDWS of 15 µg/L in A-zone monitoring wells MW-22AR (58 µg/L), MW-24A (46 µg/L), and MW-25A (32 µg/L) and B-zone monitoring wells MW-22BR (39 µg/L), MW-24B (46 µg/L), MW-25B (45 µg/L), and MW-31B (18 µg/L). The elevated lead detection in MW-31B is likely due to sample turbidity (107 NTU). Due to the high turbidity, in MW-31B a field-filtered sample was collected concurrently with the unfiltered sample and analyzed for metals. The filtered sample showed no detection of lead at an MDL of 1.3 µg/L, which suggests the high result in the unfiltered sample is due to turbidity. The other wells where lead was detected above the PDWS was unique to this event. Due to the unusually high detections in MW-22AR/BR, MW-24A/B and MW-25-A/B, EPS requested that AEL re-analyze these samples to confirm the results. AEL already disposed of the preserved sample bottles and consequently had to use a sample from the unpreserved sample bottles submitted. The re-analysis results show lead concentrations were non-detect in MW-22AR/BR, MW-24A/B, and MW-25-A and above the PQL but below the PDWS in MW-25B (2.4 µg/L) [it is of note that MW-25B had a turbidity of 72 NTU]. While not a direct comparison due to the use of an unpreserved sample, nonetheless it is likely that the initial elevated lead detections in MW-22AR/BR, MW-24A/B and MW-25-A/B are a result of laboratory bias and not indicative of site conditions. The re-analysis results and explanation were described by AEL in an email dated June 29, 2017 and was sent to the FDEP on June 29, 2017 as an attachment to the notification of exceedances for this monitoring event.

#### 4.2.1.4 Sodium

Sodium was detected above the PDWS of 160 milligrams per liter (mg/L) in monitoring well MW-1A (290 mg/L) and compliance well CW-3A (200 mg/L).

### 4.2.2 Ammonia-N (Method 350.1)

Ammonia was detected above the GCTL of 2.8 mg/L in sixteen of the shallow monitoring wells, with concentrations ranging from 2.9 mg/L to 18 mg/L and the highest concentration being from MW-4A. Ammonia was detected above the GCTL in seven of the intermediate monitoring wells, with concentrations ranging from 2.9 mg/L to 12 mg/L and the highest concentration being from MW-4B. Ammonia was detected in all three compliance wells above the GCTL with concentrations ranging from 4.2 to 12 mg/L. Ammonia has been detected in most of these wells during previous sampling events. Under reducing geochemical conditions, nitrogen containing compounds can be converted to ammonia. Reducing conditions are favorable in the shallow aquifer at the site and may develop in several ways such as the shadow effect of the lined disposal areas preventing the infiltration of oxygen-rich precipitation, displacement of oxygen by landfill gas immediately above the water table, or high organic matter content found in site soils

which promotes the growth of oxygen consuming microorganisms (HDR Engineering, Inc., 2012). The elevated levels of ammonia are likely naturally occurring and have been discussed extensively ((Geosyntec, August 2016), (Geosyntec, July 2014), and (HDR Engineering, Inc., 2012)).

#### 4.2.3 TDS (Method SM 2540C)

TDS concentrations were detected above the SDWS of 500 mg/L in seven shallow monitoring wells, with concentrations ranging from 650 mg/L to 1,500 mg/L and the highest concentration being from MW-8A. TDS concentrations were detected above the SDWS of 500 mg/L in nine intermediate monitoring wells, with concentrations ranging from 600 mg/L to 1,700 mg/L and the highest concentration being from MW-5B. TDS concentrations were detected above the SDWS in all three compliance wells with concentrations ranging from 710 to 1,300 mg/L. TDS is an indicator parameter whose value can be attributable to the presence of major cations and anions, such as calcium, magnesium, sodium, chloride, and sulfate.

#### 4.2.4 Chloride (Method 300.0)

Chloride was detected above the SDWS of 250 mg/L in shallow monitoring wells MW-1A (590 mg/L), MW-16AR (360 mg/L) and MW-23A (600 mg/L) and compliance well CW-2A (710 mg/L). The remaining monitoring wells are consistent with period of record data.

### 40 CFR Part 258, Appendix I Volatile Compounds (Method 8260)

#### 4.2.4.1 Benzene

Benzene was detected above the PDWS of 1.0 µg/L in eleven A-zone monitoring wells, with concentrations ranging from 1.5 to 9.4 µg/L and the highest concentration being from MW-9A. It was also detected in intermediate well MW-10B at a concentration of 8.1 µg/L. Benzene has been reported above the GCTL in most of these wells during previous monitoring events at similar concentrations.

The source of benzene in groundwater is likely attributed to landfill gas ((HDR Engineering, Inc., 2012) and (Geosyntec, 2013)). As discussed in the reports mentioned above, neither the constituents nor the concentrations of VOCs detected in groundwater appear to correlate well with leachate results.

#### 4.2.4.2 1,2-Dibromo-3-chloropropane

1,2-Dibromo-3-chloropropane was reported above the PDWS of 0.2 µg/L in monitoring well MW-16BR (0.31 µg/L). This constituent has not been detected in MW-16BR previously and has only been detected once before in a site well (MW-22AR during the 25<sup>th</sup> sampling event; however, it was not detected in MW-22AR this event). Based on the sporadic detections of this constituent it is likely a laboratory artifact.

### 4.3 Data Validation

All laboratory analyses were performed within the method-specified hold times. One blind duplicate sample (17138-Dup) was collected during the 26<sup>th</sup> semi-annual monitoring event. The duplicate sample was collected concurrently with the sample from monitoring well MW-16AR. Results of the duplicate sample are included in Table 3. In addition, following the collection of the sample from MW-31B, the stainless-steel submersible pump was decontaminated, a new length of HDPE tubing was attached, and, using lab supplied de-ionized water, an equipment blank (17137-EB) was collected. The equipment blank was analyzed for the same parameters as the groundwater samples. Analysis of the equipment blank sample resulted in a detection of copper (4.3 µg/L), lead (17 µg/L) and ammonia (0.02 mg/L). Silver and zinc were also detected at concentrations below the PQL. These detections, particularly for lead, may be attributed to laboratory bias similar to what is described in Section 4.2.1.3 for monitoring wells MW-22AR/BR, MW-24A/B, and MW-25-A/B. All other constituents analyzed were not detected in the equipment blank sample. The submersible pump was used to purge and sample two wells this monitoring event, MW-25B and MW-31B, and decontaminated prior to purging and sampling each well. MW-31B was the last well sampled with the submersible pump.

### 4.4 Impact of Turbidity on Metals Concentrations

A turbidity of less than 20 NTUs was achieved in all but two monitoring wells this event. Monitoring wells exceeding the FDEP guidance of 20 NTUs were B-zone wells MW-25B (72 NTUs) and MW-31B (107 NTUs). These wells were purged using a stainless-steel submersible pump, and more than five well volumes were removed from each well. Samples were collected after the third reading in which turbidity levels were within 5 NTUs or 10% (whichever was greater) as stipulated in the FDEP SOP. Of these wells, MW-31B had a concentration of lead exceeding the PDWS. For comparison, a field-filtered (1-micron) sample was collected concurrently with the unfiltered sample for metals analysis in MW-31B. The filtered sample did not show a lead detection at the MDL of 1.3 µg/L, which appears to correlate the lead exceedance to high turbidity in the unfiltered sample. Lead has not typically exceeded the PDWS in site wells.

# 5 GROUNDWATER LEVEL MEASUREMENTS AND FLOW DIRECTION

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## 5.1 Field Measurements

Groundwater level measurements were obtained on May 16, 2017 from all Phase 1 through 4 monitoring wells and the remaining piezometers installed as part of the original site hydrogeological investigation. The groundwater level measurements were made within an approximate 3.5-hr period. Table 4 contains the groundwater level measurements and calculated groundwater elevations from the monitoring wells and piezometers.

## 5.2 Water Level Contours

The water level contour maps prepared from groundwater level measurements for the surficial aquifer in the A-zone (shallow) is presented in Figure 1A, for the B-zone (intermediate) is presented in Figure 1B and for the C-zone (deep) is presented in Figure 1C. The groundwater elevation data collected on May 16, 2017 from all three zones, overall, is consistent with historical data with flow to the east and northeast; however there appears to be a slight southeast component in the C-zone. In the southwest corner of the disposal area there also appears to be a small, localized change in flow direction to the southwest. The flow to the southwest is likely due to dewatering activities taking place in the southeast section of the borrow area. Once dewatering stops the flow direction will likely resume to the northeast.

## 6 SURFACE WATER SAMPLING

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### 6.1 Sampling Locations and Procedures

Two surface water sampling locations in Bull Creek, established during the initial hydrogeological investigation, were selected by FDEP for routine water quality monitoring. However, Bull Creek was dry at the time of the 26<sup>th</sup> semi-annual water quality monitoring event, and no surface water samples were collected.

# 7 CONCLUSIONS AND RECOMMENDATIONS

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## 7.1 Sampling Locations

The existing monitoring well network is adequate for monitoring purposes, and no changes are recommended.

## 7.2 Sample Analyses

The detections of ammonia, iron, sodium, chloride, and TDS above the regulatory standards in specific groundwater monitoring wells have been discussed in detail in the previous Technical Reports on Water Quality (TRWQ). As discussed in Section 4.2, it is likely that the iron and ammonia detections are not related to a leachate release from the disposal boundary but are rather mobilized by the presence of nitrogen containing compounds under reducing conditions. Iron has exceeded the SDWS since the Phase I baseline monitoring event. Our recommendation is to continue monitoring these constituents as part of the current MPIS.

The ammonia, chloride, and TDS in MW-16AR were elevated during this sampling event. These elevated concentrations are likely due to storm water runoff and cover soil erosion from uncapped areas that occurred within the past year directly upslope between the Cell 6 and Cell 9 sump areas. Omni has addressed the storm water drainage issues through grading and additional cover soil in this area and is evaluating different control measures (e.g. geosynthetic tarps). Once control measures are implemented, concentrations of these constituents are expected to decrease in the well over time. Our recommendation is to continue to monitor these constituents as part of the current MPIS.

The detections of benzene have been consistent in select monitoring wells and, as discussed in Section 4.2 as well as prior submittals to the FDEP, may be attributable to landfill gas migration. The current MPIS requires sampling of compliance wells CW-1A, CW-2A, and CW-3A to monitor the edge of the zone of discharge. The compliance wells were non-detect for benzene this event. Our recommendation is to continue semi-annual monitoring of these constituents as part of the current MPIS.

## 8 REFERENCES

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Weibu, LLC, 2016, Well Abandonment and Installation Baseline Water Quality Sampling.



## **TABLES**

Table 1 (1 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS**  
**26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1A	28 03 48.55	81 05 59.88	19900	9-Dec-03	95.12	23.0	13.0	23.0	82.1	72.1	10.6	8.2
MW-2A	28 03 51.99	81 05 59.90	19903	10-Dec-03	95.21	22.6	12.6	22.6	82.6	72.6	10.3	8.9
MW-3A	28 03 55.34	81 05 59.91	19906	11-Dec-03	94.64	22.8	12.8	22.8	81.9	71.9	10.4	9.0
MW-4A	28 03 58.97	81 05 59.92	19909	12-Dec-03	95.48	23.1	13.1	23.1	82.4	72.4	10.8	9.4
MW-5A	28 04 02.92	81 05 59.95	19912	24-Nov-03	95.32	22.5	12.5	22.5	82.8	72.8	10.1	9.1
MW-6A	28 04 06.50	81 05 59.15	19915	25-Nov-03	94.72	22.6	12.6	22.6	82.2	72.2	10.6	8.6
MW-7A	28 04 07.13	81 05 54.78	19918	26-Nov-03	95.48	23.3	13.3	23.3	82.2	72.2	10.3	9.3
MW-8A	28 04 06.20	81 05 50.64	19921	5-Dec-03	94.67	22.5	12.5	22.5	82.2	72.2	10.2	8.6
MW-9A	28 04 04.34	81 05 46.60	19924	4-Dec-03	94.66	22.4	12.4	22.4	82.3	72.3	10.0	8.6
MW-10A	28 04 00.07	81 05 44.77	19927	3-Dec-03	96.25	22.1	12.1	22.1	84.1	74.1	9.8	7.6
MW-11A	28 03 55.43	81 05 43.27	19930	3-Dec-03	93.56	22.8	12.8	22.8	80.7	70.7	10.5	9.1
MW-12A	28 03 52.08	81 05 43.26	19933	2-Dec-03	95.10	23.0	13.0	23.0	82.1	72.1	10.7	9.3
MW-13A	28 03 48.67	81 05 43.25	19936	8-Dec-03	95.19	22.5	12.5	22.5	82.7	72.7	10.2	7.7
MW-14A	Monitoring Well Abandoned July 10, 2007											
MW-15A	Monitoring Well Abandoned July 10, 2007											
MW-16A	Monitoring Well Abandoned June 24, 2013											
MW-16AR	28 03 44.56	81 05 40.18	22342	15-Oct-13	95.01	23.9	13.5	23.5	81.5	71.5	9.0	8.0
MW-17A	Monitoring Well Abandoned March 5, 2014											
MW-17AR	28 03 42.3	81 05 35.2	22345	19-Jun-14	94.84	24.1	12.0	24.0	82.8	70.8	11.0	10.0
MW-18A	Monitoring Well Abandoned March 5, 2014											
MW-19A	Monitoring Well Abandoned March 5, 2014											
MW-20A	Monitoring Well Abandoned June 24, 2013											
MW-21A	Monitoring Well Abandoned March 5, 2014											
MW-22A	Monitoring Well Abandoned November 11, 2011											
MW-22AR	28 03 34.703	81 06 0.622	28685	14-Mar-12	95.00	23.7	13.0	23.0	82.0	72.0	10.5	9.5
MW-23A	28 03 42.41	81 05 59.79	22363	25-Sep-07	97.90	27.8	17.3	27.3	80.7	70.7	15.3	14.3
MW-24A	28 03 26.9	82 05 25.9	29170	18-Jun-14	87.06	23.5	13	23	74.1	64.1	12.0	11.0
MW-25A	28 03 26.6	82 05 42.6	29173	19-Jun-14	86.99	23.4	13	23	74.0	64.0	12	11
MW-26A	Monitoring Well Abandoned June 15, 2016											
MW-27A	28 03 32.956	81 05 26.032	29179	30-Jul-15	94.68	23.6	13	23	81.68	71.7	11	9
MW-28A	28 03 36.209	81 05 26.696	29186	30-Jul-15	94.77	24.0	14	24	80.77	70.77	11	9
MW-29A	28 03 39.981	81 05 30.307	29189	30-Jul-15	94.88	23.7	13	23	81.88	71.88	11	9
MW-31A	28 03 28.260	81 05 25.013	29195	15-Jun-16	94.15	25.0	15	25	79.15	69.15	11.4	10.4
CW-1A	28 03 55.76	81 06 00.93	29157	14-Nov-13	84.53	18.5	8	18	76.53	66.53	6	4
CW-2A	28 04 00.51	81 05 43.63	29158	14-Nov-13	82.81	18.5	8	18	74.81	64.81	6	4
CW-3A	28 03 56.07	81 05 41.93	29159	14-Nov-13	81.89	18.4	8	18	73.89	63.89	6	4

Table 1 (2 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS**  
**26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1B	28 03 48.59	81 05 59.89	19901	9-Dec-03	95.00	47.9	37.9	47.9	57.1	47.1	35.6	33.1
MW-2B	28 03 51.94	81 05 59.90	19904	10-Dec-03	95.17	48.3	38.3	48.3	56.9	46.9	36.0	34.6
MW-3B	28 03 55.31	81 05 59.91	19907	11-Dec-03	94.68	47.6	37.6	47.6	57.1	47.1	35.3	33.9
MW-4B	28 03 59.01	81 05 59.92	19910	12-Dec-03	95.18	47.4	37.4	47.4	57.8	47.8	35.1	33.5
MW-5B	28 04 02.88	81 05 59.95	19913	24-Nov-03	95.30	47.1	37.1	47.1	58.2	48.2	34.4	32.7
MW-6B	28 04 06.48	81 05 59.18	19916	25-Nov-03	94.60	47.4	37.4	47.4	57.2	47.2	34.9	33.5
MW-7B	28 04 07.13	81 05 54.81	19919	26-Nov-03	95.27	47.5	37.5	47.5	57.8	47.8	34.5	33.5
MW-8B	28 04 06.19	81 05 50.60	19922	5-Dec-03	94.58	49.6	39.6	49.6	55.0	45.0	37.1	35.6
MW-9B	28 04 04.31	81 05 46.56	19925	4-Dec-03	94.63	49.1	39.1	49.1	55.5	45.5	36.8	35.3
MW-10B	28 04 00.04	81 05 44.75	19928	3-Dec-03	96.23	48.3	38.3	48.3	58.0	48.0	35.9	33.9
MW-11B	28 03 55.40	81 05 43.27	19931	2-Dec-03	93.59	47.9	37.9	47.9	55.7	45.7	35.5	34.0
MW-12B	28 03 52.05	81 05 43.27	19934	1-Dec-03	95.01	49.0	39.0	49.0	56.1	46.1	36.6	35.1
MW-13B	28 03 48.64	81 05 43.24	19937	8-Dec-03	95.12	47.2	37.2	47.2	58.0	48.0	34.8	33.4
MW-14B	Monitoring Well Abandoned July 10, 2007											
MW-15B	Monitoring Well Abandoned July 10, 2007											
MW-16B	Monitoring Well Abandoned June 24, 2013											
MW-16BR	28 03 44.54	81 05 40.14	22343	15-Oct-13	94.97	46.6	36.5	46.5	58.5	48.5	33.0	31.0
MW-17B	Monitoring Well Abandoned March 5, 2014											
MW-17BR	28 03 42.2	82 05 35.2	22346	19-Jun-14	94.78	48.5	38.0	48.0	56.8	46.8	37.0	36.0
MW-18B	Monitoring Well Abandoned March 5, 2014											
MW-19B	Monitoring Well Abandoned March 5, 2014											
MW-20B	Monitoring Well Abandoned June 24, 2013											
MW-21B	Monitoring Well Abandoned March 5, 2014											
MW-22B	Monitoring Well Abandoned November 11, 2011											
MW-22BR	28 03 34.665	81 05 59.850	28686	15-Mar-12	94.86	46.1	35.5	45.5	59.4	49.4	33.0	28.0
MW-23B	28 03 42.46	81 05 59.79	22364	25-Sep-07	97.91	42.8	32.3	42.3	65.7	55.7	30.3	29.3
MW-24B	28 03 26.5	82 05 58.5	29171	18-Jun-14	87.05	43.1	33	43	54.1	44.1	32.0	31.0
MW-25B	28 03 26.6	82 05 42.7	29174	19-Jun-14	86.67	41.5	31	41	55.7	45.7	30.0	29.0
MW-26B	Monitoring Well Abandoned June 15, 2016											
MW-27B	28 03 33.0	81 05 26.032	29180	30-Jul-15	94.66	46.8	36	46	58.66	48.66	34	32
MW-28B	28 03 36.252	81 05 26.696	29187	30-Jul-15	94.68	48.7	38	48	56.68	46.68	36	34
MW-29B	28 03 39.998	81 05 30.307	29190	30-Jul-15	94.67	48.8	38	48	56.67	46.67	36	34
MW-31B	28 03 28.304	81 05 25.029	29196	15-Jun-16	93.88	46.3	36	46	57.88	47.88	35	34

Table 1 (3 of 3)

**SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS  
26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING EVENT  
J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well Designation	Latitude (NAD 1983)	Longitude (NAD 1983)	WACS ID	Date Installed	Top of Casing Elevation, TOC (feet)	Total Depth (feet BTOC)	Screen Setting				Sand Pack (feet BTOC)	Fine-Grained Sand Seal (feet BTOC)
							(feet BTOC)		(feet Elevation)			
							Top	Bottom	Top	Bottom		
MW-1C	28 03 48.63	81 05 59.88	19902	9-Dec-03	95.2	75.2	65.2	75.2	30.0	20.0	62.9	61.4
MW-2C	28 03 51.90	81 05 59.89	19905	10-Dec-03	95.3	68.4	58.4	68.4	36.9	26.9	56.1	53.7
MW-3C	28 03 55.28	81 05 59.91	19908	11-Dec-03	94.7	68.7	58.7	68.7	36.0	26.0	56.3	54.8
MW-4C	28 03 59.04	81 05 59.92	19911	12-Dec-03	95.4	72.5	62.5	72.5	32.9	22.9	61.2	59.6
MW-5C	28 04 02.83	81 05 59.95	19914	24-Nov-03	95.4	73.0	63.0	73.0	32.4	22.4	60.7	58.7
MW-6C	28 04 06.46	81 05 59.22	19917	25-Nov-03	94.6	73.2	63.2	73.2	31.4	21.4	60.2	57.7
MW-7C	28 04 07.13	81 05 54.86	19920	25-Nov-03	94.9	73.3	63.3	73.3	31.6	21.6	60.3	59.3
MW-8C	28 04 06.17	81 05 50.55	19923	5-Dec-03	94.5	73.9	63.9	73.9	30.6	20.6	61.6	59.8
MW-9C	28 04 04.29	81 05 46.53	19926	4-Dec-03	94.5	73.8	63.8	73.8	30.8	20.8	61.4	59.4
MW-10C	28 04 00.01	81 05 44.74	19929	3-Dec-03	96.4	73.7	63.7	73.7	32.7	22.7	61.4	60.0
MW-11C	28 03 55.36	81 05 43.26	19932	2-Dec-03	93.7	73.4	63.4	73.4	30.3	20.3	61.0	59.6
MW-12C	28 03 52.01	81 05 43.26	19935	1-Dec-03	95.1	73.6	63.6	73.6	31.5	21.5	60.2	58.7
MW-13C	28 03 48.60	81 05 43.25	19938	8-Dec-03	95.0	73.0	63.0	73.0	32.1	22.1	60.7	58.2
MW-14C	Monitoring Well Abandoned July 10, 2007											
MW-15C	Monitoring Well Abandoned July 10, 2007											
MW-16C	Monitoring Well Abandoned June 24, 2013											
MW-16CR	28 03 44.52	81 05 40.11	22344	16-Oct-13	95.0	75.3	65.0	75.0	30.0	20.0	60.0	59.0
MW-17C	Monitoring Well Abandoned March 5, 2014											
MW-18C	Monitoring Well Abandoned March 5, 2014											
MW-19C	Monitoring Well Abandoned March 5, 2014											
MW-20C	Monitoring Well Abandoned June 24, 2013											
MW-21C	Monitoring Well Abandoned March 5, 2014											
MW-22C	Monitoring Well Abandoned November 11, 2011											
MW-22CR	28 03 34.629	81 05 59.854	28687	15-Mar-12	95.1	66.6	56.0	66.0	39.1	29.1	50.0	49.0
MW-23C	28 03 42.51	81 05 59.80	22365	24-Sep-07	97.9	67.1	56.6	66.6	41.4	31.4	54.6	53.6

Table 2

**SUMMARY OF FINAL FIELD PARAMETERS**  
**26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Monitoring Well	Temperature (°C) <sup>1</sup>	pH (Standard Units)	Specific Conductance (uS/cm) <sup>2</sup>	Turbidity (NTUs) <sup>3</sup>	Oxidation-Reduction Potential (mV) <sup>4</sup>	Dissolved Oxygen (mg/L) <sup>5</sup>	Purging Method
MW-1A	26.75	4.83	2,296	2.1	49.6	1.23	Peristaltic Pump
MW-1B	26.22	4.25	1,586	0.8	87.9	1.28	Peristaltic Pump
MW-2A	25.36	4.57	1,077	0.8	83.8	0.95	Peristaltic Pump
MW-2B	25.21	4.19	1,155	1.2	96.5	0.82	Peristaltic Pump
MW-3A	25.60	5.62	1,243	4	58.8	1.44	Peristaltic Pump
MW-3B	25.60	4.20	1,659	0.5	75.2	1.16	Peristaltic Pump
MW-4A	24.54	4.93	1,098	1.3	32.7	0.87	Peristaltic Pump
MW-4B	25.22	4.19	1,924	0.8	94.0	0.61	Peristaltic Pump
MW-5A	25.65	4.76	211	4.4	41.5	1.31	Peristaltic Pump
MW-5B	25.85	4.06	2,027	1.5	81.5	0.68	Peristaltic Pump
MW-6A	25.70	4.94	253	1.5	26.8	1.28	Peristaltic Pump
MW-6B	26.49	4.46	138	1.3	57.1	1.19	Peristaltic Pump
MW-7A	24.82	5.14	437	1.5	-2.1	1.50	Peristaltic Pump
MW-7B	25.00	4.16	869	1.4	57.5	1.20	Peristaltic Pump
MW-8A	24.86	4.52	1,587	1.9	9.4	0.84	Peristaltic Pump
MW-8B	25.20	4.31	1,266	1.4	53.5	0.81	Peristaltic Pump
MW-9A	26.61	5.26	232	2.2	14.2	0.76	Peristaltic Pump
MW-9B	25.62	4.28	556	0.4	76.7	0.42	Peristaltic Pump
MW-10A	24.08	4.82	610	0.8	2.3	0.82	Peristaltic Pump
MW-10B	24.59	3.87	1,174	0.3	40.5	0.62	Peristaltic Pump
MW-11A	28.00	5.37	286	5.3	56.8	1.23	Peristaltic Pump
MW-11B	27.97	5.08	86	4.3	53.0	0.56	Peristaltic Pump
MW-12A	26.86	5.68	542	1.6	39.7	0.60	Peristaltic Pump
MW-12B	26.48	4.63	83	1.7	96.6	0.43	Peristaltic Pump
MW-13A	27.21	5.28	674	1.4	56.1	0.61	Peristaltic Pump
MW-13B	26.83	4.63	117	0.5	122.8	0.45	Peristaltic Pump
MW-16AR	26.80	5.04	1,794	1.5	66.5	1.38	Peristaltic Pump
MW-16BR	26.20	4.77	90	2.4	90.6	0.45	Peristaltic Pump
MW-17AR	25.05	4.36	330	0.4	164.2	0.63	Peristaltic Pump
MW-17BR	24.48	4.86	132	5.3	85.1	0.37	Peristaltic Pump
MW-22AR	27.16	5.51	450	1.4	-10.2	0.63	Peristaltic Pump
MW-22BR	26.82	4.54	442	0	37.8	0.41	Peristaltic Pump
MW-23A	25.86	5.27	467	1.6	31.9	1.14	Peristaltic Pump
MW-23B	25.69	4.13	1,170	0.1	126.9	0.76	Peristaltic Pump
MW-24A	24.13	4.59	95	0	79.9	0.42	Peristaltic Pump
MW-24B	24.32	4.49	45	2.8	111.7	0.38	Peristaltic Pump
MW-25A	24.81	4.78	934	0	28.3	0.21	Peristaltic Pump
MW-25B	24.26	4.89	114	72	49.1	0.32	Submersible Pump
MW-27A	24.68	4.82	126	1.1	59.6	1.32	Peristaltic Pump
MW-27B	24.20	5.12	156	14.2	36.8	0.84	Peristaltic Pump
MW-28A	25.96	5.00	150	18.5	37.1	0.54	Peristaltic Pump
MW-28B	25.59	4.96	135	4.5	26.2	0.28	Peristaltic Pump
MW-29A	26.43	5.06	172	2.5	25.3	0.45	Peristaltic Pump
MW-29B	25.72	4.70	230	2.2	39.1	0.52	Peristaltic Pump
MW-31A	25.71	4.99	165	16	40.4	0.31	Peristaltic Pump
MW-31B	24.69	5.15	121	107	58.1	0.19	Submersible Pump
CW-1A	22.60	4.84	999	0.8	89.9	1.10	Peristaltic Pump
CW-2A	22.91	5.18	1,420	3.8	31.8	1.00	Peristaltic Pump
CW-3A	23.00	4.58	2,151	1	75.2	1.43	Peristaltic Pump

Notes:

<sup>1</sup> °C = degrees Celsius<sup>2</sup> uS/cm = micro Siemens per centimeter<sup>3</sup> NTU = Nephelometric Turbidity Units<sup>4</sup> mV = millivolts<sup>5</sup> mg/L = milligram per liter

**Table 3**  
**SUMMARY OF GROUNDWATER ANALYTICAL DATA**  
**26<sup>th</sup> SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well ID	1,2-Dibromo-3-chloropropane	Acetone	Benzene	Chloroethane	Toluene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Nickel	Mercury	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	Ammonia	Chloride	TDS	Nitrate (N)														
	PDWS (ug/L)	GCTL (ug/L)	PDWS (ug/L)	GCTL (ug/L)	SDWS (ug/L)	PDWS (ug/L)	GCTL (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	SDWS (ug/L)	SDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	GCTL (ug/L)	PDWS (mg/L)	PDWS (ug/L)	SDWS (ug/L)	PDWS (ug/L)	GCTL (ug/L)	SDWS (ug/L)	GCTL (mg/L)	SDWS (mg/L)	SDWS (mg/L)	SDWS (mg/L)														
	0.2	6,300	1	12	40	6	10	2,000	4	5	100	140	1,000	300	15	100	2	160	50	100	2	49	5,000	2.8	250	500	10														
MW-1A	0.11	U	2.1	U	0.33	U	0.23	U	0.11	I	8.50	U	56	0.16	I	0.32	U	5	6,900	1.3	U	5.8	I	0.019	I	290	6.8	U	1.40	I	0.057	U	25	8.5	I	9.5	590	1,200	0.05	U	
MW-1B	0.11	U	2.1	U	0.33	U	0.23	U	0.16	I	8.50	U	51	0.65	I	0.41	I	1.1	29,000	1.3	U	6.7	I	0.044	I	160	6.8	U	0.90	I	0.085	I	15	2	U	4.4	190	1,100	0.05	U	
MW-2A	0.11	U	4.9	I	0.16	U	0.33	U	0.05	U	8.50	U	58	0.18	I	0.35	I	2.7	14,000	1.3	U	6.3	I	0.011	U	63	6.8	U	0.94	I	0.057	U	5.1	2.5	I	6.9	140	650	0.05	U	
MW-2B	0.11	U	2.1	U	0.16	U	0.33	U	0.09	I	8.50	U	45	0.94	I	0.56	I	0.50	45,000	1.3	U	6.6	I	0.011	U	62	6.8	U	0.83	I	0.057	U	4.2	2	U	1.1	120	860	0.05	U	
MW-3A	0.11	U	2.1	U	0.33	U	0.23	U	0.05	U	8.50	U	67	0.13	U	0.34	I	2.7	4,100	1.3	U	4.5	I	0.011	U	26	6.8	U	0.44	U	0.057	U	6.8	10	11	44	1,400	0.05	U		
MW-3B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	I	8.50	U	38	1.9	I	0.44	I	0.8	10,000	1.3	U	1.4	I	0.011	U	35	6.8	U	0.44	U	0.070	I	5.1	16	3.7	98	1,300	0.05	U		
MW-4A	0.11	U	2.1	U	0.33	U	0.23	U	0.05	U	8.50	U	43	0.13	U	0.33	I	3.0	6,300	1.3	U	1.3	I	0.011	U	43	6.8	U	0.63	I	0.057	U	4.3	8.1	I	18	40	760	0.05	U	
MW-4B	0.11	U	2.1	U	0.16	U	0.33	U	0.15	I	8.50	U	37	0.60	I	0.46	I	2.2	280	1.3	U	1.1	U	0.011	U	57	6.8	U	0.44	U	0.057	U	7.5	10	12	97	1,500	0.05	U		
MW-5A	0.11	U	2.1	U	1.00	I	0.33	U	0.10	I	8.50	U	5	0.13	U	0.32	U	2.6	300	1.3	U	1.1	U	0.011	U	12	6.8	U	1.10	I	0.057	U	2.6	8.6	I	5.9	35	220	0.10	U	
MW-5B	0.11	U	2.1	U	0.16	U	0.33	U	0.08	I	8.50	U	46	0.43	I	0.41	I	1.6	260	1.3	U	1.1	U	0.011	U	76	6.8	U	0.44	U	0.057	U	4.6	8.4	I	5.4	99	1,700	0.05	U	
MW-6A	0.11	U	2.1	U	4.4	I	0.33	U	0.05	U	8.50	U	6.6	0.13	U	0.32	U	1.2	13,000	1.3	U	1.9	I	0.011	U	17	6.8	U	0.90	I	0.057	U	4.0	4.7	I	3.9	41	140	0.05	U	
MW-6B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	42	0.33	I	0.32	U	0.5	1,300	1.3	U	1.5	I	0.011	U	9.8	6.8	U	0.95	I	0.057	U	1.7	9.7	I	0.25	29	67	0.05	U	
MW-7A	0.11	U	18.0	I	0.16	U	0.33	U	0.05	U	8.50	U	26	0.13	U	0.32	U	1.0	21,000	1.3	U	2.7	I	0.011	U	20	6.8	U	0.76	I	0.057	U	1.9	2	U	16	76	150	0.15	I	
MW-7B	0.11	U	2.1	U	0.16	U	0.33	U	0.07	I	8.50	U	34	1.40	I	0.32	U	0.6	30,000	1.3	U	7.2	I	0.011	U	25	6.8	U	1.40	I	0.089	I	3.5	2	U	3.6	31	670	0.05	U	
MW-8A	0.11	U	2.1	U	4.1	I	0.33	U	0.10	I	8.50	U	39	0.14	I	0.40	I	2.1	19,000	1.3	U	2.5	I	0.011	U	7.5	6.8	U	0.44	U	0.057	U	3.3	2	U	6.3	0.91	I	1,500	0.05	U
MW-8B	0.11	U	2.1	U	0.16	U	0.33	U	0.07	I	8.50	U	67	0.86	I			0.50	48,000	1.3	U	5.4	I	0.011	U	38	6.8	U	1.1	I	0.090	I	4.9	2	U	0.92	41	1,100	0.05	U	
MW-9A	0.11	U	6.6	I	9.4	I	0.33	U	0.05	I	8.50	U	9	0.13	U	0.32	U	3.60	1,200	1.3	U	1.1	U	0.011	U	20	6.8	U	0.44	U	0.057	U	5.2	21	3.8	16	200	0.10	U		
MW-9B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	I	8.50	U	41	1.1	I	0.32	U	2.0	9,400	1.3	U	1.1	U	0.011	U	18	6.8	U	0.44	U	0.069	I	3.8	7.0	I	1.3	37	390	0.05	U	
MW-10A	0.11	U	2.1	U	5.2	I	0.33	U	0.05	U	8.50	U	54	0.13	U	0.32	U	0.94	6,500	1.3	U	1.1	U	0.011	U	28	6.8	U	0.65	I	0.057	U	2.6	6.8	I	13	28	380	0.05	U	
MW-10B	0.11	U	2.1	U	8.1	I	0.33	U	0.05	U	8.50	U	41	2.3	I	0.32	U	0.93	13,000	1.3	U	1.3	I	0.011	U	36	6.8	U	0.44	U	0.091	I	4.4	3.5	I	9.2	39	900	0.05	U	
MW-11A	0.11	U	2.1	U	1.5	I	0.33	U	0.06	I	8.50	U	19	0.25	I	0.32	U	5.60	13,000	1.3	U	2.8	I	0.011	U	15	6.8	U	0.44	U	0.057	U	5.6	2	U	3.3	14	150	0.23	I	
MW-11B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	I	8.50	U	23	0.13	U	0.32	U	2.5	360	1.3	U	1.1	U	0.011	U	11	6.8	U	0.44	U	0.057	U	3.6	12	0.03	11	60	0.05	U		
MW-12A	0.11	U	2.1	U	8.1	I	0.33	U	0.06	I	8.50	U	21	0.13	U	0.32	U	1.90	28,000	1.3	U	2.0	I	0.011	U	26	6.8	U	0.55	I	0.057	U	4.9	2	U	1.9	62	310	0.05	U	
MW-12B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	57	0.13	U	0.32	U	1.00	730	1.3	U	1.1	U	0.011	U	7.6	6.8	U	0.44	U	0.057	U	1.4	11	0.09	15	60	0.05	U		
MW-13A	0.11	U	2.1	U	3.2	I	0.33	U	0.05	U	8.50	U	15	0.13	U	0.32	U	2.1	4,800	1.3	U	4.5	I	0.011	U	56	6.8	U	1.0	I	0.057	U	6.6	4.7	I	1.7	120	370	0.05	U	
MW-13B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	120	0.13	U	0.32	U	0.79	1,100	1.3	U	6.9	I	0.011	U	10	6.8	U	0.88	I	0.057	U	0.94	7.1	I	0.12	27	74	0.05	U	
MW-16AR	0.11	U	2.1	U	2.10	I	0.33	U	0.23	U	8.50	U	120	0.13	U	0.68	I	3.7	1,900	1.3	U	3.6	I	0.011	U	140	6.8	U	0.44	U	0.057	U	11	5.6	I	4.8	360	1,200	0.36	I	
MW-16AR Duplicate	0.11	U	6.0	I	2.60	I	0.33	U	0.23	U	8.50	U	120	0.13	U	0.88	I	4.1	2,100	1.3	U	1.1	U	0.011	U	160	6.8	U	0.44	U	0.057	U	10	2	U	4.8	350	1,200	0.52	I	
MW-16BR	0.31	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	24	0.13	U	0.32	U	0.9	1,300	1.3	U	9.1	I	0.011	U	6.4	6.8	U	0.70	I	0.057	U	1.30	I	8.8	I	0.21	16	54	0.05	U
MW-17AR	0.11	U	2.1	U	0.16	U	0.33	U	0.33	I	8.50	U	79	0.15	I	1.4	I	1.0	750	1.3	U	8.5	I	0.011	U	13	6.8	U	0.76	I	0.057	U	6.3	6.2	I	1.8	16	190	0.05	U	
MW-17BR	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	26	0.13	U	0.32	U	1.7	630	1.3	U	11.0	I	0.011	U	15	6.8	U	1.10	I	0.057	U	2.3	9.1	I	0.11	26	71	0.05	U	
MW-22AR	0.11	U	7.5	I	0.16	U	0.33	U	0.06	I	8.50	U	19	0.13	U	0.32	U	4.3	1,400	1.3	U	3.0	I	0.011	U	19	6.8	U	0.95	I	0.057	U	3.1	3.8	I	5.0	48	310	0.50	U	
MW-22BR	0.11	U	2.1	U	0.16	U	0.33	U	0.05	I	8.50	U	77	0.39	I	0.32	U	0.5	13,000	1.3	U	3.50	I	0.011	U	29	6.8	U	0.44	U	0.057	U	2.1	5.5	I	0.30	76	330	0.50	U	
MW-23A	0.11	U	2.1	U	0.86	I	0.33	U	0.07	I	8.50	U	8	0.13	U	0.32	U	1.7	190	1.3	U	1.1	U	0.011	U	21	6.8	U	1.0	I	0.057	U	3.2	V	7.3	I	3.0	600	320	0.50	U
MW-23B	0.11	U	2.1	U	0.16	U	0.33	U	0.07	I	8.50	U	100	0.69	I	0.32	U	0.9	3,100	1.3	U	0.94	I	0.011	U	92	6.8	U	1.2	I	0.057	U	5.8	V	6.4	I	2.9	59	600	0.50	U
MW-24A	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	10	0.13	U	0.32	U	1.1	440	1.3	U	4.6	I	0.011	U	11	6.8	U	0.44	U	0.057	U	0.74	I	10	0.37	47	I	77	0.50	U
MW-24B	0.11	U	2.1	U	0.16	U	0.33	U	0.05	U	8.50	U	7	0.13	U	0.32	U	1.2	430	1.3	U	4.6	I	0.011	U	4.5	6.8	U	0.44	U	0.057	U	1.1	I	9.9	I					

**Table 4**  
(1 of 3)  
**GROUNDWATER LEVEL MEASUREMENTS**  
**26th SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well ID	Time	TOC Elevation	Depth to Water (ft)	Well Depth (ft) <sup>(1)</sup>	GW Elevation	Field Observations
DP-1						Piezometer Abandoned October 3, 2003
DP-2						Piezometer Abandoned October 3, 2003
DP-3						Piezometer Abandoned January 16, 2006
DP-4						Piezometer Abandoned January 16, 2006
DP-5						Piezometer Abandoned July 10, 2007
DP-6						Piezometer Abandoned July 10, 2007
DP-7						Piezometer Abandoned July 10, 2007
DP-8						Piezometer Abandoned July 10, 2007
DP-9						Piezometer Abandoned July 10, 2007
DP-10						Piezometer Abandoned July 10, 2007
DP-11						Piezometer Abandoned July 10, 2007
DP-12						Piezometer Abandoned July 10, 2007
DP-13						Piezometer Abandoned July 11, 2007
DP-14						Piezometer Abandoned March 2, 2015
DP-15						Piezometer Abandoned March 2, 2015
DP-16						Piezometer Abandoned December 30, 2015
DP-17						Piezometer Abandoned December 30, 2015
DP-18	9:44	84.38	9.85	52.87	74.53	
DP-19	9:44	84.34	9.77	18.20	74.57	
DP-20	10:02	83.07	7.35	18.35	75.72	
DP-21	10:02	83.00	7.23	53.68	75.77	
DP-22	6:58	81.00	6.31	18.63	74.69	
DP-23	6:58	81.27	6.33	53.73	74.94	
DP-24						Piezometer Abandoned December 30, 2015
SZ-1						Piezometer Abandoned July 10, 2007
SZ-2	10:02	83.16	8.22	75.39	74.94	
SZ-3	6:58	81.27	7.07	78.85	74.20	
MW-1A	9:23	95.12	18.24	23.15	76.88	
MW-1B	9:23	95.00	18.13	48.07	76.87	
MW-1C	9:23	95.18	18.37	74.58	76.81	
MW-2A	9:15	95.21	18.36	22.84	76.85	
MW-2B	9:15	95.17	18.32	48.26	76.85	
MW-2C	9:15	95.32	18.52	68.57	76.80	
MW-3A	9:05	94.64	17.67	22.97	76.97	
MW-3B	9:05	94.68	17.68	47.88	77.00	
MW-3C	9:05	94.66	17.74	68.95	76.92	
MW-4A	8:53	95.48	18.38	23.28	77.10	
MW-4B	8:53	95.18	18.16	47.67	77.02	
MW-4C	8:53	95.39	18.50	72.70	76.89	
MW-5A	8:45	95.32	18.65	22.69	76.67	
MW-5B	8:45	95.30	18.77	47.32	76.53	
MW-5C	8:45	95.39	19.19	73.25	76.20	
MW-6A	8:40	94.72	19.20	22.60	75.52	
MW-6B	8:40	94.60	19.09	47.71	75.51	
MW-6C	8:40	94.58	19.17	73.25	75.41	
MW-7A	8:35	95.48	19.96	23.53	75.52	
MW-7B	8:35	95.27	19.74	48.14	75.53	
MW-7C	8:35	94.93	19.54	73.49	75.39	
MW-8A	8:30	94.67	19.20	22.71	75.47	
MW-8B	8:30	94.58	19.14	49.48	75.44	

Table 4  
(2 of 3)

**GROUNDWATER LEVEL MEASUREMENTS**  
**26th SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

Well ID	Time	TOC Elevation	Depth to Water (ft)	Well Depth (ft) <sup>(1)</sup>	GW Elevation	Field Observations
MW-8C	8:30	94.50	19.24	73.95	75.26	
MW-9A	8:18	94.66	19.40	22.53	75.26	
MW-9B	8:18	94.63	19.40	49.30	75.23	
MW-9C	8:18	94.54	19.42	73.96	75.12	
MW-10A	8:13	96.25	20.78	22.37	75.47	
MW-10B	8:13	96.23	20.77	48.47	75.46	
MW-10C	8:13	96.36	21.04	73.76	75.32	
MW-11A	8:02	93.56	18.13	22.83	75.43	
MW-11B	8:02	93.59	18.24	48.03	75.35	
MW-11C	8:02	93.65	18.30	73.72	75.35	
MW-12A	7:53	95.10	19.45	23.20	75.65	
MW-12B	7:53	95.01	19.47	49.17	75.54	
MW-12C	7:53	95.10	19.60	73.75	75.50	
MW-13A	7:47	95.19	19.43	22.73	75.76	
MW-13B	7:47	95.12	19.37	47.43	75.75	
MW-13C	7:47	95.04	19.38	73.20	75.66	
MW-14A						Monitoring Well Abandoned July 10, 2007
MW-14B						Monitoring Well Abandoned July 10, 2007
MW-14C						Monitoring Well Abandoned July 10, 2007
MW-15A						Monitoring Well Abandoned July 10, 2007
MW-15B						Monitoring Well Abandoned July 10, 2007
MW-15C						Monitoring Well Abandoned July 10, 2007
MW-16A						Monitoring Well Abandoned June 24, 2013
MW-16B						Monitoring Well Abandoned June 24, 2013
MW-16C						Monitoring Well Abandoned June 24, 2013
MW-16AR	7:44	95.01	19.19	23.95	75.82	
MW-16BR	7:44	94.97	19.18	46.55	75.79	
MW-16CR	7:44	95.03	19.38	75.25	75.65	
MW-17AR	7:36	94.84	19.58	24.03	75.26	
MW-17BR	7:36	94.78	19.44	48.40	75.34	
MW-17A						Monitoring Well Abandoned March 5, 2014
MW-17B						Monitoring Well Abandoned March 5, 2014
MW-17C						Monitoring Well Abandoned March 5, 2014
MW-18A						Monitoring Well Abandoned March 5, 2014
MW-18B						Monitoring Well Abandoned March 5, 2014
MW-18C						Monitoring Well Abandoned March 5, 2014
MW-19A						Monitoring Well Abandoned March 5, 2014
MW-19B						Monitoring Well Abandoned March 5, 2014
MW-19C						Monitoring Well Abandoned March 5, 2014
MW-20A						Monitoring Well Abandoned June 24, 2013
MW-20B						Monitoring Well Abandoned June 24, 2013
MW-20C						Monitoring Well Abandoned June 24, 2013
MW-21A						Monitoring Well Abandoned March 5, 2014
MW-21B						Monitoring Well Abandoned March 5, 2014
MW-21C						Monitoring Well Abandoned March 5, 2014
MW-22A						Monitoring Well Abandoned November 11, 2011
MW-22B						Monitoring Well Abandoned November 11, 2011
MW-22C						Monitoring Well Abandoned November 11, 2011



Table 4

(3 of 3)

**GROUNDWATER LEVEL MEASUREMENTS**  
**26th SEMI-ANNUAL WATER QUALITY MONITORING EVENT**  
**J.E.D. SOLID WASTE MANAGEMENT FACILITY**

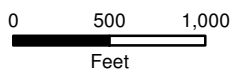
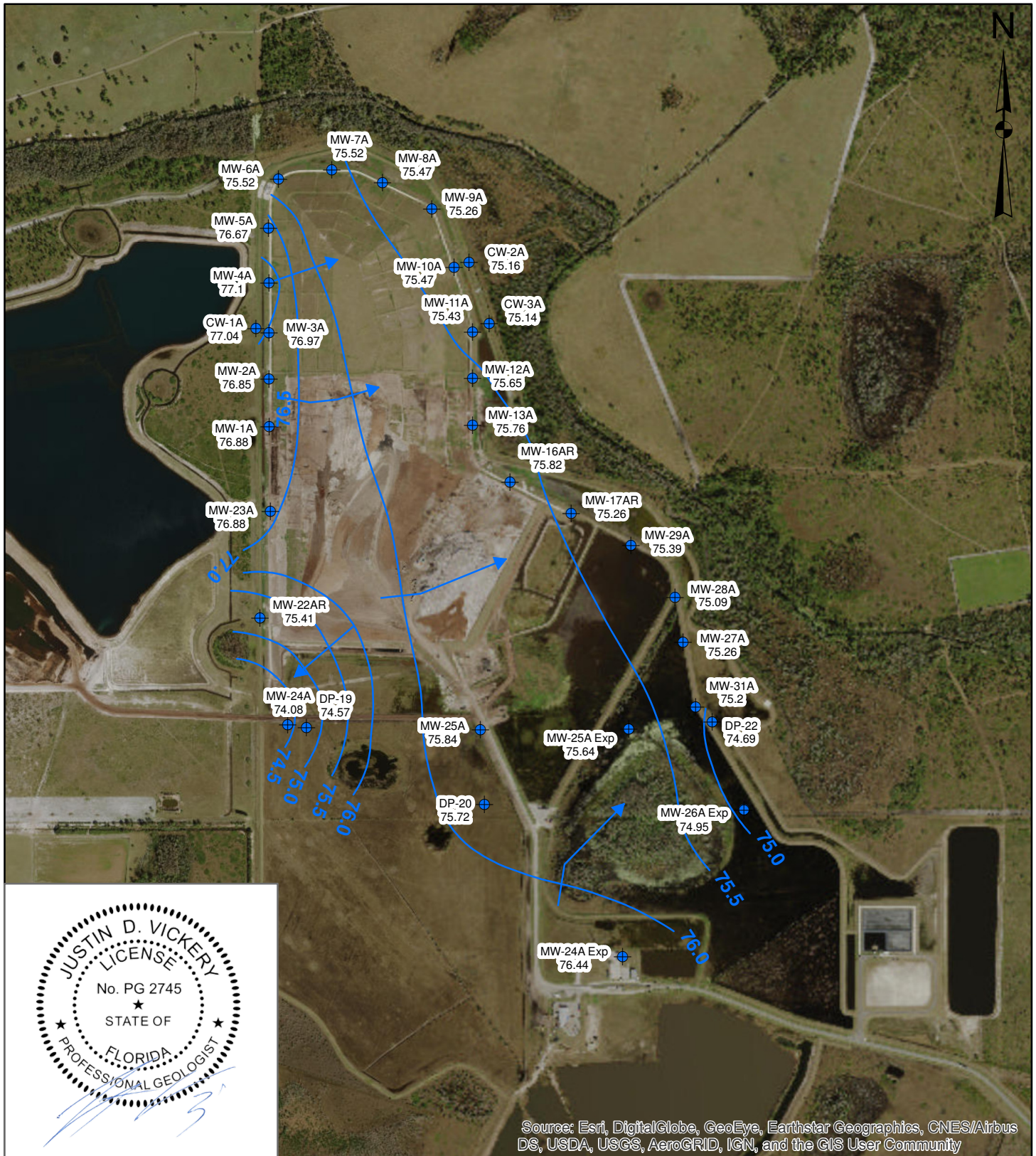
Well ID	Time	TOC Elevation	Depth to Water (ft)	Well Depth (ft) <sup>(1)</sup>	GW Elevation	Field Observations
MW-22AR	9:37	95.00	19.59	23.59	75.41	
MW-22BR	9:37	94.86	19.49	46.06	75.37	
MW-22CR	9:37	95.13	19.68	66.50	75.45	
MW-23A	9:30	97.90	21.02	27.95	76.88	
MW-23B	9:30	97.91	21.00	42.98	76.91	
MW-23C	9:30	97.93	21.05	67.19	76.88	
MW-24A	9:47	87.06	12.98	23.41	74.08	
MW-24B	9:47	87.05	13.01	43.05	74.04	
MW-25A	9:55	86.99	11.15	23.36	75.84	
MW-25B	9:55	86.67	10.73	41.41	75.94	
MW-26A	Monitoring Well Abandoned June 15, 2016					
MW-26B	Monitoring Well Abandoned June 15, 2016					
MW-24A Exp	10:40	86.97	10.53	24.14	76.44	
MW-25A Exp	6:52	82.36	6.72	24.71	75.64	
MW-26A Exp	7:03	82.01	7.06	24.03	74.95	
MW-27C Exp	--	81.66	NM	58.37	NM	
MW-27A	7:20	94.68	19.42	23.54	75.26	
MW-27B	7:20	94.66	19.47	46.50	75.19	
MW-28A	7:25	94.77	19.68	23.84	75.09	
MW-28B	7:25	94.68	19.65	48.82	75.03	
MW-29A	7:32	94.88	19.49	23.65	75.39	
MW-29B	7:32	94.67	19.62	48.90	75.05	
MW-31A	7:15	94.15	18.95	25.02	75.20	
MW-31B	7:15	93.88	18.89	46.34	74.99	
CW-1A	9:00	84.53	7.49	18.46	77.04	
CW-2A	8:06	82.81	7.65	18.48	75.16	
CW-3A	8:00	81.89	6.75	18.42	75.14	

Notes: Well caps removed site wide and wells allowed to stabilize prior to measurements.

(1):Monitoring well total depths were measured following the November 2016 water quality monitoring event

NM = Not Measured

## FIGURES



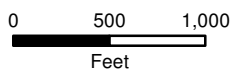
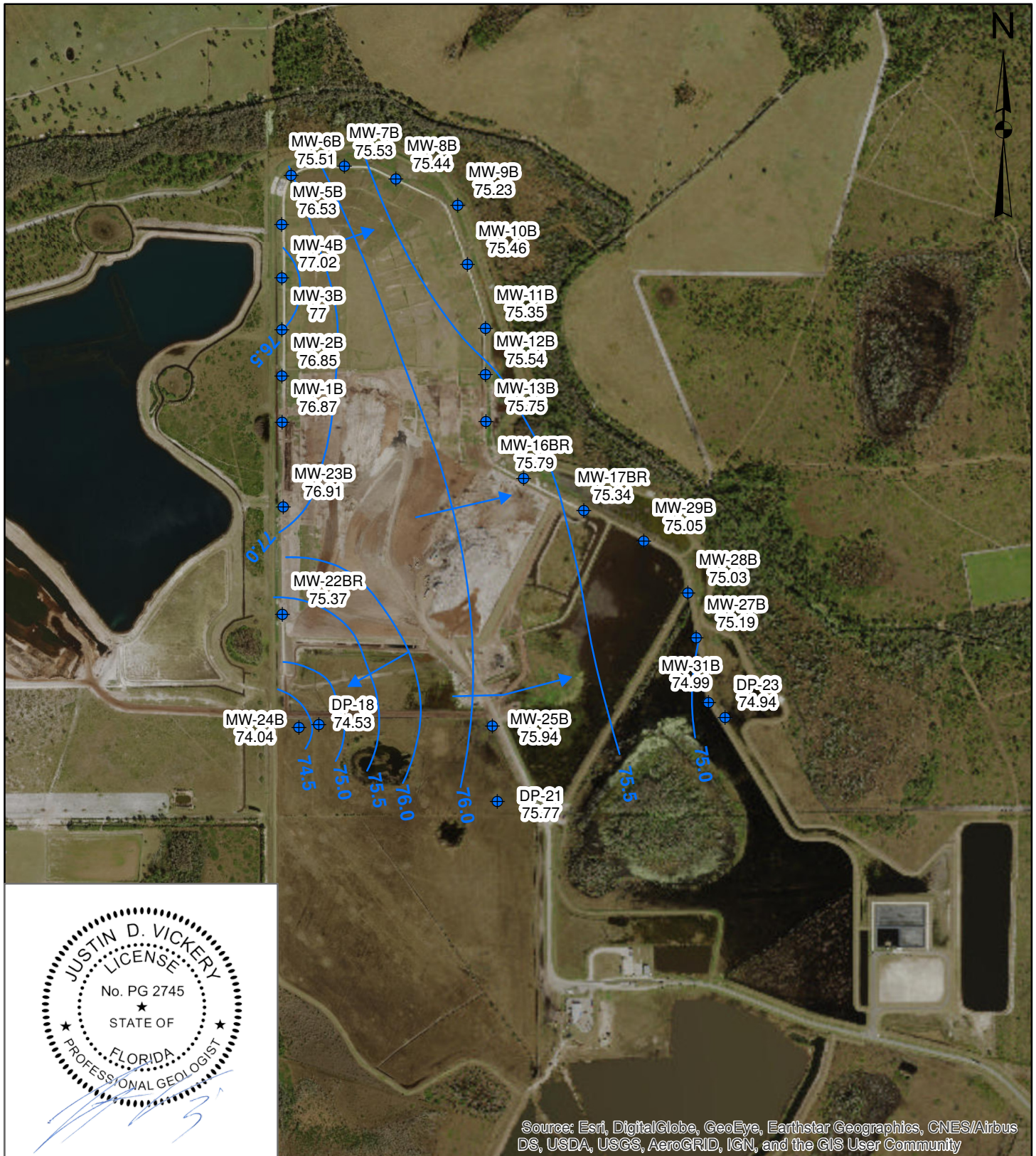
**Legend**

- MW-1A 76.88 Monitoring Well and Groundwater Elevation (feet above NGVD)
- Groundwater Elevation Contour
- Assumed Groundwater Elevation Contour
- Groundwater Flow Direction

**Potentiometric Surface Map  
"A"-Zone (Shallow) Wells  
May 2017**

J.E.D. Solid Waste Management Facility  
1501 Omni Way  
St. Cloud, Osceola County, FL 34773





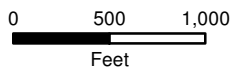
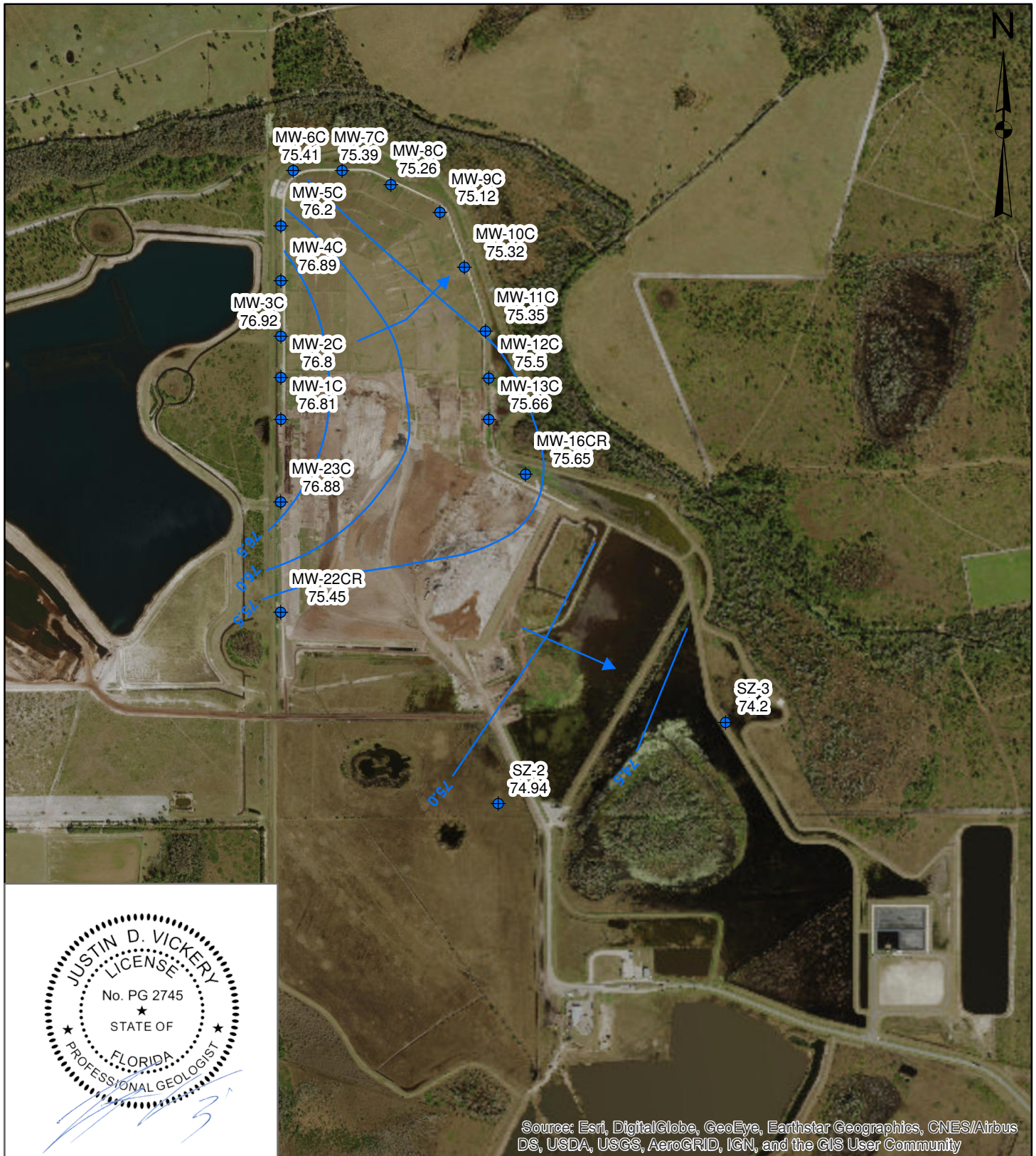
**Legend**

- MW-1B 76.87 Monitoring Well and Groundwater Elevation (feet above NGVD)
- Groundwater Elevation Contour
- Assumed Groundwater Elevation Contour
- Groundwater Flow Direction

**Potentiometric Surface Map  
"B"-Zone (Intermediate) Wells  
May 2017**

J.E.D. Solid Waste Management Facility  
1501 Omni Way  
St. Cloud, Osceola County, FL 34773





**Legend**

- MW-1C 76.81 Monitoring Well and Groundwater Elevation (feet above NGVD)
- Groundwater Elevation Contour
- Assumed Groundwater Elevation Contour
- Groundwater Flow Direction

**Potentiometric Surface Map  
"C"-Zone (Deep) Wells  
May 2017**

J.E.D. Solid Waste Management Facility  
1501 Omni Way  
St. Cloud, Osceola County, FL 34773

**APPENDIX A**  
**Water Quality Monitoring Certification**  
**FDEP Form 62-701.900(31)**





# 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 J.E.D. Soild Waste Management Facility  
Address 1501 Omni Way  
City Saint Cloud Zip 34773 County Osceola  
Telephone Number (407 ) 891-3720
- (2) WACS Facility ID 89544
- (3) DEP Permit Number SO49-0199726-022
- (4) Authorized Representative's Name Kirk Wills Title South Region Engineer  
Address 5135 Madison Avenue  
City Tampa Zip 33619 County Hillsborough  
Telephone Number (813 ) 388-1026  
Email address (if available) kirk.wills@wasteconnections.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.

June 29, 2017  
(Date)

(Owner or Authorized Representative's Signature)

### PART II QUALITY ASSURANCE REQUIREMENTS

- Sampling Organization Environmental Planning Specialists, Inc.  
Analytical Lab NELAC / HRS Certification # E82574  
Lab Name Advanced Environmental Laboratories, Inc.  
Address 6681 Southpoint Parkway, Jacksonville, Florida 32216  
Phone Number (904 ) 363-9350  
Email address (if available) CMyers@AELLab.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.  
Temple 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

**APPENDIX B**  
**Monitoring Well Sampling Logs**



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-1A</u>	SAMPLE ID: <u>17143-MW-1A</u>
DATE: <u>5-23-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): <u>18.28</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <u>23</u> feet - <u>18.28</u> feet ) X 0.16 gallons/foot = <u>0.8</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X <u>21</u> feet ) + 0.12 gallons = <u>0.03</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	PURGING INITIATED AT: <u>1100</u>	PURGING ENDED AT: <u>1152</u>	TOTAL VOLUME PURGED (gallons): <u>2.6</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1142</u>	<u>2.1</u>	<u>2.1</u>	<u>0.05</u>	<u>18.71</u>	<u>4.82</u>	<u>26.78</u>	<u>2292</u>	<u>1.26</u>	<u>2.1</u>	<u>clear</u>	<u>49.7</u>
<u>1145</u>	<u>0.15</u>	<u>2.25</u>	<u>0.05</u>	<u>18.71</u>	<u>4.83</u>	<u>26.77</u>	<u>2293</u>	<u>1.24</u>	<u>2.3</u>	<u>clear</u>	<u>49.2</u>
<u>1152</u>	<u>0.35</u>	<u>2.6</u>	<u>0.05</u>	<u>18.71</u>	<u>4.83</u>	<u>26.75</u>	<u>2296</u>	<u>1.23</u>	<u>2.1</u>	<u>clear</u>	<u>49.6</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <u>1155</u>		SAMPLING ENDED AT: <u>1207</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>17143-MW-1A</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>APP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>APP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>APP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>	<u>APP</u>	<u>200</u>
REMARKS: Weather: <u>Partly cloudy, 84°F, SSW 14 mph</u> Odor: <u>none</u>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) 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)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-2A</u>	SAMPLE ID: <u>17143-MW-2A</u>
DATE: <u>5-23-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>12.6</u> feet to <u>22.6</u> feet	STATIC DEPTH TO WATER (feet): <u>18.40</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>22.6</u> feet - <u>18.40</u> feet ) X 0.16 gallons/foot = <u>0.7</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X <u>21</u> feet ) + 0.12 gallons = <u>0.03</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	PURGING INITIATED AT: <u>0925</u>	PURGING ENDED AT: <u>1015</u>	TOTAL VOLUME PURGED (gallons): <u>2.5</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1010</u>	<u>2.25</u>	<u>2.25</u>	<u>0.05</u>	<u>18.70</u>	<u>4.56</u>	<u>25.40</u>	<u>1077</u>	<u>0.94</u>	<u>0.7</u>	<u>clear</u>	<u>84.1</u>
<u>1012</u>	<u>0.1</u>	<u>2.35</u>	<u>0.05</u>	<u>18.70</u>	<u>4.56</u>	<u>25.41</u>	<u>1077</u>	<u>0.94</u>	<u>0.9</u>	<u>clear</u>	<u>83.8</u>
<u>1015</u>	<u>0.15</u>	<u>2.5</u>	<u>0.05</u>	<u>18.70</u>	<u>4.57</u>	<u>25.36</u>	<u>1077</u>	<u>0.95</u>	<u>0.8</u>	<u>clear</u>	<u>83.8</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <u>1020</u>		SAMPLING ENDED AT: <u>1030</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <u>(N)</u>		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <u>(N)</u>						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<u>17143-</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>	<u>200</u>
<u>MW-2A</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>	<u>200</u>
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>	<u>200</u>
REMARKS: Weather: <u>p. cloudy, 79°F</u>										
Odor: <u>none</u>										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-2B	SAMPLE ID: 17143-MW-2B
DATE: 5-23-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 38.3 feet to 48.3 feet	STATIC DEPTH TO WATER (feet): 18.37	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) = (                      feet -                      feet) X 0.16 gallons/foot =                      gallons											
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X 50 feet) + 0.12 gallons = 0.2 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 43	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 43	PURGING INITIATED AT: 0925	PURGING ENDED AT: 0950	TOTAL VOLUME PURGED (gallons): 1.5							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0940	0.9	0.9	0.06	18.41	4.18	25.25	1155	0.83	2	clear	97.7
0945	0.3	1.2	0.06	18.41	4.19	25.22	1155	0.85	1.3	clear	96.7
0950	0.3	1.5	0.06	18.41	4.19	25.21	1155	0.82	1.2	clear	96.5
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 0950		SAMPLING ENDED AT: 1000	
PUMP OR TUBING DEPTH IN WELL (feet): 43				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
17143-	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	225	
MW-2B	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	225	
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	225	
↓	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	225	
REMARKS: Weather: p. cloudy, 79°F										
Odor: none										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)











## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-4A	SAMPLE ID: 17143-MW-4A
DATE: 5-23-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13.1 feet to 23.1 feet	STATIC DEPTH TO WATER (feet): 18.47	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 23.1 feet - 18.47 feet ) X 0.16 gallons/foot = 0.74 gallons											
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21	PURGING INITIATED AT: 0600	PURGING ENDED AT: 0710	TOTAL VOLUME PURGED (gallons): 4.9							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0700	4.2	4.2	0.07	18.73	4.93	24.53	1090	0.88	1.2	clear	33.2
0705	0.35	4.55	0.07	18.73	4.94	24.53	1091	0.87	1.5	clear	33.3
0710	0.35	4.9	0.07	18.73	4.93	24.54	1098	0.87	1.3	clear	32.7
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: 0710		SAMPLING ENDED AT: 0720	
PUMP OR TUBING DEPTH IN WELL (feet): 21				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> (N)							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
17143-MW-4A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200		
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	275		
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	275		
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	275		
REMARKS: Weather: p. Cloudy, 73°F											
Odor: none											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-4B</u>	SAMPLE ID: <u>17143-MW-4B</u>
DATE: <u>5-23-17</u>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>37.4</u> feet to <u>47.4</u> feet	STATIC DEPTH TO WATER (feet): <u>18.20</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= (                      feet -                      feet ) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X <u>50</u> feet ) + 0.12 gallons = <u>0.2</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>42</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>42</u>	PURGING INITIATED AT: <u>0600</u>	PURGING ENDED AT: <u>0635</u>	TOTAL VOLUME PURGED (gallons): <u>2.8</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>0625</u>	<u>2</u>	<u>2</u>	<u>0.08</u>	<u>18.40</u>	<u>4.20</u>	<u>25.21</u>	<u>1928</u>	<u>0.64</u>	<u>1.2</u>	<u>clear</u>	<u>94.5</u>
<u>0630</u>	<u>0.4</u>	<u>2.4</u>	<u>0.08</u>	<u>18.40</u>	<u>4.19</u>	<u>25.21</u>	<u>1925</u>	<u>0.61</u>	<u>1</u>	<u>clear</u>	<u>94.1</u>
<u>0635</u>	<u>0.4</u>	<u>2.8</u>	<u>0.08</u>	<u>18.40</u>	<u>4.19</u>	<u>25.22</u>	<u>1924</u>	<u>0.61</u>	<u>0.8</u>	<u>clear</u>	<u>94</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <u>0635</u>		SAMPLING ENDED AT: <u>0645</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>42</u>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>17143-MW</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>APP</u>	<u>200</u>
<u>-4B</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>APP</u>	<u>300</u>
<u>b</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>APP</u>	<u>300</u>
<u>b</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>	<u>APP</u>	<u>300</u>
REMARKS: Weather: <u>p. cloudy, 73°F</u> Odor: <u>none</u>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-SA</u>	SAMPLE ID: <u>17142-MW-SA</u>
DATE: <u>5-22-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>12.5</u> feet to <u>22.5</u> feet	STATIC DEPTH TO WATER (feet): <u>18.76</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
$= ( 22.5 \text{ feet} - 18.76 \text{ feet} ) \times 0.16 \text{ gallons/foot} = 0.6 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
$= 0 \text{ gallons} + ( 0.0014 \text{ gallons/foot} \times \text{feet} ) + 0.12 \text{ gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	PURGING INITIATED AT: <u>1340</u>	PURGING ENDED AT: <u>1430</u>	TOTAL VOLUME PURGED (gallons): <u>2.5</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1420</u>	<u>2</u>	<u>2</u>	<u>0.05</u>	<u>19.65</u>	<u>4.75</u>	<u>25.63</u>	<u>214</u>	<u>1.50</u>	<u>4.4</u>	<u>yellowish</u>	<u>42.5</u>
<u>1425</u>	<u>0.25</u>	<u>2.25</u>	<u>0.05</u>	<u>19.65</u>	<u>4.75</u>	<u>25.61</u>	<u>212</u>	<u>1.32</u>	<u>4.4</u>	<u>" "</u>	<u>42</u>
<u>1430</u>	<u>0.25</u>	<u>2.5</u>	<u>0.05</u>	<u>19.65</u>	<u>4.76</u>	<u>25.65</u>	<u>211</u>	<u>1.31</u>	<u>4.4</u>	<u>" "</u>	<u>41.5</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1430</u>		SAMPLING ENDED AT: <u>1440</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="radio"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="radio"/> N							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<u>17142</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>APP</u>	<u>200</u>		
<u>MW-SA</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>APP</u>			
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>APP</u>			
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO<sub>3</sub>, TDS</u>	<u>APP</u>			
REMARKS: Weather: <u>M. sunny, 85°F</u> Odor: <u>none</u>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)















## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-7A</b>	SAMPLE ID: <b>17142-MW-7A</b>
DATE: <b>5-22-17</b>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <b>13.3</b> feet to <b>23.3</b> feet	STATIC DEPTH TO WATER (feet): <b>20.04</b>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <b>23.3</b> feet - <b>20.04</b> feet ) X 0.16 gallons/foot = <b>0.5</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>22</b>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>22</b>		PURGING INITIATED AT: <b>1050</b>		PURGING ENDED AT: <b>1150</b>		TOTAL VOLUME PURGED (gallons): <b>3</b>			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1140	2.5	2.5	0.05	20.10	5.13	24.77	413	1.52	1.6	clear	0.6
1145	0.25	2.75	0.05	20.10	5.13	24.80	439	1.49	1.8	clear	-1.5
1150	0.25	3	0.05	20.10	5.14	24.82	437	1.5	1.5	clear	-2.1
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <b>1150</b>		SAMPLING ENDED AT: <b>1200</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>22</b>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17142-MW-7A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200
↓	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	200
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	200
↓	1	PE	500 ml	None	None		Cl, NO <sub>3</sub> , TDS	APP	200
REMARKS: Weather: <b>h. sunny, 83°F</b> Odor: <b>none</b>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-7B</u>	SAMPLE ID: <u>17142-MW-7B</u>
DATE: <u>5-22-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>37.5</u> feet to <u>47.5</u> feet	STATIC DEPTH TO WATER (feet): <u>19.82</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (                      feet -                      feet) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X <u>50</u> feet) + 0.12 gallons = <u>0.2</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>	PURGING INITIATED AT: <u>1050</u>	PURGING ENDED AT: <u>1120</u>	TOTAL VOLUME PURGED (gallons): <u>1.5</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1105</u>	<u>0.75</u>	<u>0.75</u>	<u>0.05</u>	<u>20.07</u>	<u>4.14</u>	<u>25.02</u>	<u>876</u>	<u>1.21</u>	<u>1.9</u>	<u>clear</u>	<u>62.6</u>
<u>1110</u>	<u>0.25</u>	<u>1</u>	<u>0.05</u>	<u>20.07</u>	<u>4.15</u>	<u>24.96</u>	<u>868</u>	<u>1.21</u>	<u>1.9</u>	<u>clear</u>	<u>59.5</u>
<u>1115</u>	<u>0.25</u>	<u>1.25</u>	<u>0.05</u>	<u>20.07</u>	<u>4.16</u>	<u>24.95</u>	<u>868</u>	<u>1.19</u>	<u>1.3</u>	<u>clear</u>	<u>58.4</u>
<u>1120</u>	<u>0.25</u>	<u>1.5</u>	<u>0.05</u>	<u>20.07</u>	<u>4.16</u>	<u>25.00</u>	<u>869</u>	<u>1.2</u>	<u>1.4</u>	<u>clear</u>	<u>57.5</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 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: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1120</u>		SAMPLING ENDED AT: <u>1130</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17142-MW-7B</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>200</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>200</u>	
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>200</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>200</u>	
REMARKS: Weather: <u>h. sunny, 83°F</u>												
Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) 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)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-8A</u>	SAMPLE ID: <u>17142-MW-8A</u>
DATE: <u>5-22-17</u>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>12.5</u> feet to <u>22.5</u> feet	STATIC DEPTH TO WATER (feet): <u>19.29</u>	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) $= (22.5 \text{ feet} - 19.29 \text{ feet}) \times 0.16 \text{ gallons/foot} = 0.51 \text{ gallons}$											
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) $= 0 \text{ gallons} + (0.0014 \text{ gallons/foot} \times \text{feet}) + 0.12 \text{ gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>	PURGING INITIATED AT: <u>0910</u>	PURGING ENDED AT: <u>1015</u>	TOTAL VOLUME PURGED (gallons): <u>2.6</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1005</u>	<u>2.2</u>	<u>2.2</u>	<u>0.04</u>	<u>19.81</u>	<u>4.52</u>	<u>24.83</u>	<u>1583</u>	<u>0.85</u>	<u>1.5</u>	<u>clear</u>	<u>11</u>
<u>1010</u>	<u>0.2</u>	<u>2.4</u>	<u>0.04</u>	<u>19.81</u>	<u>4.56</u>	<u>24.84</u>	<u>1584</u>	<u>0.87</u>	<u>1.5</u>	<u>clear</u>	<u>6.9</u>
<u>1015</u>	<u>0.2</u>	<u>2.6</u>	<u>0.04</u>	<u>19.81</u>	<u>4.52</u>	<u>24.86</u>	<u>1587</u>	<u>0.84</u>	<u>1.9</u>	<u>clear</u>	<u>9.4</u>
<b>WELL CAPACITY (Gallons Per Foot):</b> 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 <b>TUBING INSIDE DIA. CAPACITY (Gal./Ft.):</b> 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
<b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1015</u>		SAMPLING ENDED AT: <u>1025</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>21</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<u>17142- MW-8A</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>APP</u>	<u>150</u>		
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>APP</u>	<u>150</u>		
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>APP</u>	<u>150</u>		
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>	<u>APP</u>	<u>150</u>		
REMARKS: Weather: <u>clear, 79°F</u>											
Odor: <u>sulfur-like</u>											
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
<b>SAMPLING EQUIPMENT CODES:</b> APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);  
 optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-8B	SAMPLE ID: 17142-MW-8B
DATE: 5-22-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 39.6 feet to 41.6 feet	STATIC DEPTH TO WATER (feet): 19.22	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 45				
FINAL PUMP OR TUBING DEPTH IN WELL (feet): 45				
PURGING INITIATED AT: 0910				
PURGING ENDED AT: 0947				
TOTAL VOLUME PURGED (gallons): 2.56				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0930	1.4	1.4	0.07	19.83	4.38	25.18	1289	0.55	2.2	clear	48.6
0935	0.35	1.75	0.07	19.84	4.34	25.22	1272	0.65	1.5	clear	51.7
0939	0.28	2	0.07	19.84	4.32	25.16	1263	0.73	1.5	clear	52.2
0944	0.35	2.35	0.07	19.84	4.31	25.17	1260	0.74	1.2	clear	52.9
0947	0.21	2.56	0.07	19.84	4.31	25.20	1266	0.81	1.4	clear	53.5

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 0950 0945	SAMPLING ENDED AT: 1800 0954
PUMP OR TUBING DEPTH IN WELL (feet): 45	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y <input checked="" type="radio"/> N	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)	DUPLICATE: Y <input checked="" type="radio"/> N		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17142-MW	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	275
BA	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	275
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	275
↓	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	275

REMARKS: Weather: clear, 79°F  
 Odor: none

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-9A</b>	SAMPLE ID: <b>17142-MW-9A</b>
DATE: <b>5-22-17</b>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 12.4 feet to 22.4 feet	STATIC DEPTH TO WATER (feet): <b>19.52</b>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
$= (22.4 \text{ feet} - 19.52 \text{ feet}) \times 0.16 \text{ gallons/foot} = 0.5 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
$= 0 \text{ gallons} + (0.0014 \text{ gallons/foot} \times \text{feet}) + 0.12 \text{ gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>21</b>	PURGING INITIATED AT: <b>0730</b>	PURGING ENDED AT: <b>0835</b>	TOTAL VOLUME PURGED (gallons): <b>2.6</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0820	2	2	0.04	20.14	5.21	26.55	233	0.74	2.3	yellowish	19.9
0825	0.2	2.2	0.04	20.14	5.22	26.58	231	0.76	2.3	" "	18.2
0830	0.2	2.4	0.04	20.14	5.25	26.60	232	0.73	2.3	" "	15.8
0835	0.2	2.6	0.04	20.14	5.26	26.61	232	0.76	2.2	" "	14.2
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <b>0835</b>		SAMPLING ENDED AT: <b>0846</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>21</b>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17142-MW-9A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	150
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	150
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	150
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	150
REMARKS: Weather: <b>p. cloudy, 71°F</b> Odor: <b>none</b>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) 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:**
- The above do not constitute all of the information required by Chapter 62-160, F.A.C.
  - 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)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-10A</u>	SAMPLE ID: <u>17142-MW-10A</u> DATE: <u>5-22-17</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>12.1</u> feet to <u>22.1</u> feet	STATIC DEPTH TO WATER (feet): <u>20.86</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>22.1</u> feet - <u>20.86</u> feet ) X 0.16 gallons/foot = <u>0.2</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	PURGING INITIATED AT: <u>0554</u>	PURGING ENDED AT: <u>0703</u>	TOTAL VOLUME PURGED (gallons): <u>2.7</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>0645</u>	<u>2</u>	<u>2</u>	<u>0.04</u>	<u>21.19</u>	<u>4.78</u>	<u>24.00</u>	<u>612</u>	<u>3.34</u>	<u>1</u>	<u>clear</u>	<u>5.6</u>
<u>0655</u>	<u>0.4</u>	<u>2.4</u>	<u>0.04</u>	<u>21.19</u>	<u>4.82</u>	<u>24.07</u>	<u>610</u>	<u>0.67</u>	<u>0.7</u>	<u>clear</u>	<u>2.2</u>
<u>0658</u>	<u>0.1</u>	<u>2.5</u>	<u>0.04</u>	<u>21.19</u>	<u>4.83</u>	<u>24.07</u>	<u>610</u>	<u>0.81</u>	<u>0.8</u>	<u>clear</u>	<u>2.2</u>
<u>0703</u>	<u>0.2</u>	<u>2.7</u>	<u>0.04</u>	<u>21.19</u>	<u>4.82</u>	<u>24.08</u>	<u>610</u>	<u>0.82</u>	<u>0.8</u>	<u>clear</u>	<u>2.3</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>0705</u>		SAMPLING ENDED AT: <u>0718</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No      TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17142-MW</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>150</u>	
<u>10A</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>150</u>	
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>150</u>	
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>150</u>	
REMARKS: Weather: <u>cloudy, 71°F</u> Odor: <u>None</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);  
optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-11A	SAMPLE ID: 1713B-MW-11A
DATE: 5-18-17	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 12.8 feet to 22.8 feet	STATIC DEPTH TO WATER (feet): 18.20	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( 22.8 feet - 18.20 feet ) X 0.16 gallons/foot = 0.74 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.5		PURGING INITIATED AT: 1250							
				PURGING ENDED AT: 1347							
				TOTAL VOLUME PURGED (gallons): 2.85							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1337	2.35	2.35	0.05	20.45	5.36	28.14	283	1.52	3.7	clear	60.6
1340	0.15	2.5	0.05	20.45	5.37	27.98	294	1.41	4.6	clear	58.6
1343	0.15	2.65	0.05	20.45	5.37	27.98	286	1.26	6.5	clear	56.5
1347	0.2	2.85	0.05	20.45	5.37	28.00	286	1.23	5.3	clear	56.8
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: 1350		SAMPLING ENDED AT: 1403	
PUMP OR TUBING DEPTH IN WELL (feet): 21.5				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/>		FILTER SIZE: ___ µm	
FIELD DECONTAMINATION: PUMP No				TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
1713B-MW-11A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200		
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	200		
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	200		
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	200		
REMARKS: Weather: <i>Mr. Sunny, 89°F, E 10 mph</i> Odor: <i>none</i>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After (Through) 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)







## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-12A</b>	SAMPLE ID: <b>17138-MW-12A</b>
DATE: <b>5-18-17</b>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): 19.50	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) $= (23 \text{ feet} - 19.50 \text{ feet}) \times 0.16 \text{ gallons/foot} = 0.6 \text{ gallons}$											
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) $= 0 \text{ gallons} + (0.0014 \text{ gallons/foot} \times \text{feet}) + 0.12 \text{ gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 21.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.5	PURGING INITIATED AT: 1110	PURGING ENDED AT: 1215	TOTAL VOLUME PURGED (gallons): 5.2							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1205	4.4	4.4	0.08	19.90	5.70	26.84	544	0.61	1.8	clear	39.5
1210	0.4	4.8	0.08	19.90	5.69	26.89	543	0.63	1.6	clear	39.5
1215	0.4	5.2	0.08	19.90	5.68	26.86	542	0.6	1.6	clear	39.7
<b>WELL CAPACITY (Gallons Per Foot):</b> 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 <b>TUBING INSIDE DIA. CAPACITY (Gal./Ft.):</b> 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 <b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: 1220		SAMPLING ENDED AT: 1232		
PUMP OR TUBING DEPTH IN WELL (feet): 21.5				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
17138- mw-12A	3	CG	40 ml	HCL	Prefilled by lab		VOCs		APP		300	
	1	PE	500 ml	HNO3	Prefilled by lab		Metals		APP		300	
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3		APP		300	
	1	PE	500 ml	None	None		Cl, NO3, TDS		APP		300	
REMARKS: Weather: m. sunny, 85°F, E 10mph Odor: none												
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
<b>SAMPLING EQUIPMENT CODES:</b> APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);  
 optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-12B</u>	SAMPLE ID: <u>17138-MW-12B</u>
DATE: <u>5-18-17</u>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>39</u> feet to <u>49</u> feet	STATIC DEPTH TO WATER (feet): <u>19.49</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= (                      feet -                      feet ) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X <u>50</u> feet ) + 0.12 gallons = <u>0.2</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>44</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>44</u>	PURGING INITIATED AT: <u>1110</u>	PURGING ENDED AT: <u>1140</u>	TOTAL VOLUME PURGED (gallons): <u>2.4</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1130</u>	<u>1.6</u>	<u>1.6</u>	<u>0.08</u>	<u>19.65</u>	<u>4.61</u>	<u>26.51</u>	<u>83</u>	<u>0.45</u>	<u>1.4</u>	<u>clear</u>	<u>99.4</u>
<u>1135</u>	<u>0.4</u>	<u>2</u>	<u>0.09</u>	<u>19.65</u>	<u>4.62</u>	<u>26.50</u>	<u>83</u>	<u>0.44</u>	<u>1.4</u>	<u>clear</u>	<u>98.9</u>
<u>1140</u>	<u>0.4</u>	<u>2.4</u>	<u>0.08</u>	<u>19.65</u>	<u>4.63</u>	<u>26.48</u>	<u>83</u>	<u>0.43</u>	<u>1.7</u>	<u>clear</u>	<u>96.6</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88											
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1145</u>		SAMPLING ENDED AT: <u>1155</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>44</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <u>N</u>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <u>N</u>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17138- MW-12B</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>200</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>300</u>	
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>300</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>300</u>	
REMARKS: Weather: <u>M. sunny, 85°F, E 10 mph</u>												
Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-13B</u>	SAMPLE ID: <u>17138-MW-13B</u>
DATE: <u>5-18-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>31.2</u> feet to <u>47.2</u> feet	STATIC DEPTH TO WATER (feet): <u>19.42</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (                      feet -                      feet) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X <u>55</u> feet) + 0.12 gallons = <u>0.2</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>	PURGING INITIATED AT: <u>0942</u>	PURGING ENDED AT: <u>1015</u>	TOTAL VOLUME PURGED (gallons): <u>3</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>0957</u>	<u>1.4</u>	<u>1.4</u>	<u>0.09</u>	<u>19.47</u>	<u>4.64</u>	<u>26.83</u>	<u>122</u>	<u>0.59</u>	<u>0.7</u>	<u>clear</u>	<u>118.9</u>
<u>1005</u>	<u>0.7</u>	<u>2.1</u>	<u>0.09</u>	<u>19.48</u>	<u>4.63</u>	<u>26.82</u>	<u>120</u>	<u>0.51</u>	<u>0.7</u>	<u>clear</u>	<u>119.7</u>
<u>1008</u>	<u>0.3</u>	<u>2.4</u>	<u>0.09</u>	<u>19.48</u>	<u>4.62</u>	<u>26.78</u>	<u>119</u>	<u>0.48</u>	<u>0.6</u>	<u>clear</u>	<u>121.8</u>
<u>1012</u>	<u>0.4</u>	<u>2.8</u>	<u>0.09</u>	<u>19.48</u>	<u>4.63</u>	<u>26.79</u>	<u>117</u>	<u>0.45</u>	<u>0.7</u>	<u>clear</u>	<u>120.9</u>
<u>1015</u>	<u>0.2</u>	<u>3</u>	<u>0.09</u>	<u>19.49</u>	<u>4.63</u>	<u>26.83</u>	<u>117</u>	<u>0.45</u>	<u>0.5</u>	<u>clear</u>	<u>122.8</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1015</u>		SAMPLING ENDED AT: <u>1025</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>43</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17138-MW-</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>200</u>	
<u>13B</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>325</u>	
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>325</u>	
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>325</u>	
REMARKS: Weather: <u>m. sunny, 82°F</u>												
Odor: <u>None</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-16AR</u>	SAMPLE ID: <u>17138-MW-16AR</u>
DATE: <u>5-18-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>13.5</u> feet to <u>23.5</u> feet	STATIC DEPTH TO WATER (feet): <u>19.25</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>23.9</u> feet - <u>19.25</u> feet ) X 0.16 gallons/foot = <u>0.7</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X _____ feet ) + 0.12 gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>22</u>	PURGING INITIATED AT: <u>0800</u>	PURGING ENDED AT: <u>0855</u>	TOTAL VOLUME PURGED (gallons): <u>3.9</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>0847</u>	<u>3.3</u>	<u>3.3</u>	<u>0.07</u>	<u>20.05</u>	<u>5.03</u>	<u>26.80</u>	<u>1802</u>	<u>1.47</u>	<u>1.7</u>	<u>clear</u>	<u>68.8</u>
<u>0850</u>	<u>0.2</u>	<u>3.5</u>	<u>0.07</u>	<u>20.05</u>	<u>5.05</u>	<u>26.79</u>	<u>1800</u>	<u>1.41</u>	<u>1.7</u>	<u>clear</u>	<u>67.4</u>
<u>0855</u>	<u>0.4</u>	<u>3.9</u>	<u>0.07</u>	<u>20.05</u>	<u>5.04</u>	<u>26.80</u>	<u>1794</u>	<u>1.38</u>	<u>1.5</u>	<u>clear</u>	<u>66.5</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>0900</u>		SAMPLING ENDED AT: <u>0909</u>			
PUMP OR TUBING DEPTH IN WELL (feet): <u>22</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <u>(N)</u>		FILTER SIZE: _____ µm <u>5-15</u>			
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: <u>(Y)</u>				Blind duplicate N time: 1200					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH							
<u>17138-MW</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>250</u>		
<u>-16AR</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>250</u>		
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>250</u>		
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>250</u>		
REMARKS: Weather: <u>Clear, 75°F</u>													
Odor: <u>None</u>													
Duplicate ID: <u>17138-Dup</u>													
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)													
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)													

- NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-16BR	SAMPLE ID: 17138-MW-16BR
DATE: 5-18-17	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 36.5 feet to 46.5 feet	STATIC DEPTH TO WATER (feet): 19.24	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X 55 feet) + 0.12 gallons = 0.2 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 42	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42	PURGING INITIATED AT: 0756	PURGING ENDED AT: 0827	TOTAL VOLUME PURGED (gallons): 1.6							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0816	1	1	0.05	19.29	4.78	26.19	92	0.57	2.2	clear	89.5
0820	0.2	1.2	0.05	19.29	4.76	26.14	89	0.51	2.4	clear	91.5
0827	0.4	1.6	0.05	19.29	4.77	26.20	90	0.45	2.4	clear	90.6
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 0830		SAMPLING ENDED AT: 0842	
PUMP OR TUBING DEPTH IN WELL (feet): 42			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17138-MW-16BR	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	200
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	200
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	200
REMARKS: Weather: clear, 75°F Odor: none									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-17AR	SAMPLE ID: 17138-MW-17AR
DATE: 5-18-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 12 feet to 24 feet	STATIC DEPTH TO WATER (feet): 19.62	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( 24.1 feet - 19.62 feet ) X 0.16 gallons/foot = 0.72 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22	PURGING INITIATED AT: 0620	PURGING ENDED AT: 0723	TOTAL VOLUME PURGED (gallons): 3.8

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0715	3.3	3.3	0.06	20.02	4.35	24.99	327	0.72	0.3	clear	155
0717	0.1	3.4	0.06	20.02	4.35	25.02	328	0.69	0.4	clear	159.2
0720	0.2	3.6	0.06	20.02	4.36	25.03	330	0.63	0.5	clear	162.5
0723	0.2	3.8	0.06	20.02	4.36	25.05	330	0.63	0.4	clear	164.2

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 0725		SAMPLING ENDED AT: 0737	
PUMP OR TUBING DEPTH IN WELL (feet): 22			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: ___ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>						

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17138-MW	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	225
-17AR	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	225
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	225
↓	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	225

REMARKS: Weather: Clear, 71°F  
 Odor: None

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) 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:**
- The above do not constitute all of the information required by Chapter 62-160, F.A.C.
  - 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)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-22AR</u>	SAMPLE ID: <u>17136-MW-22AR</u> DATE: <u>5-16-17</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): 19.59	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>23.7</u> feet - <u>19.59</u> feet ) X 0.16 gallons/foot = <u>0.7</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X _____ feet ) + 0.12 gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	PURGING INITIATED AT: <u>1410</u>	PURGING ENDED AT: <u>1512</u>	TOTAL VOLUME PURGED (gallons): <u>3.7</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1455</u>	<u>2.7</u>	<u>2.7</u>	<u>0.06</u>	<u>19.79</u>	<u>5.49</u>	<u>27.28</u>	<u>461</u>	<u>0.57</u>	<u>1.9</u>	<u>clear</u>	<u>-4.7</u>
<u>1500</u>	<u>0.3</u>	<u>3</u>	<u>0.06</u>	<u>19.79</u>	<u>5.50</u>	<u>27.20</u>	<u>454</u>	<u>0.6</u>	<u>1.5</u>	<u>clear</u>	<u>-8.3</u>
<u>1505</u>	<u>0.3</u>	<u>3.3</u>	<u>0.06</u>	<u>19.79</u>	<u>5.52</u>	<u>27.18</u>	<u>451</u>	<u>0.64</u>	<u>1.6</u>	<u>clear</u>	<u>-10.7</u>
<u>1512</u>	<u>0.4</u>	<u>3.7</u>	<u>0.06</u>	<u>19.79</u>	<u>5.51</u>	<u>27.16</u>	<u>450</u>	<u>0.63</u>	<u>1.4</u>	<u>clear</u>	<u>-10.2</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1515</u>		SAMPLING ENDED AT: <u>1525</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17136-MW- 22AR</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>225</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>225</u>	
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>225</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>225</u>	
REMARKS: Weather: <u>B. Sunny, 89°F, E 10 mph</u> Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);  
optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-22BR</u>	SAMPLE ID: <u>17136-MW-22BR</u>
DATE: <u>5-16-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>35.5</u> feet to <u>45.5</u> feet	STATIC DEPTH TO WATER (feet): <u>19.49</u>	PURGE PUMP TYPE OR BAILER: PP							
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) = (                      feet -                      feet ) X 0.16 gallons/foot =                      gallons											
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X <u>50</u> feet ) + 0.12 gallons = <u>0.2</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>41</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>41</u>	PURGING INITIATED AT: <u>1410</u>	PURGING ENDED AT: <u>1435</u>	TOTAL VOLUME PURGED (gallons): <u>1.8</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1424</u>	<u>1</u>	<u>1</u>	<u>0.07</u>	<u>19.52</u>	<u>4.54</u>	<u>26.79</u>	<u>441</u>	<u>0.31</u>	<u>0</u>	<u>clear</u>	<u>36.5</u>
<u>1430</u>	<u>0.4</u>	<u>1.4</u>	<u>0.07</u>	<u>19.52</u>	<u>4.54</u>	<u>26.85</u>	<u>442</u>	<u>0.38</u>	<u>0</u>	<u>clear</u>	<u>40.8</u>
<u>1435</u>	<u>0.4</u>	<u>1.8</u>	<u>0.07</u>	<u>19.52</u>	<u>4.54</u>	<u>26.82</u>	<u>442</u>	<u>0.41</u>	<u>0</u>	<u>clear</u>	<u>37.8</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1435</u>		SAMPLING ENDED AT: <u>1445</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>41</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <u>(N)</u>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <u>(N)</u>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17136-MW-22BR</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>275</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>275</u>	
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>275</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>275</u>	
REMARKS: Weather: <u>h. sunny, 89°F, E 10 mph</u>												
Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773	
WELL NO: <u>MW-23B</u>	SAMPLE ID: <u>17144-MW-23B</u>	DATE: <u>5-24-17</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>323</u> feet to <u>423</u> feet	STATIC DEPTH TO WATER (feet): <u>21.05</u>	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>30</u>				
FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>30</u>				
PURGING INITIATED AT: <u>0600</u>				
PURGING ENDED AT: <u>0630</u>				
TOTAL VOLUME PURGED (gallons): <u>2.4</u>				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0613	1	1	0.08	21.10	4.15	25.69	1125	0.88	0.3	clear	128.8
0625	1	2	0.08	21.10	4.13	25.69	1163	0.77	0.2	clear	127.2
0628	0.2	2.2	0.08	21.10	4.13	25.70	1169	0.76	0.1	clear	127.2
0630	0.2	2.4	0.08	21.10	4.13	25.69	1170	0.76	0.1	clear	126.9

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: <u>0630</u>		SAMPLING ENDED AT: <u>0640</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>30</u>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>17144-MW-23B</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>APP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>APP</u>	<u>300</u>
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>APP</u>	<u>300</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>	<u>APP</u>	<u>300</u>

REMARKS: Weather: cloudy, 76°F, S 11 mph  
 Odor: none

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-24A	SAMPLE ID: 17136-MW-24A
DATE: 5-16-17	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): 12.98	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
$= (23.5 \text{ feet} - 12.98 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.7 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
$= 0 \text{ gallons} + (0.0014 \text{ gallons/foot} \times 30 \text{ feet}) + 0.12 \text{ gallons} = 0.2 \text{ gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18	PURGING INITIATED AT: 1225	PURGING ENDED AT: 1225	TOTAL VOLUME PURGED (gallons): 4.3							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1215	3.5	3.5	0.07	13.04	4.59	24.06	95	0.413	0	clear	82.5
1220	0.35	3.9	0.07	13.04	4.59	24.10	95	0.412	0	clear	80
1225	0.35	4.3	0.07	13.04	4.59	24.13	95	0.412	0	clear	79.9
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: 1225		SAMPLING ENDED AT: 1235	
PUMP OR TUBING DEPTH IN WELL (feet): 18				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
17136-MW-24A	3	CG	40 ml	HCL	Prefilled by lab		VOCs		APP	275	
	1	PE	500 ml	HNO3	Prefilled by lab		Metals		APP	275	
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3		APP	275	
	1	PE	500 ml	None	None		Cl, NO3, TDS		APP	275	
REMARKS: Weather: m. sunny, 86°F, E 10 mph Odor: none											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After (Through) 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)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-24B	SAMPLE ID: 17136-MW-24B
DATE: 5-16-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 33 feet to 43 feet	STATIC DEPTH TO WATER (feet): 13.01	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= (                      feet -                      feet ) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X 50 feet ) + 0.12 gallons = 0.2 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 38	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 38	PURGING INITIATED AT: 1123	PURGING ENDED AT: 1200	TOTAL VOLUME PURGED (gallons): 3							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1140	1.4	1.4	0.08	13.18	4.38	24.31	45	0.43	2.9	clear	118.8
1150	0.8	2.2	0.08	13.18	4.49	24.21	45	0.4	2.4	clear	112.5
1155	0.4	2.6	0.08	13.18	4.49	24.28	45	0.39	3	clear	117
1200	0.4	3	0.08	13.18	4.49	24.32	45	0.38	2.8	clear	111.7
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1200		SAMPLING ENDED AT: 1208	
PUMP OR TUBING DEPTH IN WELL (feet): 38			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DUPLICATE: Y (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17136-MW-24B	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	250
↓	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	300
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	300
↓	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	300
REMARKS: Weather: n. sunny, 86°F, E 10 mph Odor: none									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-25A	SAMPLE ID: 17136-MW-25A
DATE: 5-16-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): 11.15	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= (                      feet -                      feet ) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X 25 feet ) + 0.12 gallons = 0.2 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18	PURGING INITIATED AT: 1250	PURGING ENDED AT: 1340	TOTAL VOLUME PURGED (gallons): 4.5							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1325	3.15	3.15	0.09	11.23	4.80	24.81	938	0.25	0	Clear	28.4
1330	0.45	3.6	0.09	11.23	4.80	24.82	934	0.25	0	Clear	28.2
1335	0.45	4.05	0.09	11.23	4.78	24.80	934	0.22	0	Clear	28.4
1340	0.45	4.5	0.09	11.23	4.78	24.81	934	0.21	0	Clear	28.3
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1345		SAMPLING ENDED AT: 1351	
PUMP OR TUBING DEPTH IN WELL (feet):			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="radio"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="radio"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17136-MW-25A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	350
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	350
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	350
REMARKS: Weather: m. sunny, 87°F, E 10 mph Odor: none									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

- NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-25B</u>	SAMPLE ID: <u>17136-MW-25B</u>
DATE: <u>5-16-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.375	WELL SCREEN INTERVAL DEPTH: <u>31</u> feet to <u>41</u> feet	STATIC DEPTH TO WATER (feet): <u>10.73</u>	PURGE PUMP TYPE OR BAILER: ESP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= (                      feet -                      feet) X 0.16 gallons/foot =                      gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.006 gallons/foot X <u>55</u> feet) + 0.12 gallons = <u>0.5</u> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>36</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>36</u>	PURGING INITIATED AT: <u>1100</u>	PURGING ENDED AT: <u>1310</u>	TOTAL VOLUME PURGED (gallons): <u>169.5</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>1255</u>	<u>150</u>	<u>150</u>	<u>1.3</u>	<u>12.78</u>	<u>4.83</u>	<u>24.31</u>	<u>114</u>	<u>0.29</u>	<u>70</u>	<u>light brown</u>	<u>61.2</u>
<u>1300</u>	<u>6.5</u>	<u>156.5</u>	<u>1.3</u>	<u>12.78</u>	<u>4.87</u>	<u>24.27</u>	<u>114</u>	<u>0.31</u>	<u>72</u>	<u>" "</u>	<u>55.2</u>
<u>1305</u>	<u>6.5</u>	<u>163</u>	<u>1.3</u>	<u>12.78</u>	<u>4.87</u>	<u>24.24</u>	<u>114</u>	<u>0.31</u>	<u>71</u>	<u>" "</u>	<u>52.1</u>
<u>1310</u>	<u>6.5</u>	<u>169.5</u>	<u>1.3</u>	<u>12.78</u>	<u>4.89</u>	<u>24.26</u>	<u>114</u>	<u>0.32</u>	<u>72</u>	<u>" "</u>	<u>49.1</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <u>1310</u>		SAMPLING ENDED AT: <u>1317</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>36</u>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <u>(N)</u>		FILTER SIZE: <u>1317</u> µm	
FIELD DECONTAMINATION: PUMP Yes			TUBING No (replaced)			DUPLICATE: Y <u>(N)</u>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<u>17136-MW-25B</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>	<u>ESP</u>	<u>200</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>	<u>ESP</u>	<u>300</u>
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>	<u>ESP</u>	<u>300</u>
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>	<u>ESP</u>	<u>300</u>
REMARKS: Weather: <u>A. sunny, 86°F, E 10 mph</u> Odor: <u>none</u>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-27A</u>	SAMPLE ID: <u>17137-MW-27A</u> DATE: <u>5-17-17</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: <u>13</u> feet to <u>23</u> feet	STATIC DEPTH TO WATER (feet): <u>19.42</u>	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>23.6</u> feet - <u>19.42</u> feet ) X 0.16 gallons/foot = <u>0.7</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X _____ feet ) + 0.12 gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	PURGING INITIATED AT: <u>0625</u>	PURGING ENDED AT: <u>0738</u>	TOTAL VOLUME PURGED (gallons): <u>3.65</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<u>0728</u>	<u>3.15</u>	<u>3.15</u>	<u>0.05</u>	<u>19.90</u>	<u>4.82</u>	<u>24.63</u>	<u>126</u>	<u>1.57</u>	<u>1.2</u>	<u>clear</u>	<u>58.1</u>
<u>0730</u>	<u>0.1</u>	<u>3.25</u>	<u>0.05</u>	<u>19.90</u>	<u>4.82</u>	<u>24.60</u>	<u>126</u>	<u>1.48</u>	<u>1.4</u>	<u>clear</u>	<u>58.2</u>
<u>0735</u>	<u>0.25</u>	<u>3.5</u>	<u>0.05</u>	<u>19.90</u>	<u>4.81</u>	<u>24.69</u>	<u>126</u>	<u>1.39</u>	<u>1.3</u>	<u>clear</u>	<u>59.5</u>
<u>0738</u>	<u>0.15</u>	<u>3.65</u>	<u>0.05</u>	<u>19.90</u>	<u>4.82</u>	<u>24.68</u>	<u>126</u>	<u>1.32</u>	<u>1.1</u>	<u>clear</u>	<u>59.6</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>0740</u>		SAMPLING ENDED AT: <u>0751</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No				TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17137- MW-27A</u>	<u>3</u>	<u>CG</u>	<u>40 ml</u>	<u>HCL</u>	<u>Prefilled by lab</u>		<u>VOCs</u>		<u>APP</u>		<u>175</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>HNO3</u>	<u>Prefilled by lab</u>		<u>Metals</u>		<u>APP</u>		<u>175</u>	
	<u>1</u>	<u>PE</u>	<u>250 ml</u>	<u>H2SO4</u>	<u>Prefilled by lab</u>		<u>NH3</u>		<u>APP</u>		<u>175</u>	
	<u>1</u>	<u>PE</u>	<u>500 ml</u>	<u>None</u>	<u>None</u>		<u>Cl, NO3, TDS</u>		<u>APP</u>		<u>175</u>	
REMARKS: Weather: <u>clear, 70°F</u> Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2);  
optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-27B</b>	SAMPLE ID: <b>17137-MW-27B</b>
DATE: <b>5-17-17</b>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 36 feet to 46 feet	STATIC DEPTH TO WATER (feet): 19.47	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>				
FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>				
PURGING INITIATED AT: <b>0622</b>				
PURGING ENDED AT: <b>0712</b>				
TOTAL VOLUME PURGED (gallons): <b>3</b>				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0700	2.28	2.28	0.06	19.71	5.13	24.12	157	0.8	13	clear	36.1
0704	0.24	2.52	0.06	19.71	5.12	24.17	158	0.81	13	clear	36.3
0710	0.36	2.88	0.06	19.71	5.12	24.18	156	0.86	13.5	clear	36.7
0712	0.12	3	0.06	19.71	5.12	24.20	156	0.84	14.2	clear	36.8

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <b>0715</b>		SAMPLING ENDED AT: <b>0723</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17137-MW-27B	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	225
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	225
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	225
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	225

REMARKS: Weather: **Clear, 70°F**  
 Odor: **none**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) 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:**
- The above do not constitute all of the information required by Chapter 62-160, F.A.C.
  - 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)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-28A	SAMPLE ID: 17137-MW-28A
DATE: 5-17-17	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 14 feet to 24 feet	STATIC DEPTH TO WATER (feet): 19.72	PURGE PUMP TYPE OR BAILER: PP
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 24 feet - 19.72 feet ) X 0.16 gallons/foot = 0.7 gallons				
<b>EQUIPMENT VOLUME PURGE:</b> 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22	PURGING INITIATED AT: 1045	PURGING ENDED AT: 1143	TOTAL VOLUME PURGED (gallons): 3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1135	2.5	2.5	0.05	20.51	4.96	26.03	151	0.58	22	clear	41.9
1137	0.1	2.6	0.05	20.51	5.02	25.97	150	0.54	19.3	clear	36.5
1140	0.2	2.8	0.05	20.51	5.01	25.94	150	0.54	18.9	clear	36.6
1143	0.2	3	0.05	20.51	5.00	25.96	150	0.54	18.5	clear	37.1

**WELL CAPACITY (Gallons Per Foot):** 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY (Gal./Ft.):** 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 1145		SAMPLING ENDED AT: 1157	
PUMP OR TUBING DEPTH IN WELL (feet): 22			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="radio"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DUPLICATE: Y <input checked="" type="radio"/> N						

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17137-MW-28A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	200
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	200
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	200
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	200

**REMARKS:** Weather: p. cloudy, 83°F, ESE 13 mph  
 Odor: none  
**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING EQUIPMENT CODES:** APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)







**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <u>MW-29A</u>	SAMPLE ID: <u>17137-MW-29A</u>
DATE: <u>5-17-17</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 13 feet to 23 feet	STATIC DEPTH TO WATER (feet): 19.49	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>23.7</u> feet - <u>19.49</u> feet ) X 0.16 gallons/foot = <u>0.7</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0 gallons + ( 0.0014 gallons/foot X _____ feet ) + 0.12 gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>	PURGING INITIATED AT: <u>1215</u>	PURGING ENDED AT: <u>1318</u>	TOTAL VOLUME PURGED (gallons): <u>3.15</u>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1305	2.5	2.5	0.05	20.28	5.09	26.40	175	0.43	2.4	clear	26
1310	0.25	2.75	0.05	20.28	5.07	26.38	174	0.44	2.8	clear	25.3
1315	0.25	3	0.05	20.28	5.06	26.42	173	0.44	2.4	clear	25.3
1318	0.15	3.15	0.05	20.28	5.06	26.43	172	0.45	2.5	clear	25.3
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs				SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>				SAMPLING INITIATED AT: <u>1320</u>		SAMPLING ENDED AT: <u>1332</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>21.5</u>				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>								
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
<u>17137- mw-29A</u>	3	CG	40 ml	HCL	Prefilled by lab		VOCs		APP		<u>200</u>	
	1	PE	500 ml	HNO3	Prefilled by lab		Metals		APP		<u>200</u>	
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3		APP		<u>200</u>	
	1	PE	500 ml	None	None		Cl, NO <sub>3</sub> , TDS		APP		<u>200</u>	
REMARKS: Weather: <u>m. cloudy, 83°F, E 13 mph</u>												
Odor: <u>none</u>												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-29B</b>	SAMPLE ID: <b>17137-MW-29B</b>
DATE: <b>5-17-17</b>	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 38 feet to 48 feet	STATIC DEPTH TO WATER (feet): 19.84	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>43</b>				
FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>43</b>				
PURGING INITIATED AT: <b>1215</b>				
PURGING ENDED AT: <b>1243</b>				
TOTAL VOLUME PURGED (gallons): <b>1.9</b>				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1230	1	1	0.07	20.01	4.88	25.85	232	0.67	1.9	clear	37
1233	0.2	1.2	0.07	20.02	4.65	25.78	230	0.6	1.3	clear	46.1
1235	0.1	1.3	0.07	20.02	4.65	25.74	230	0.58	4.1	clear	43.5
1240	0.4	1.7	0.07	20.02	4.70	25.70	230	0.55	2.5	clear	39.2
1243	0.2	1.9	0.07	20.02	4.70	25.72	230	0.52	2.2	clear	39.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <b>1245</b>		SAMPLING ENDED AT: <b>1253</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>43</b>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP No			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17137-	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	250
MW-29B	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	250
↓	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	250
↓	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	250

REMARKS: Weather: *M. Cloudy, 83°F, E 13 mph*  
 Odor: *None*  
 MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: MW-31A	SAMPLE ID: 17137-MW-31A
DATE: 5-17-17	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 18.95	PURGE PUMP TYPE OR BAILER: PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( 25 feet - 18.95 feet ) X 0.16 gallons/foot = 1 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= 0 gallons + ( 0.0014 gallons/foot X feet ) + 0.12 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22	PURGING INITIATED AT: 0805	PURGING ENDED AT: 0847	TOTAL VOLUME PURGED (gallons): 2.1							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0835	1.5	1.5	0.05	19.07	5.01	25.69	166	0.32	16.6	clear	39.8
0840	0.25	1.75	0.05	19.07	4.97	25.75	165	0.28	15.9	clear	41.1
0845	0.25	2	0.05	19.07	4.99	25.73	165	0.24	15.7	clear	40.4
0847	0.1	2.1	0.05	19.07	4.99	25.71	165	0.31	16	clear	40.4
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPS			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: 0850	SAMPLING ENDED AT: 0900		
PUMP OR TUBING DEPTH IN WELL (feet): 22			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)	FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP No TUBING No (replaced)			DUPLICATE: Y (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
17137-MW-31A	3	CG	40 ml	HCL	Prefilled by lab		VOCs	APP	175
	1	PE	500 ml	HNO3	Prefilled by lab		Metals	APP	175
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	APP	175
	1	PE	500 ml	None	None		Cl, NO3, TDS	APP	175
REMARKS: Weather:									
Odor:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG**

SITE NAME: J.E.D. SWMF (WACs Facility ID: 89544)	SITE LOCATION: 1501 Omni Way, St. Cloud, Osceola County, Florida, 34773
WELL NO: <b>MW-31B</b>	SAMPLE ID: <b>17137-MW-31B</b>
DATE: <b>5-17-17</b>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.375	WELL SCREEN INTERVAL DEPTH: 36 feet to 46 feet	STATIC DEPTH TO WATER (feet): <b>18.89</b>	PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>		PURGING INITIATED AT: <b>0605</b>
				PURGING ENDED AT: <b>0920</b>
TOTAL VOLUME PURGED (gallons): <b>175.5</b>				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
0910	166.5	166.5	0.9	23.78	5.16	24.70	122	0.23	106	light brown	60
0915	4.5	171	0.9	23.78	5.17	24.68	121	0.21	104	" "	57.3
0920	4.5	175.5	0.9	23.78	5.15	24.69	121	0.19	107	" "	58.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: Joe Terry/EPs			SAMPLER(S) SIGNATURE(S): <i>Joe Terry</i>			SAMPLING INITIATED AT: <b>0925</b>		SAMPLING ENDED AT: <b>0935</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>41</b>			TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Filtration Equipment Type: <i>in line</i>		FILTER SIZE: <b>1</b> µm	
FIELD DECONTAMINATION: PUMP Yes			TUBING No (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>17137-</b>	3	CG	40 ml	HCL	Prefilled by lab		VOCs	ESP	200
<b>MW-31B</b>	1	PE	500 ml	HNO3	Prefilled by lab		Metals	ESP	350
	1	PE	250 ml	H2SO4	Prefilled by lab		NH3	ESP	350
	1	PE	500 ml	None	None		Cl, NO3, TDS	ESP	350
	1	PE	500 ml	HNO3	Prefilled by lab		Dissolved Metals	ESP	350

REMARKS: Weather: *p. cloudy, 81°F, E 12 mph @ 0920* Collected equipment blanks after decon of pump w/ tabs  
 Odor: *none* Turbidity after filter: *3.2 NTU supplied BT H2O*

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; HDPE = High Density Polyethylene; LDPE = Low Density Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After (Through) Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

*Equipment Blank ID: 17137-EB*













**APPENDIX C**  
**Field Instrument Calibration Logs**



### Field Instrument Calibration Record

Site: JED Date: 5-16-17

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 0530

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	4.00	0	0.2	Y	DI	DT
160212B	AUG 31, 2017	pH = 7.00	7.00	0	0.2	Y	I	DT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	10.12	1.2	10%	Y	C	DT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	86	2.4	5%	Y	C	DT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1410	0.2	5%	Y	C	DT
	Per Table →	D.O. = 8.39 mg/L @ 24.2°C	8.41	0.02	0.2 mg/l	Y	C	DT

Date: 5-16-17 Time: 1830

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	3.95	0.05	0.2	Y	C	DT
160212B	AUG 31, 2017	pH = 7.00	6.98	0.02	0.2	Y	C	DT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	10.2	2	10%	Y	C	DT
VZ1	JAN 31, 2019	Conductivity = 100 µS/cm	85	1.2	5%	Y	C	DT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1422	0.6	5%	Y	C	DT
	Per Table →	D.O. = 7.87 mg/L @ 27.7°C	7.92	0.05	0.2 mg/l	Y	C	DT

Note (1): Percent Deviation = (Standard Value – Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (3): Initial, Continual, Final

### Field Instrument Calibration Record

Site: JED Date: 5-17-17

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 1845

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	4.09	0.09	0.2	Y	C	GT
160212B	AUG 31, 2017	pH = 7.00	7.02	0.02	0.2	Y	C	GT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	9.76	2.4	10%	Y	C	GT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	87	3.6	5%	Y	C	GT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1422	0.6	5%	Y	C	GT
	Per Table →	D.O. = 8.51 mg/L @ 23.4 °C	8.55	0.04	0.2 mg/l	Y	C	GT

Date: ~~5-22-17~~ 5-21-17 Time: 1750

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	4.03	0.03	0.2	Y	C	GT
160212B	AUG 31, 2017	pH = 7.00	6.98	0.02	0.2	Y	C	GT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	9.82	1.0	10%	Y	C	GT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	86	2.4	5%	Y	C	GT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1415	0.14	5%	Y	C	GT
	Per Table →	D.O. = 8.58 mg/L @ 23 °C	8.62	0.04	0.2 mg/l	Y	C	GT

Note (1): Percent Deviation = (Standard Value – Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (3): Initial, Continual, Final



### Field Instrument Calibration Record

Site: JED SWDF Date: 5-22-17

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 1830

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	3.97	0.03	0.2	Y	C	GT
160212B	AUG 31, 2017	pH = 7.00	7.03	0.03	0.2	Y	C	GT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	9.84	1.6	10%	Y	C	GT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	87	3.6	5%	Y	C	GT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1412	0.07	5%	Y	C	GT
	Per Table →	D.O. = 7.93 mg/L @ 27.3°C	7.88	0.05	0.2 mg/l	Y	C	GT

Date: 5-23-17 Time: 1900

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	4.11	0.11	0.2	Y	C	GT
160212B	AUG 31, 2017	pH = 7.00	6.97	0.03	0.2	Y	C	GT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	9.62	3.8	10%	Y	C	GT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	88	4.8	5%	Y	C	GT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1444	2.2	5%	Y	C	GT
	Per Table →	D.O. = 8.48 mg/L @ 23.6°C	8.55	0.07	0.2 mg/l	Y	C	GT

Note (1): Percent Deviation = (Standard Value – Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (3): Initial, Continual, Final

### Field Instrument Calibration Record

Site: JED Date: 5-24-17

Water Quality Instrument Make: YSI Instrument Model Number: 556 Instrument Serial Number: 06A2173AL

Turbidity Instrument Make: LaMotte Instrument Model Number: 2020e Instrument Serial Number: ME12953

Time: 1630

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00	4.12	0.12	0.2	Y	C	GT
160212B	AUG 31, 2017	pH = 7.00	6.96	0.04	0.2	Y	C	GT
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU	9.73	2.7	10%	Y	C	GT
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm	87	3.6	5%	Y	C	GT
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm	1404	0.6	5%	Y	C	GT
	Per Table →	D.O. = 8.45 mg/L @ 23.8°C	8.53	0.08	0.2 mg/l	Y	C	GT

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Calibration Standard			Instrument Response	Percent Deviation <sup>(1)</sup> or Difference	Allowable Deviation <sup>(2)</sup>	Calibrated? Yes or No	Type of Calibration <sup>(3)</sup>	Calibration Performed By:
Lot No.	Expiration Date	Standard Value						
C26858	JUN 30, 2017	pH = 4.00			0.2			
160212B	AUG 31, 2017	pH = 7.00			0.2			
160212C	AUG 31, 2017	pH = 10.00			0.2			
		Turbidity = 0.0 NTU						
		Turbidity = 1.0 NTU			10%			
C689840	AUG 31, 2017	Turbidity = 10 NTU			10%			
VZ1	JAN 31, 2019	Conductivity = 84 µS/cm			5%			
		Conductivity = 447 µS/cm			5%			
C687509	JUN 30, 2018	Conductivity = 1,413 µS/cm			5%			
	Per Table →	D.O. = mg/L @ °C			0.2 mg/l			

Note (1): Percent Deviation = (Standard Value – Instrument Response) ÷ Standard Value x 100

Note (2): Allowable Deviation: pH ± 0.2 of Standard Value; Conductivity ± 5 % of Standard Value; Salinity ± 3 % of Standard Value; DO ± 0.2 mg/L;

Turbidity 0.1-10 NTU ± 10% of Standard Value, 11-40 NTU ± 8% of Standard Value, 41-100 NTU ± 6.5% of Standard Value, >100 NTU ± 5% of Standard Value

Note (3): Initial, Continual, Final



**APPENDIX D**  
**Chain-of-Custody Forms**



Advanced Environmental Laboratories, Inc.

- Altamonte Springs: 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32714
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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.889.1111
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9610 • Fax 813.630.4347

# J1704958

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic		LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3		
Tampa, Florida 33619		Project Location: <i>Ho St. Clair, FL</i>												
Phone: <i>813-388-1026</i>		FDEP Facility No: 89544		PRESERVATION		HCL		HNO3		Ice		H2SO4		
FAX:		Project Name and Address:												
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>		X ADaPT <input type="checkbox"/> EQUIS		X		X		X		X		
Sampled By: <i>Soetery/EP</i>														
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH														
Page <u>1</u> of <u>1</u>														

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4							
			DATE	TIME														
17136-MW-22AR		G	5/16/17	1515	GW	6		X	X	X	X							001
17136-MW-22BR				1435		6												002
17136-MW-24A				1225		6												003
17136-MW-24B				1200		6												004
17136-MW-25A				1345		6												005
17136-MW-25B		↓	↓	1310	GW	6		↓	X	X	X							006
17136-TripBank		G	5/16/17	0000		2		X										007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 5 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J:9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1	<i>Soetery</i>	5/16/17	1630	<i>Fedex</i>		
2	<i>Fedex</i>	5-17-17	8:30	<i>Bob Andy</i>	5-17-17	8:30
3						
4						

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32233 •
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32309 •
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.634.1111

# J1705011

597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>				BOTTLE SIZE & TYPE				LABORATORY I.D. NUMBER							
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:				40 mL Vials	500 mL Plastic	500 mL Plastic	250 mL Plastic		500 mL Plastic						
Tampa, Florida 33619		Project Location: <i>St Cloud, FL</i>				ANALYSIS REQUIRED	App I VOAs+EDB/DBCP	App I Metals+Fe,Hg,Na	C/NO3/TDS		NH3	<i>Dissolved App I Metals+Fe,Hg,Na Plastic</i>					
Phone: <i>813-388-1026</i>		FDEP Facility No: 89544															
FAX:		Project Name and Address:															
Contact: <b>Kirk Wills</b>																	
Sampled By: <i>Joe Terry / EPS</i>																	
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		Special Instructions: <b>Jax Profile: 31172</b>															
Page <u>1</u> of <u>1</u>		<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS															
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3		Ice	H2SO4	HNO3				
			DATE	TIME													
17137-MW-27A		G	5/17/17	0710	GW	6		X	X	X	X						001
17137-MW-27B				0715		6											002
17137-MW-28A				1145		6											003
17137-MW-28B				1115		6											004
17137-MW-29A				1320		6											005
17137-MW-29B				1245		6											006
17137-MW-31A				0850	↓	6											007
17137-MW-31B				0925	GW	7			↓	↓	↓	X					008
17137-EB		↓		1000	H <sub>2</sub> O	6		↓	X	X	X						009
17137-Trip Blank		G	5/17/17	0000	H <sub>2</sub> O	2		X									010

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S=(H2SO4) N=(HNO3) T=(Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 5 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Joe Terry</i>	5/17/17	14:30	<i>FedEx</i>		
<i>FedEx</i>	5/18/17	8:30	<i>Bob O'Neil</i>	5/18/17	8:30

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site Address: \_\_\_\_\_



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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32227 • 904-731-1111
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954-861-1111
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32302 • 904-833-1111
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813-631-1111

# J1705077

7

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>				BOTTLE SIZE & TYPE				LABORATORY I.D. NUMBER											
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:				40 mL Vials	500 mL Plastic	500 mL Plastic	250 mL Plastic												
<b>Tampa, Florida 33619</b>		Project Location:				ANALYSIS REQUIRED	App I VOAs+EDB/DBCP	App I Metals+Fe,Hg,Na	C/NO3/TDS		NH3										
Phone: <b>813-388-1026</b>		FDEP Facility No: 89544																			
FAX:		Project Name and Address:																			
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>																			
Sampled By: <b>Joe Terry / EPS</b>		<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS																			
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH																					
Page <u>1</u> of <u>1</u>																					
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4										
			DATE	TIME																	
17138-MW-13A		G	5/18/17	1035	GW	6		X	X	X	X									001	
17138-MW-13B				1015		6															002
17138-MW-16AR				0900		6															003
17138-MW-16BR				0830		6															004
17138-MW-17AR				0725		6															005
17138-MW-17BR		↓	↓	0655	GW	6		↓	X	X	X										006
17138-Trip Blank-1		G	5/18/17	0000	DI H <sub>2</sub> O	2		X													007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
1 <i>Joe Terry</i>	5-18-17	1500	<i>Fedex</i>		
2 <i>Fedex</i>	5-19-17	8:30	<i>Bil Auf</i>	5-19-17	8:30
3					
4					

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





Advanced Environmental Laboratories, Inc.

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- Tallahassee: 1286 Cedar Center Drive, Tallahassee, FL 32301 • 904.437.1111
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9610

# J1705078

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE																LABORATORY I.D. NUMBER		
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic												
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3										
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>																				
FAX:		Project Name and Address:																				
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>																				
Sampled By: <b>Joe Terry / EPS</b>				<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS																		
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH																						
Page <u>1</u> of <u>1</u>																						

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4											
			DATE	TIME																		
17138-MW-11A		G	5-18-17	1350	GW	6		X	X	X	X											001
17138-MW-11B				1320		6																002
17138-MW-12A				1220		6																003
17138-MW-12B				1145		6																004
17138-Dup		↓	↓	1200	GW	6		↓	X	X	X											005
17138-Trip Blank-2		G	5-18-17	0000	DI H <sub>2</sub> O	2		X														006

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J-9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:		Date	Time	Received by:		Date	Time
Joe Terry		5-18-17	1500	Fedex			
Fedex		5-19-17	8:30	Bull Ouf		5-19-17	8:30

**FOR DRINKING WATER USE:**  
 (When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_



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- Tallahassee: 1288 Cedar Center Drive, Tallahassee, F.
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813

# J1705149

17.1597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic		LABORATORY I.D. NUMBER	
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3			
Tampa, Florida 33619		Project Location:													
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>		Project Name and Address:		HCL		HNO3		Ice		H2SO4			
FAX:		Special Instructions: <b>Jax Profile: 31172</b>													
Contact: <b>Kirk Wills</b>		<input checked="" type="checkbox"/> XADaPT <input type="checkbox"/> EquiS		PRESER-VATION		HCL		HNO3		Ice		H2SO4			
Sampled By: <b>Joe Terry / EPS</b>				Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		SAMPLE ID		SAMPLE DESCRIPTION		Grab Comp		SAMPLING DATE TIME			MATRIX NO. COUNT
Page <u>1</u> of <u>1</u>				17142-MW-8A		G		5-22-17		1015		GW		6	
				17142-MW-8B		↓		↓		0950		↓		↓	
				17142-MW-9A		↓		↓		0835		↓		↓	
				17142-MW-9B		↓		↓		0805		↓		↓	
				17142-MW-10A		↓		↓		0705		↓		↓	
				17142-MW-10B		↓		↓		0625		GW		6	
				17142-Trip Blank-2		G		5-22-17		0000		DI H2O		2	

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Joe Terry</i>	5-22-17	1530	<i>Fedex</i>	5-22-17	1520
<i>Fedex</i>	5-23-17	0900	<i>Bjatts</i>	5-23-17	0900

**FOR DRINKING WATER USE:**  
 (When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





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- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 96
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.833.3010 • Fax 813.833.4521

# J1705150

1597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE						LABORATORY I.D. NUMBER			
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials	500 mL Plastic	500 mL Plastic	250 mL Plastic						
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED									
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>											
FAX:		Project Name and Address:		App I VOAs+EDB/DBCP	App I Metals+Fe,Hg,Na	C/NO3/TDS	NH3						
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>											
Sampled By: <b>Joe Terry / EPS</b>													
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		<input type="checkbox"/> XADaPT <input type="checkbox"/> EQUIS											
Page <u>1</u> of <u>1</u>													
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION						
			DATE	TIME				HCL	HNO3	Ice	H2SO4		
17142-MW-5A		G	5-22-17	1430	GW	6		X	X	X	X		001
17142-MW-5B				1405									002
17142-MW-6A				1310									003
17142-MW-6B				1240									004
17142-MW-7A				1150									005
17142-MW-7B				1120	GW	6		X	X	X	X		006
17142-Trip Bulk-2		G	5-22-17	0000	DW	2		X					007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celsius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J:9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
Joe Terry	5-22-17	1530	Fedex	5-22-17	1530
Fedex	5-23-17	0900	Bylatts	5-23-17	0900

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_



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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 3222
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.88
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 323
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.6666

# J1705241

7

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE												LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic						
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3				
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>														
FAX:		Project Name and Address:														
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>														
Sampled By: <b>Joe Terry/EPs</b>				<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS												
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH																
Page <b>1</b> of <b>1</b>																

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4							
			DATE	TIME														
17143-MW-1A		G	5.23.17	1155	GW	6		X	X	X	X							001
17143-MW-1B				1120														002
17143-MW-2A				1020														003
17143-MW-2B				0950														004
17143-MW-3A				0950														005
17143-MW-3B				0815														006
17143-MW-4A				0710														007
17143-MW-4B		↓	↓	0635	GW	6		X	X	X	X							008
17143-Tr.p Bank		G	5.23.17	0000	DJ H2O	2		X										009

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received **9** (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) **J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V**

Relinquished by:		Date	Time	Received by:		Date	Time
Joe Terry		5.23.17	1300	Felder			
Felder		5-24-17	0830	[Signature]		5-24-17	1830

**FOR DRINKING WATER USE:**  
 (When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





**APPENDIX E**  
**Analytical Laboratory Reports**



June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, May 24, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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**SAMPLE SUMMARY**

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705241001	17143-MW-1A	Water	5/23/2017 11:55	5/24/2017 08:30
J1705241002	17143-MW-1B	Water	5/23/2017 11:20	5/24/2017 08:30
J1705241003	17143-MW-2A	Water	5/23/2017 10:20	5/24/2017 08:30
J1705241004	17143-MW-2B	Water	5/23/2017 09:50	5/24/2017 08:30
J1705241005	17143-MW-3A	Water	5/23/2017 08:50	5/24/2017 08:30
J1705241006	17143-MW-3B	Water	5/23/2017 08:15	5/24/2017 08:30
J1705241007	17143-MW-4A	Water	5/23/2017 07:10	5/24/2017 08:30
J1705241008	17143-MW-4B	Water	5/23/2017 06:35	5/24/2017 08:30
J1705241009	17143-Trip Blank	Water	5/23/2017 00:00	5/24/2017 08:30

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241001** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-1A** Date Collected: 05/23/17 11:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/30/2017 17:45	J
Barium	56		ug/L	1	2.0	0.28	5/30/2017 17:45	J
Beryllium	0.16	I	ug/L	1	0.30	0.13	5/30/2017 17:45	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/30/2017 17:45	J
Chromium	4.7		ug/L	1	1.0	0.50	5/30/2017 17:45	J
Cobalt	1.1	I	ug/L	1	4.0	0.60	5/30/2017 17:45	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 17:45	J
Iron	6900		ug/L	1	200	30	5/30/2017 17:45	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 17:45	J
Nickel	5.8	I	ug/L	1	6.5	1.1	5/30/2017 17:45	J
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 17:45	J
Silver	1.4	I	ug/L	1	4.0	0.44	5/30/2017 17:45	J
Sodium	290		mg/L	1	0.20	0.16	5/30/2017 17:45	J
Vanadium	25		ug/L	1	1.5	0.18	5/30/2017 17:45	J
Zinc	8.5	I	ug/L	1	10	2.0	5/30/2017 17:45	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.11	I	ug/L	1	0.70	0.046	5/30/2017 19:41	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 19:41	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.019	I	ug/L	1	0.10	0.011	5/31/2017 12:31	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 11:48	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 11:48	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 11:48	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 11:48	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 11:48	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 11:48	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 11:48	J

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## ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241001**  
Sample ID: **17143-MW-1A**

Date Received: 05/24/17 08:30 Matrix: Water  
Date Collected: 05/23/17 11:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 11:48	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 11:48	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 11:48	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 11:48	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 11:48	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 11:48	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 11:48	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 11:48	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 11:48	J
Benzene	2.5		ug/L	1	1.0	0.16	5/30/2017 11:48	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 11:48	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 11:48	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 11:48	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 11:48	J
Carbon Disulfide	0.69	I	ug/L	1	1.0	0.21	5/30/2017 11:48	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 11:48	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 11:48	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 11:48	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 11:48	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 11:48	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 11:48	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 11:48	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 11:48	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 11:48	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 11:48	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 11:48	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 11:48	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 11:48	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 11:48	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 11:48	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 11:48	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 11:48	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 11:48	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 11:48	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 11:48	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 11:48	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 11:48	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 11:48	J
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		5/30/2017 11:48	
Toluene-d8 (S)	99		%	1	77-119		5/30/2017 11:48	

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241001**  
 Sample ID: **17143-MW-1A**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 11:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>106</b>		%	1	86-123		5/30/2017 11:48	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/30/2017 11:48	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/30/2017 11:48	J
1,2-Dichloroethane-d4 (S)	<b>101</b>		%	1	77-125		5/30/2017 11:48	
Toluene-d8 (S)	<b>84</b>		%	1	80-121		5/30/2017 11:48	
Bromofluorobenzene (S)	<b>100</b>		%	1	80-129		5/30/2017 11:48	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	<b>590</b>		mg/L	20	100	10	5/30/2017 15:33	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/24/2017 20:24	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	<b>9.5</b>		mg/L	10	0.10	0.08	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	<b>1200</b>		mg/L	1	10	10	5/30/2017 15:43	J
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Lab ID: **J1705241002**  
 Sample ID: **17143-MW-1B**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/30/2017 17:48	J
Barium	<b>51</b>		ug/L	1	2.0	0.28	5/30/2017 17:48	J
Beryllium	<b>0.65</b>		ug/L	1	0.30	0.13	5/30/2017 17:48	J
Cadmium	<b>0.41</b>	<b>I</b>	ug/L	1	0.60	0.32	5/30/2017 17:48	J
Chromium	<b>1.1</b>		ug/L	1	1.0	0.50	5/30/2017 17:48	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241002** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-1B** Date Collected: 05/23/17 11:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	9.2		ug/L	1	4.0	0.60	5/30/2017 17:48	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 17:48	J
Iron	29000		ug/L	1	200	30	5/30/2017 17:48	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 17:48	J
Nickel	6.7		ug/L	1	6.5	1.1	5/30/2017 17:48	J
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 17:48	J
Silver	0.90	I	ug/L	1	4.0	0.44	5/30/2017 17:48	J
Sodium	160		mg/L	1	0.20	0.16	5/30/2017 17:48	J
Vanadium	15		ug/L	1	1.5	0.18	5/30/2017 17:48	J
Zinc	2.0	U	ug/L	1	10	2.0	5/30/2017 17:48	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.16	I	ug/L	1	0.70	0.046	5/30/2017 19:45	J
Thallium	0.065	I	ug/L	1	0.20	0.057	5/30/2017 19:45	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.044	I	ug/L	1	0.10	0.011	5/31/2017 12:34	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 12:14	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 12:14	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:14	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 12:14	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 12:14	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 12:14	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 12:14	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 12:14	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 12:14	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:14	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 12:14	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 12:14	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 12:14	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 12:14	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 12:14	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 12:14	J

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## ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241002**  
Sample ID: **17143-MW-1B**

Date Received: 05/24/17 08:30 Matrix: Water  
Date Collected: 05/23/17 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.70	I	ug/L	1	1.0	0.16	5/30/2017 12:14	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 12:14	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 12:14	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 12:14	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 12:14	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 12:14	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 12:14	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 12:14	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 12:14	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 12:14	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 12:14	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 12:14	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 12:14	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 12:14	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 12:14	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 12:14	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 12:14	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 12:14	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 12:14	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 12:14	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 12:14	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 12:14	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:14	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 12:14	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 12:14	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 12:14	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:14	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 12:14	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 12:14	J
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		5/30/2017 12:14	
Toluene-d8 (S)	99		%	1	77-119		5/30/2017 12:14	
Bromofluorobenzene (S)	102		%	1	86-123		5/30/2017 12:14	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 12:14	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 12:14	J
1,2-Dichloroethane-d4 (S)	101		%	1	77-125		5/30/2017 12:14	
Toluene-d8 (S)	84		%	1	80-121		5/30/2017 12:14	
Bromofluorobenzene (S)	96		%	1	80-129		5/30/2017 12:14	

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241002** Date Received: 05/24/17 08:30 Matrix: Water  
Sample ID: **17143-MW-1B** Date Collected: 05/23/17 11:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>WET CHEMISTRY</b>									
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0							
Chloride	190		mg/L	1	5.0	0.50	5/24/2017 20:42	J	
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 20:42	J	
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1							
Ammonia (N)	4.4		mg/L	10	0.10	0.08	6/1/2017 16:44	G	
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C							
Total Dissolved Solids	1100		mg/L	1	10	10	5/30/2017 15:43	J	

Lab ID: **J1705241003** Date Received: 05/24/17 08:30 Matrix: Water  
Sample ID: **17143-MW-2A** Date Collected: 05/23/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>METALS</b>									
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	8.5	U	ug/L	1	10	8.5	5/30/2017 17:52	J	
Barium	58		ug/L	1	2.0	0.28	5/30/2017 17:52	J	
Beryllium	0.18	I	ug/L	1	0.30	0.13	5/30/2017 17:52	J	
Cadmium	0.35	I	ug/L	1	0.60	0.32	5/30/2017 17:52	J	
Chromium	2.7		ug/L	1	1.0	0.50	5/30/2017 17:52	J	
Cobalt	3.1	I	ug/L	1	4.0	0.60	5/30/2017 17:52	J	
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 17:52	J	
Iron	14000		ug/L	1	200	30	5/30/2017 17:52	J	
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 17:52	J	
Nickel	6.3	I	ug/L	1	6.5	1.1	5/30/2017 17:52	J	
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 17:52	J	
Silver	0.94	I	ug/L	1	4.0	0.44	5/30/2017 17:52	J	
Sodium	63		mg/L	1	0.20	0.16	5/30/2017 17:52	J	
Vanadium	5.1		ug/L	1	1.5	0.18	5/30/2017 17:52	J	
Zinc	2.5	I	ug/L	1	10	2.0	5/30/2017 17:52	J	

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241003** Date Received: 05/24/17 08:30 Matrix: Water  
Sample ID: **17143-MW-2A** Date Collected: 05/23/17 10:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 19:49	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 19:49	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 12:37	J

#### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/30/2017 12:40	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 12:40	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 12:40	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 12:40	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/30/2017 12:40	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 12:40	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 12:40	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 12:40	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/30/2017 12:40	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 12:40	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 12:40	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/30/2017 12:40	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/30/2017 12:40	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/30/2017 12:40	J
Acetone	<b>4.9</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/30/2017 12:40	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/30/2017 12:40	J
Benzene	<b>0.16</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/30/2017 12:40	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/30/2017 12:40	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/30/2017 12:40	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/30/2017 12:40	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/30/2017 12:40	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 12:40	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/30/2017 12:40	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 12:40	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/30/2017 12:40	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 12:40	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 12:40	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241003** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-2A** Date Collected: 05/23/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 12:40	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 12:40	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 12:40	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 12:40	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 12:40	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 12:40	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 12:40	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 12:40	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 12:40	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 12:40	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 12:40	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:40	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 12:40	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 12:40	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 12:40	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 12:40	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 12:40	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 12:40	J
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		5/30/2017 12:40	
Toluene-d8 (S)	100		%	1	77-119		5/30/2017 12:40	
Bromofluorobenzene (S)	103		%	1	86-123		5/30/2017 12:40	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 12:40	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 12:40	J
1,2-Dichloroethane-d4 (S)	103		%	1	77-125		5/30/2017 12:40	
Toluene-d8 (S)	84		%	1	80-121		5/30/2017 12:40	
Bromofluorobenzene (S)	97		%	1	80-129		5/30/2017 12:40	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	140	J4	mg/L	1	5.0	0.50	5/24/2017 21:36	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 21:36	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	6.9		mg/L	10	0.10	0.08	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241003**  
 Sample ID: **17143-MW-2A**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 10:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>650</b>		<b>mg/L</b>	<b>1</b>	10	10	5/30/2017 15:43	J

Lab ID: **J1705241004**  
 Sample ID: **17143-MW-2B**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
 Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/30/2017 17:56	J
Barium	<b>45</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/30/2017 17:56	J
Beryllium	<b>0.94</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/30/2017 17:56	J
Cadmium	<b>0.56</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/30/2017 17:56	J
Chromium	<b>0.50</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.50	5/30/2017 17:56	J
Cobalt	<b>14</b>		<b>ug/L</b>	<b>1</b>	4.0	0.60	5/30/2017 17:56	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/30/2017 17:56	J
Iron	<b>45000</b>		<b>ug/L</b>	<b>1</b>	200	30	5/30/2017 17:56	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/30/2017 17:56	J
Nickel	<b>6.6</b>		<b>ug/L</b>	<b>1</b>	6.5	1.1	5/30/2017 17:56	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/30/2017 17:56	J
Silver	<b>0.83</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/30/2017 17:56	J
Sodium	<b>62</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/30/2017 17:56	J
Vanadium	<b>4.2</b>		<b>ug/L</b>	<b>1</b>	1.5	0.18	5/30/2017 17:56	J
Zinc	<b>2.0</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/30/2017 17:56	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.085</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 19:53	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 19:53	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 12:40	J
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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241004** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-2B** Date Collected: 05/23/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:06	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:06	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:06	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:06	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 13:06	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:06	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:06	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:06	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:06	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:06	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:06	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 13:06	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 13:06	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 13:06	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 13:06	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 13:06	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:06	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 13:06	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 13:06	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 13:06	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:06	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:06	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:06	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:06	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:06	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:06	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:06	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:06	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:06	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:06	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:06	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 13:06	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:06	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:06	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:06	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 13:06	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241004** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-2B** Date Collected: 05/23/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 13:06	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 13:06	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:06	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 13:06	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:06	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:06	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:06	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:06	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 13:06	J
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		5/30/2017 13:06	
Toluene-d8 (S)	101		%	1	77-119		5/30/2017 13:06	
Bromofluorobenzene (S)	102		%	1	86-123		5/30/2017 13:06	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 13:06	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 13:06	J
1,2-Dichloroethane-d4 (S)	101		%	1	77-125		5/30/2017 13:06	
Toluene-d8 (S)	85		%	1	80-121		5/30/2017 13:06	
Bromofluorobenzene (S)	96		%	1	80-129		5/30/2017 13:06	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	120		mg/L	1	5.0	0.50	5/24/2017 22:12	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 22:12	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	1.1		mg/L	2	0.02	0.02	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	860		mg/L	1	10	10	5/30/2017 15:43	J
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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241005** Date Received: 05/24/17 08:30 Matrix: Water  
Sample ID: **17143-MW-3A** Date Collected: 05/23/17 08:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/30/2017 18:00	J
Barium	67		ug/L	1	2.0	0.28	5/30/2017 18:00	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/30/2017 18:00	J
Cadmium	0.34	I	ug/L	1	0.60	0.32	5/30/2017 18:00	J
Chromium	2.7		ug/L	1	1.0	0.50	5/30/2017 18:00	J
Cobalt	1.6	I	ug/L	1	4.0	0.60	5/30/2017 18:00	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 18:00	J
Iron	4100		ug/L	1	200	30	5/30/2017 18:00	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 18:00	J
Nickel	4.5	I	ug/L	1	6.5	1.1	5/30/2017 18:00	J
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 18:00	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/30/2017 18:00	J
Sodium	26		mg/L	1	0.20	0.16	5/30/2017 18:00	J
Vanadium	6.8		ug/L	1	1.5	0.18	5/30/2017 18:00	J
Zinc	10		ug/L	1	10	2.0	5/30/2017 18:00	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 19:57	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 19:57	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 12:43	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:32	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:32	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:32	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:32	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 13:32	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:32	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:32	J

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## ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241005**  
Sample ID: **17143-MW-3A**

Date Received: 05/24/17 08:30 Matrix: Water  
Date Collected: 05/23/17 08:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:32	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:32	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:32	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:32	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 13:32	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 13:32	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 13:32	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 13:32	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 13:32	J
Benzene	4.4		ug/L	1	1.0	0.16	5/30/2017 13:32	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 13:32	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 13:32	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 13:32	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:32	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:32	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:32	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:32	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:32	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:32	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:32	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:32	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:32	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:32	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:32	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 13:32	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:32	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:32	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:32	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 13:32	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 13:32	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 13:32	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:32	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 13:32	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:32	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:32	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:32	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:32	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 13:32	J
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		5/30/2017 13:32	
Toluene-d8 (S)	101		%	1	77-119		5/30/2017 13:32	

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241005**  
 Sample ID: **17143-MW-3A**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 08:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>101</b>		%	1	86-123		5/30/2017 13:32	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/30/2017 13:32	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/30/2017 13:32	J
1,2-Dichloroethane-d4 (S)	<b>100</b>		%	1	77-125		5/30/2017 13:32	
Toluene-d8 (S)	<b>85</b>		%	1	80-121		5/30/2017 13:32	
Bromofluorobenzene (S)	<b>95</b>		%	1	80-129		5/30/2017 13:32	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	<b>44</b>		mg/L	1	5.0	0.50	5/24/2017 22:31	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/24/2017 22:31	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	<b>11</b>		mg/L	20	0.20	0.16	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	<b>860</b>		mg/L	1	10	10	5/30/2017 15:43	J
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Lab ID: **J1705241006**  
 Sample ID: **17143-MW-3B**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 08:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/30/2017 18:03	J
Barium	<b>38</b>		ug/L	1	2.0	0.28	5/30/2017 18:03	J
Beryllium	<b>1.9</b>		ug/L	1	0.30	0.13	5/30/2017 18:03	J
Cadmium	<b>0.44</b>	<b>I</b>	ug/L	1	0.60	0.32	5/30/2017 18:03	J
Chromium	<b>0.76</b>	<b>I</b>	ug/L	1	1.0	0.50	5/30/2017 18:03	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241006** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-3B** Date Collected: 05/23/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	3.8	I	ug/L	1	4.0	0.60	5/30/2017 18:03	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 18:03	J
Iron	10000		ug/L	1	200	30	5/30/2017 18:03	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 18:03	J
Nickel	1.4	I	ug/L	1	6.5	1.1	5/30/2017 18:03	J
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 18:03	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/30/2017 18:03	J
Sodium	35		mg/L	1	0.20	0.16	5/30/2017 18:03	J
Vanadium	5.1		ug/L	1	1.5	0.18	5/30/2017 18:03	J
Zinc	16		ug/L	1	10	2.0	5/30/2017 18:03	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.047	I	ug/L	1	0.70	0.046	5/30/2017 20:01	J
Thallium	0.070	I	ug/L	1	0.20	0.057	5/30/2017 20:01	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 12:46	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:58	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:58	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:58	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:58	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 13:58	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:58	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 13:58	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:58	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:58	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:58	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 13:58	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 13:58	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 13:58	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 13:58	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 13:58	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 13:58	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241006**  
 Sample ID: **17143-MW-3B**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 08:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:58	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 13:58	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 13:58	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 13:58	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:58	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:58	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:58	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:58	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:58	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:58	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 13:58	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 13:58	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 13:58	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:58	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:58	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 13:58	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:58	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 13:58	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 13:58	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 13:58	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 13:58	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 13:58	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:58	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 13:58	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 13:58	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 13:58	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 13:58	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 13:58	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 13:58	J
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		5/30/2017 13:58	
Toluene-d8 (S)	101		%	1	77-119		5/30/2017 13:58	
Bromofluorobenzene (S)	104		%	1	86-123		5/30/2017 13:58	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 13:58	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 13:58	J
1,2-Dichloroethane-d4 (S)	100		%	1	77-125		5/30/2017 13:58	
Toluene-d8 (S)	85		%	1	80-121		5/30/2017 13:58	
Bromofluorobenzene (S)	97		%	1	80-129		5/30/2017 13:58	

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241006** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-3B** Date Collected: 05/23/17 08:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	98		mg/L	1	5.0	0.50	5/24/2017 22:49	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 22:49	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	3.7		mg/L	5	0.05	0.04	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	1400		mg/L	1	10	10	5/30/2017 15:43	J

Lab ID: **J1705241007** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-4A** Date Collected: 05/23/17 07:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	8.5	U	ug/L	1	10	8.5	5/30/2017 18:07	J
Barium	43		ug/L	1	2.0	0.28	5/30/2017 18:07	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/30/2017 18:07	J
Cadmium	0.33	I	ug/L	1	0.60	0.32	5/30/2017 18:07	J
Chromium	3.0		ug/L	1	1.0	0.50	5/30/2017 18:07	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/30/2017 18:07	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/30/2017 18:07	J
Iron	6300		ug/L	1	200	30	5/30/2017 18:07	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/30/2017 18:07	J
Nickel	1.3	I	ug/L	1	6.5	1.1	5/30/2017 18:07	J
Selenium	6.8	U	ug/L	1	20	6.8	5/30/2017 18:07	J
Silver	0.63	I	ug/L	1	4.0	0.44	5/30/2017 18:07	J
Sodium	43		mg/L	1	0.20	0.16	5/30/2017 18:07	J
Vanadium	4.3		ug/L	1	1.5	0.18	5/30/2017 18:07	J
Zinc	8.1	I	ug/L	1	10	2.0	5/30/2017 18:07	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241007** Date Received: 05/24/17 08:30 Matrix: Water  
Sample ID: **17143-MW-4A** Date Collected: 05/23/17 07:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 20:05	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 20:05	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 12:55	J

#### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/30/2017 14:24	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 14:24	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 14:24	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 14:24	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/30/2017 14:24	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 14:24	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 14:24	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 14:24	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/30/2017 14:24	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 14:24	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 14:24	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/30/2017 14:24	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/30/2017 14:24	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/30/2017 14:24	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/30/2017 14:24	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/30/2017 14:24	J
Benzene	<b>1.6</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/30/2017 14:24	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/30/2017 14:24	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/30/2017 14:24	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/30/2017 14:24	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/30/2017 14:24	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 14:24	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/30/2017 14:24	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 14:24	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/30/2017 14:24	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 14:24	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 14:24	J

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## ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241007**  
Sample ID: **17143-MW-4A**

Date Received: 05/24/17 08:30 Matrix: Water  
Date Collected: 05/23/17 07:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 14:24	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 14:24	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 14:24	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 14:24	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 14:24	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 14:24	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 14:24	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 14:24	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 14:24	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 14:24	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 14:24	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:24	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 14:24	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 14:24	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 14:24	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:24	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 14:24	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 14:24	J
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		5/30/2017 14:24	
Toluene-d8 (S)	82		%	1	77-119		5/30/2017 14:24	
Bromofluorobenzene (S)	103		%	1	86-123		5/30/2017 14:24	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 14:24	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 14:24	J
1,2-Dichloroethane-d4 (S)	100		%	1	77-125		5/30/2017 14:24	
Toluene-d8 (S)	88		%	1	80-121		5/30/2017 14:24	
Bromofluorobenzene (S)	97		%	1	80-129		5/30/2017 14:24	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	40		mg/L	1	5.0	0.50	5/24/2017 23:07	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 23:07	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	18		mg/L	50	0.50	0.40	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241007**  
 Sample ID: **17143-MW-4A**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 07:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>760</b>		<b>mg/L</b>	<b>1</b>	10	10	5/30/2017 15:43	J

Lab ID: **J1705241008**  
 Sample ID: **17143-MW-4B**

Date Received: 05/24/17 08:30 Matrix: Water  
 Date Collected: 05/23/17 06:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
 Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/30/2017 18:11	J
Barium	<b>37</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/30/2017 18:11	J
Beryllium	<b>0.60</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/30/2017 18:11	J
Cadmium	<b>0.46</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/30/2017 18:11	J
Chromium	<b>2.2</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/30/2017 18:11	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/30/2017 18:11	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/30/2017 18:11	J
Iron	<b>280</b>		<b>ug/L</b>	<b>1</b>	200	30	5/30/2017 18:11	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/30/2017 18:11	J
Nickel	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/30/2017 18:11	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/30/2017 18:11	J
Silver	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/30/2017 18:11	J
Sodium	<b>57</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/30/2017 18:11	J
Vanadium	<b>7.5</b>		<b>ug/L</b>	<b>1</b>	1.5	0.18	5/30/2017 18:11	J
Zinc	<b>10</b>		<b>ug/L</b>	<b>1</b>	10	2.0	5/30/2017 18:11	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.15</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 20:09	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 20:09	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 12:58	J
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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241008** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-4B** Date Collected: 05/23/17 06:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 14:50	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 14:50	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:50	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 14:50	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 14:50	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 14:50	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 14:50	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 14:50	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 14:50	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:50	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 14:50	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 14:50	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 14:50	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 14:50	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 14:50	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 14:50	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 14:50	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 14:50	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 14:50	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 14:50	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 14:50	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 14:50	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 14:50	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 14:50	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 14:50	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 14:50	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 14:50	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 14:50	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 14:50	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 14:50	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 14:50	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 14:50	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 14:50	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 14:50	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 14:50	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 14:50	J

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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241008** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-MW-4B** Date Collected: 05/23/17 06:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 14:50	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 14:50	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:50	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 14:50	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 14:50	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 14:50	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 14:50	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 14:50	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 14:50	J
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		5/30/2017 14:50	
Toluene-d8 (S)	102		%	1	77-119		5/30/2017 14:50	
Bromofluorobenzene (S)	101		%	1	86-123		5/30/2017 14:50	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 14:50	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 14:50	J
1,2-Dichloroethane-d4 (S)	102		%	1	77-125		5/30/2017 14:50	
Toluene-d8 (S)	86		%	1	80-121		5/30/2017 14:50	
Bromofluorobenzene (S)	95		%	1	80-129		5/30/2017 14:50	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	97		mg/L	1	5.0	0.50	5/24/2017 23:25	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/24/2017 23:25	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	12		mg/L	25	0.25	0.20	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	1500		mg/L	1	10	10	5/30/2017 15:43	J
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### ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241009** Date Received: 05/24/17 08:30 Matrix: Water  
 Sample ID: **17143-Trip Blank** Date Collected: 05/23/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 15:17	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 15:17	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:17	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 15:17	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 15:17	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:17	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 15:17	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:17	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:17	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:17	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 15:17	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 15:17	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 15:17	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 15:17	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 15:17	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 15:17	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 15:17	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 15:17	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 15:17	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 15:17	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:17	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:17	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 15:17	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:17	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 15:17	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:17	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:17	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 15:17	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 15:17	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:17	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 15:17	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 15:17	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:17	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 15:17	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:17	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 15:17	J

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## ANALYTICAL RESULTS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705241009**  
Sample ID: **17143-Trip Blank**

Date Received: 05/24/17 08:30 Matrix: Water  
Date Collected: 05/23/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 15:17	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 15:17	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:17	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 15:17	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:17	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 15:17	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:17	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:17	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 15:17	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/30/2017 15:17	
Toluene-d8 (S)	98		%	1	77-119		5/30/2017 15:17	
Bromofluorobenzene (S)	101		%	1	86-123		5/30/2017 15:17	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 15:17	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 15:17	J
1,2-Dichloroethane-d4 (S)	104		%	1	77-125		5/30/2017 15:17	
Toluene-d8 (S)	83		%	1	80-121		5/30/2017 15:17	
Bromofluorobenzene (S)	95		%	1	80-129		5/30/2017 15:17	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- J4 Estimated Result

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: WCAj/4248 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

METHOD BLANK: 2363740

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: DGMj/3037 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/26/2017 09:45

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

METHOD BLANK: 2364073

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.18	0.18 U
Zinc	ug/L	2.0	2.0 U

QC Batch: DGMj/3038 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/26/2017 09:45

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

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### QUALITY CONTROL DATA

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2364077

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: WCAj/4267 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

METHOD BLANK: 2365781

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: DGMj/3048 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 05/31/2017 09:11

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

METHOD BLANK: 2366540

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: MSVj/4073 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 05/30/2017 09:37

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008,

METHOD BLANK: 2366565

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	112	77-125
Toluene-d8 (S)	%	100	80-121

Report ID: 489017 - 686446

Page 29 of 36

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### QUALITY CONTROL DATA

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2366565

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Bromofluorobenzene (S)	%	104	80-129

QC Batch: MSVj/4075

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 05/30/2017 09:37

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008,

METHOD BLANK: 2366569

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Chloromethane	ug/L	0.21	0.21 U
Vinyl Chloride	ug/L	0.20	0.20 U
Bromomethane	ug/L	0.24	0.24 U
Chloroethane	ug/L	0.33	0.33 U
Trichlorofluoromethane	ug/L	0.32	0.32 U
Acetone	ug/L	2.1	2.1 U
1,1-Dichloroethylene	ug/L	0.18	0.18 U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16 U
Acrylonitrile	ug/L	1.1	1.1 U
Methylene Chloride	ug/L	2.5	2.5 U
Carbon Disulfide	ug/L	0.21	0.21 U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20 U
1,1-Dichloroethane	ug/L	0.14	0.14 U
Vinyl Acetate	ug/L	0.19	0.19 U
2-Butanone (MEK)	ug/L	0.43	0.43 U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24 U
Bromochloromethane	ug/L	0.17	0.17 U
Chloroform	ug/L	0.18	0.18 U
1,2-Dichloroethane	ug/L	0.23	0.23 U
1,1,1-Trichloroethane	ug/L	0.22	0.22 U
Carbon Tetrachloride	ug/L	0.36	0.36 U
Benzene	ug/L	0.16	0.16 U
Dibromomethane	ug/L	0.26	0.26 U
1,2-Dichloropropane	ug/L	0.20	0.20 U
Trichloroethene	ug/L	0.29	0.29 U
Bromodichloromethane	ug/L	0.25	0.25 U
cis-1,3-Dichloropropene	ug/L	0.16	0.16 U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47 U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18 U
1,1,2-Trichloroethane	ug/L	0.30	0.30 U
Toluene	ug/L	0.23	0.23 U
2-Hexanone	ug/L	0.44	0.44 U

Report ID: 489017 - 686446

Page 30 of 36

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### QUALITY CONTROL DATA

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2366569

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Dibromochloromethane	ug/L	0.33	0.33 U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36 U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26 U
Chlorobenzene	ug/L	0.21	0.21 U
Ethylbenzene	ug/L	0.24	0.24 U
Bromoform	ug/L	0.43	0.43 U
Styrene	ug/L	0.23	0.23 U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20 U
1,2,3-Trichloropropane	ug/L	0.30	0.30 U
1,4-Dichlorobenzene	ug/L	0.22	0.22 U
1,2-Dichlorobenzene	ug/L	0.18	0.18 U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8 U
Xylene (Total)	ug/L	0.53	0.53 U
1,2-Dichloroethane-d4 (S)	%	112	70-128
Toluene-d8 (S)	%	100	77-119
Bromofluorobenzene (S)	%	104	86-123

QC Batch: WCAg/5054 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1705241001, J1705241002, J1705241003, J1705241004, J1705241005, J1705241006, J1705241007, J1705241008

METHOD BLANK: 2368849

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Ammonia (N)	mg/L	0.01	0.01 U

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705241001	17143-MW-1A			EPA 300.0	WCAj/4248
J1705241002	17143-MW-1B			EPA 300.0	WCAj/4248
J1705241003	17143-MW-2A			EPA 300.0	WCAj/4248
J1705241004	17143-MW-2B			EPA 300.0	WCAj/4248
J1705241005	17143-MW-3A			EPA 300.0	WCAj/4248
J1705241006	17143-MW-3B			EPA 300.0	WCAj/4248
J1705241007	17143-MW-4A			EPA 300.0	WCAj/4248
J1705241008	17143-MW-4B			EPA 300.0	WCAj/4248
J1705241001	17143-MW-1A	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241002	17143-MW-1B	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241003	17143-MW-2A	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241004	17143-MW-2B	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241005	17143-MW-3A	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241006	17143-MW-3B	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241007	17143-MW-4A	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241008	17143-MW-4B	SW-846 3010A	DGMj/3037	SW-846 6010	ICPj/2025
J1705241001	17143-MW-1A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241002	17143-MW-1B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241003	17143-MW-2A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241004	17143-MW-2B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241005	17143-MW-3A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241006	17143-MW-3B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241007	17143-MW-4A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241008	17143-MW-4B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705241001	17143-MW-1A			SM 2540 C	WCAj/4267
J1705241002	17143-MW-1B			SM 2540 C	WCAj/4267
J1705241003	17143-MW-2A			SM 2540 C	WCAj/4267
J1705241004	17143-MW-2B			SM 2540 C	WCAj/4267
J1705241005	17143-MW-3A			SM 2540 C	WCAj/4267
J1705241006	17143-MW-3B			SM 2540 C	WCAj/4267
J1705241007	17143-MW-4A			SM 2540 C	WCAj/4267

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705241008	17143-MW-4B			SM 2540 C	WCAj/4267
J1705241001	17143-MW-1A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241002	17143-MW-1B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241003	17143-MW-2A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241004	17143-MW-2B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241005	17143-MW-3A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241006	17143-MW-3B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241007	17143-MW-4A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241008	17143-MW-4B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705241001	17143-MW-1A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241002	17143-MW-1B	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241003	17143-MW-2A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241004	17143-MW-2B	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241005	17143-MW-3A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241006	17143-MW-3B	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241007	17143-MW-4A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241008	17143-MW-4B	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241009	17143-Trip Blank	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705241001	17143-MW-1A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241002	17143-MW-1B	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241003	17143-MW-2A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241004	17143-MW-2B	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241005	17143-MW-3A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241006	17143-MW-3B	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241007	17143-MW-4A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241008	17143-MW-4B	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241009	17143-Trip Blank	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705241001	17143-MW-1A			EPA 350.1	WCAg/5054
J1705241002	17143-MW-1B			EPA 350.1	WCAg/5054

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705241 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705241003	17143-MW-2A			EPA 350.1	WCAg/5054
J1705241004	17143-MW-2B			EPA 350.1	WCAg/5054
J1705241005	17143-MW-3A			EPA 350.1	WCAg/5054
J1705241006	17143-MW-3B			EPA 350.1	WCAg/5054
J1705241007	17143-MW-4A			EPA 350.1	WCAg/5054
J1705241008	17143-MW-4B			EPA 350.1	WCAg/5054

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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 3222
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.8
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 323
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.0000

# J1705241

7

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE														LABORATORY I.D. NUMBER								
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic																
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3														
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>																								
FAX:		Project Name and Address:																								
Contact: <b>Kirk Wills</b>																										
Sampled By: <b>Joe Terry/EPs</b>																										
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		Special Instructions: <b>Jax Profile: 31172</b>																								
Page <b>1</b> of <b>1</b>		<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS																								
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION																			
			DATE	TIME				HCL	HNO3	Ice	H2SO4															
17143-MW-1A		G	5.23.17	1155	GW	6		X	X	X	X							001								
17143-MW-1B				1120														002								
17143-MW-2A				1020														003								
17143-MW-2B				0950														004								
17143-MW-3A				0950														005								
17143-MW-3B				0815														006								
17143-MW-4A				0710														007								
17143-MW-4B		↓	↓	0635	GW	6		X	X	X	X							008								
17143-Tr.p Bank		G	5.23.17	0000	DJ H2O	2		X										009								

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received **9** (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) **J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V**

Relinquished by:		Date	Time	Received by:		Date	Time
Joe Terry		5.23.17	1300	Felder			
Felder		5-24-17	0830	[Signature]		5-24-17	1830

**FOR DRINKING WATER USE:**  
 (When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_



Client: Waste Connections

Project name: J.E.D Landfill

Date/Time Rcvd: 5-24-17 0830

Log-In request number: J1105241

Received by: By

Completed by: By

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4</u>				
Temp taken from	<input type="checkbox"/> Sample Bottle <input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below:

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
2. Were custody papers properly included with samples?	<input checked="" type="checkbox"/>		
3. Were custody papers properly filled out (ink, signed, match labels)?	<input checked="" type="checkbox"/>		
4. Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/>		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	<input checked="" type="checkbox"/>		
6. Did the sample labels agree with the chain of custody?	<input checked="" type="checkbox"/>		
7. Were correct bottles used for the tests indicated?	<input checked="" type="checkbox"/>		
8. Were proper sample preservation techniques indicated on the label?	<input checked="" type="checkbox"/>		
9. Were samples received within holding times?	<input checked="" type="checkbox"/>		
10. Were all VOA vials free of the presence of air bubbles?	<input checked="" type="checkbox"/>		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?	<input checked="" type="checkbox"/>		
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	<input checked="" type="checkbox"/>		
13. Was the cooler temperature less than 6°C?	<input checked="" type="checkbox"/>		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	<input checked="" type="checkbox"/>		
15. Was sufficient sample volume provided to perform all tests?	<input checked="" type="checkbox"/>		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)	<input checked="" type="checkbox"/>		
17. Were all sample containers provided by AEL? (Other than Bacteriological)	<input checked="" type="checkbox"/>		
18. Were samples accepted into the laboratory?	<input checked="" type="checkbox"/>		
19. When necessary to split samples into other bottles, is it noted in the comments?	<input checked="" type="checkbox"/>		

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)





**Project No.:** J1705241  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

A. Calibration: All acceptance criteria were met.  
B. Blanks: All acceptance criteria were met.  
C. Duplicates: All acceptance criteria were met.  
D. Spikes: The upper control criterion was exceeded for the following analyte in the matrix spike and matrix spike duplicate for analytical batch 4248: Nitrate. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

The matrix spike (MS) recovery of Chloride for J1705241003 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Matrix Spike Duplicate (MSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. No further corrective action was required.

E. Serial Diluion: All acceptance criteria were met.  
F. Samples: Sample analyses proceeded normally.  
G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, May 23, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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### SAMPLE SUMMARY

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705150001	17142-MW-5A	Water	5/22/2017 14:30	5/23/2017 09:00
J1705150002	17142-MW-5B	Water	5/22/2017 14:05	5/23/2017 09:00
J1705150003	17142-MW-6A	Water	5/22/2017 13:10	5/23/2017 09:00
J1705150004	17142-MW-6B	Water	5/22/2017 12:40	5/23/2017 09:00
J1705150005	17142-MW-7A	Water	5/22/2017 11:50	5/23/2017 09:00
J1705150006	17142-MW-7B	Water	5/22/2017 11:20	5/23/2017 09:00
J1705150007	17142-Trip Blank-2	Water	5/22/2017 00:00	5/23/2017 09:00

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150001** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-5A** Date Collected: 05/22/17 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/25/2017 14:38	J
Barium	5.4		ug/L	1	2.0	0.28	5/25/2017 14:38	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/25/2017 14:38	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/25/2017 14:38	J
Chromium	2.6		ug/L	1	1.0	0.50	5/25/2017 14:38	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/25/2017 14:38	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/25/2017 14:38	J
Iron	300		ug/L	1	200	30	5/25/2017 14:38	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/25/2017 14:38	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/25/2017 14:38	J
Selenium	6.8	U	ug/L	1	20	6.8	5/25/2017 14:38	J
Silver	1.1	I	ug/L	1	4.0	0.44	5/25/2017 14:38	J
Sodium	12		mg/L	1	0.20	0.16	5/25/2017 14:38	J
Vanadium	2.6	V	ug/L	1	1.5	0.18	5/25/2017 14:38	J
Zinc	8.6	I	ug/L	1	10	2.0	5/25/2017 14:38	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.099	I	ug/L	1	0.70	0.046	5/30/2017 19:01	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 19:01	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 16:15	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 19:52	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 19:52	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:52	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 19:52	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 19:52	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:52	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 19:52	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150001**  
Sample ID: **17142-MW-5A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 14:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:52	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:52	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:52	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 19:52	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 19:52	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 19:52	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 19:52	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 19:52	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 19:52	J
Benzene	1.0		ug/L	1	1.0	0.16	5/27/2017 19:52	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 19:52	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 19:52	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 19:52	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:52	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:52	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:52	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:52	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:52	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:52	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:52	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:52	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 19:52	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:52	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:52	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 19:52	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:52	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:52	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:52	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 19:52	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 19:52	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 19:52	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:52	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 19:52	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:52	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:52	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:52	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:52	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 19:52	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/27/2017 19:52	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 19:52	

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150001** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-5A** Date Collected: 05/22/17 14:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>102</b>		%	1	86-123		5/27/2017 19:52	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/27/2017 19:52	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/27/2017 19:52	J
1,2-Dichloroethane-d4 (S)	<b>103</b>		%	1	77-125		5/27/2017 19:52	
Toluene-d8 (S)	<b>87</b>		%	1	80-121		5/27/2017 19:52	
Bromofluorobenzene (S)	<b>95</b>		%	1	80-129		5/27/2017 19:52	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>35</b>		mg/L	2	10	1.0	5/23/2017 14:40	J
Nitrate	<b>0.10</b>	<b>U</b>	mg/L	2	1.0	0.10	5/23/2017 14:40	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>5.9</b>		mg/L	10	0.10	0.08	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>220</b>		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705150002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-5B** Date Collected: 05/22/17 14:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/25/2017 14:42	J
Barium	<b>46</b>		ug/L	1	2.0	0.28	5/25/2017 14:42	J
Beryllium	<b>0.43</b>		ug/L	1	0.30	0.13	5/25/2017 14:42	J
Cadmium	<b>0.41</b>	<b>I</b>	ug/L	1	0.60	0.32	5/25/2017 14:42	J
Chromium	<b>1.6</b>		ug/L	1	1.0	0.50	5/25/2017 14:42	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-5B** Date Collected: 05/22/17 14:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/25/2017 14:42	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/25/2017 14:42	J
Iron	260		ug/L	1	200	30	5/25/2017 14:42	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/25/2017 14:42	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/25/2017 14:42	J
Selenium	6.8	U	ug/L	1	20	6.8	5/25/2017 14:42	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/25/2017 14:42	J
Sodium	76		mg/L	1	0.20	0.16	5/25/2017 14:42	J
Vanadium	4.6	V	ug/L	1	1.5	0.18	5/25/2017 14:42	J
Zinc	8.4	I	ug/L	1	10	2.0	5/25/2017 14:42	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.084	I	ug/L	1	0.70	0.046	5/30/2017 19:13	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 19:13	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 16:18	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 20:19	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 20:19	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:19	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 20:19	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 20:19	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 20:19	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 20:19	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 20:19	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 20:19	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:19	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 20:19	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 20:19	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 20:19	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 20:19	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 20:19	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 20:19	J

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## ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150002**  
Sample ID: **17142-MW-5B**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 14:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 20:19	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 20:19	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 20:19	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 20:19	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 20:19	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 20:19	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 20:19	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 20:19	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 20:19	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 20:19	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 20:19	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 20:19	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 20:19	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 20:19	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 20:19	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 20:19	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 20:19	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 20:19	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 20:19	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 20:19	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 20:19	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 20:19	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:19	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 20:19	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 20:19	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 20:19	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:19	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 20:19	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 20:19	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/27/2017 20:19	
Toluene-d8 (S)	84		%	1	77-119		5/27/2017 20:19	
Bromofluorobenzene (S)	101		%	1	86-123		5/27/2017 20:19	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 20:19	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 20:19	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/27/2017 20:19	
Toluene-d8 (S)	89		%	1	80-121		5/27/2017 20:19	
Bromofluorobenzene (S)	94		%	1	80-129		5/27/2017 20:19	

Report ID: 488600 - 678264

Page 7 of 31

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-5B** Date Collected: 05/22/17 14:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	99		mg/L	1	5.0	0.50	5/23/2017 14:58	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 14:58	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	5.4		mg/L	10	0.10	0.08	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	1700		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705150003** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-6A** Date Collected: 05/22/17 13:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/25/2017 14:46	J
Barium	6.6		ug/L	1	2.0	0.28	5/25/2017 14:46	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/25/2017 14:46	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/25/2017 14:46	J
Chromium	1.2		ug/L	1	1.0	0.50	5/25/2017 14:46	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/25/2017 14:46	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/25/2017 14:46	J
Iron	13000		ug/L	1	200	30	5/25/2017 14:46	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/25/2017 14:46	J
Nickel	1.9	I	ug/L	1	6.5	1.1	5/25/2017 14:46	J
Selenium	6.8	U	ug/L	1	20	6.8	5/25/2017 14:46	J
Silver	0.90	I	ug/L	1	4.0	0.44	5/25/2017 14:46	J
Sodium	17		mg/L	1	0.20	0.16	5/25/2017 14:46	J
Vanadium	4.0	V	ug/L	1	1.5	0.18	5/25/2017 14:46	J
Zinc	4.7	I	ug/L	1	10	2.0	5/25/2017 14:46	J

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## ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150003** Date Received: 05/23/17 09:00 Matrix: Water  
Sample ID: **17142-MW-6A** Date Collected: 05/22/17 13:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.046</b>	<b>U</b>	ug/L	1	0.70	0.046	5/30/2017 19:17	J
Thallium	<b>0.057</b>	<b>U</b>	ug/L	1	0.20	0.057	5/30/2017 19:17	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	ug/L	1	0.10	0.011	5/30/2017 16:30	J

### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	ug/L	1	1.0	0.26	5/27/2017 20:45	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/27/2017 20:45	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/27/2017 20:45	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/27/2017 20:45	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	ug/L	1	1.0	0.14	5/27/2017 20:45	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/27/2017 20:45	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/27/2017 20:45	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/27/2017 20:45	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	ug/L	1	1.0	0.23	5/27/2017 20:45	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/27/2017 20:45	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/27/2017 20:45	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	ug/L	1	5.0	0.43	5/27/2017 20:45	J
2-Hexanone	<b>0.44</b>	<b>U</b>	ug/L	1	5.0	0.44	5/27/2017 20:45	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	ug/L	1	1.0	0.47	5/27/2017 20:45	J
Acetone	<b>2.1</b>	<b>U</b>	ug/L	1	5.0	2.1	5/27/2017 20:45	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	ug/L	1	10	1.1	5/27/2017 20:45	J
Benzene	<b>4.4</b>	<b>U</b>	ug/L	1	1.0	0.16	5/27/2017 20:45	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	ug/L	1	1.0	0.17	5/27/2017 20:45	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	ug/L	1	1.0	0.25	5/27/2017 20:45	J
Bromoform	<b>0.43</b>	<b>U</b>	ug/L	1	1.0	0.43	5/27/2017 20:45	J
Bromomethane	<b>0.24</b>	<b>U</b>	ug/L	1	1.0	0.24	5/27/2017 20:45	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	ug/L	1	1.0	0.21	5/27/2017 20:45	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	ug/L	1	1.0	0.36	5/27/2017 20:45	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	ug/L	1	1.0	0.21	5/27/2017 20:45	J
Chloroethane	<b>0.33</b>	<b>U</b>	ug/L	1	1.0	0.33	5/27/2017 20:45	J
Chloroform	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/27/2017 20:45	J
Chloromethane	<b>0.21</b>	<b>U</b>	ug/L	1	1.0	0.21	5/27/2017 20:45	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150003** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-6A** Date Collected: 05/22/17 13:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 20:45	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 20:45	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 20:45	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 20:45	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 20:45	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 20:45	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 20:45	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 20:45	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 20:45	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 20:45	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 20:45	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:45	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 20:45	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 20:45	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 20:45	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 20:45	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 20:45	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 20:45	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/27/2017 20:45	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 20:45	
Bromofluorobenzene (S)	102		%	1	86-123		5/27/2017 20:45	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 20:45	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 20:45	J
1,2-Dichloroethane-d4 (S)	103		%	1	77-125		5/27/2017 20:45	
Toluene-d8 (S)	88		%	1	80-121		5/27/2017 20:45	
Bromofluorobenzene (S)	95		%	1	80-129		5/27/2017 20:45	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	41		mg/L	1	5.0	0.50	5/23/2017 15:17	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 15:17	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	3.9		mg/L	5	0.05	0.04	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150003**  
 Sample ID: **17142-MW-6A**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 13:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>140</b>		<b>mg/L</b>	<b>1</b>	10	10	5/26/2017 11:55	J

Lab ID: **J1705150004**  
 Sample ID: **17142-MW-6B**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 12:40

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
 Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/25/2017 14:49	J
Barium	<b>42</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/25/2017 14:49	J
Beryllium	<b>0.33</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/25/2017 14:49	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/25/2017 14:49	J
Chromium	<b>0.53</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	1.0	0.50	5/25/2017 14:49	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/25/2017 14:49	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/25/2017 14:49	J
Iron	<b>1300</b>		<b>ug/L</b>	<b>1</b>	200	30	5/25/2017 14:49	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/25/2017 14:49	J
Nickel	<b>1.5</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/25/2017 14:49	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/25/2017 14:49	J
Silver	<b>0.95</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/25/2017 14:49	J
Sodium	<b>9.8</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/25/2017 14:49	J
Vanadium	<b>1.7</b>	<b>V</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/25/2017 14:49	J
Zinc	<b>9.7</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/25/2017 14:49	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 19:21	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 19:21	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 12:03	J
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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150004** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-6B** Date Collected: 05/22/17 12:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 21:11	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 21:11	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:11	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 21:11	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 21:11	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:11	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 21:11	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:11	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:11	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:11	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 21:11	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 21:11	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 21:11	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 21:11	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 21:11	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 21:11	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:11	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 21:11	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 21:11	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 21:11	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:11	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:11	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 21:11	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:11	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 21:11	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:11	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:11	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 21:11	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 21:11	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:11	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:11	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 21:11	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:11	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 21:11	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:11	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 21:11	J

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## ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150004**  
Sample ID: **17142-MW-6B**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 12:40

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 21:11	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 21:11	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:11	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 21:11	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:11	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:11	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:11	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:11	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 21:11	J
1,2-Dichloroethane-d4 (S)	108		%	1	70-128		5/27/2017 21:11	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 21:11	
Bromofluorobenzene (S)	103		%	1	86-123		5/27/2017 21:11	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 21:11	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 21:11	J
1,2-Dichloroethane-d4 (S)	104		%	1	77-125		5/27/2017 21:11	
Toluene-d8 (S)	88		%	1	80-121		5/27/2017 21:11	
Bromofluorobenzene (S)	96		%	1	80-129		5/27/2017 21:11	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	29		mg/L	1	5.0	0.50	5/23/2017 17:24	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 17:24	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.25		mg/L	1	0.01	0.01	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	67		mg/L	1	10	10	5/26/2017 11:55	J
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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150005** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-7A** Date Collected: 05/22/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/25/2017 14:53	J
Barium	26		ug/L	1	2.0	0.28	5/25/2017 14:53	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/25/2017 14:53	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/25/2017 14:53	J
Chromium	1.0		ug/L	1	1.0	0.50	5/25/2017 14:53	J
Cobalt	2.8	I	ug/L	1	4.0	0.60	5/25/2017 14:53	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/25/2017 14:53	J
Iron	21000		ug/L	1	200	30	5/25/2017 14:53	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/25/2017 14:53	J
Nickel	2.7	I	ug/L	1	6.5	1.1	5/25/2017 14:53	J
Selenium	6.8	U	ug/L	1	20	6.8	5/25/2017 14:53	J
Silver	0.76	I	ug/L	1	4.0	0.44	5/25/2017 14:53	J
Sodium	20		mg/L	1	0.20	0.16	5/25/2017 14:53	J
Vanadium	1.9	V	ug/L	1	1.5	0.18	5/25/2017 14:53	J
Zinc	2.0	U	ug/L	1	10	2.0	5/25/2017 14:53	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 19:25	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 19:25	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 12:25	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 21:37	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 21:37	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:37	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 21:37	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 21:37	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:37	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 21:37	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150005**  
Sample ID: **17142-MW-7A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 11:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:37	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:37	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:37	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 21:37	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 21:37	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 21:37	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 21:37	J
Acetone	18		ug/L	1	5.0	2.1	5/27/2017 21:37	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 21:37	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:37	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 21:37	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 21:37	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 21:37	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:37	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:37	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 21:37	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:37	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 21:37	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:37	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 21:37	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 21:37	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 21:37	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:37	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:37	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 21:37	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:37	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 21:37	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 21:37	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 21:37	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 21:37	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 21:37	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:37	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 21:37	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 21:37	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 21:37	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 21:37	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 21:37	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 21:37	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/27/2017 21:37	
Toluene-d8 (S)	83		%	1	77-119		5/27/2017 21:37	

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150005** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-7A** Date Collected: 05/22/17 11:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>100</b>		%	1	86-123		5/27/2017 21:37	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/27/2017 21:37	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/27/2017 21:37	J
1,2-Dichloroethane-d4 (S)	<b>104</b>		%	1	77-125		5/27/2017 21:37	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/27/2017 21:37	
Bromofluorobenzene (S)	<b>94</b>		%	1	80-129		5/27/2017 21:37	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>76</b>		mg/L	1	5.0	0.50	5/23/2017 17:42	J
Nitrate	<b>0.15</b>	<b>I</b>	mg/L	1	0.50	0.050	5/23/2017 17:42	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>16</b>		mg/L	20	0.20	0.16	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>150</b>		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705150006** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-7B** Date Collected: 05/22/17 11:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/25/2017 15:13	J
Barium	<b>34</b>		ug/L	1	2.0	0.28	5/25/2017 15:13	J
Beryllium	<b>1.4</b>		ug/L	1	0.30	0.13	5/25/2017 15:13	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/25/2017 15:13	J
Chromium	<b>0.61</b>	<b>I</b>	ug/L	1	1.0	0.50	5/25/2017 15:13	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150006** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-7B** Date Collected: 05/22/17 11:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	5.7		ug/L	1	4.0	0.60	5/25/2017 15:13	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/25/2017 15:13	J
Iron	30000		ug/L	1	200	30	5/25/2017 15:13	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/25/2017 15:13	J
Nickel	7.2		ug/L	1	6.5	1.1	5/25/2017 15:13	J
Selenium	6.8	U	ug/L	1	20	6.8	5/25/2017 15:13	J
Silver	1.4	I	ug/L	1	4.0	0.44	5/25/2017 15:13	J
Sodium	25		mg/L	1	0.20	0.16	5/25/2017 15:13	J
Vanadium	3.5	V	ug/L	1	1.5	0.18	5/25/2017 15:13	J
Zinc	2.0	U	ug/L	1	10	2.0	5/25/2017 15:13	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.066	I	ug/L	1	0.70	0.046	5/30/2017 19:37	J
Thallium	0.089	I	ug/L	1	0.20	0.057	5/30/2017 19:37	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 12:28	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 22:03	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 22:03	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:03	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 22:03	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 22:03	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:03	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 22:03	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:03	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:03	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:03	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 22:03	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 22:03	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 22:03	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 22:03	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 22:03	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 22:03	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150006**  
 Sample ID: **17142-MW-7B**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:03	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 22:03	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 22:03	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 22:03	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:03	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:03	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 22:03	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:03	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 22:03	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:03	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:03	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 22:03	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 22:03	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:03	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:03	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 22:03	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:03	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 22:03	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:03	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 22:03	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 22:03	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 22:03	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:03	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 22:03	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:03	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:03	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:03	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:03	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 22:03	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/27/2017 22:03	
Toluene-d8 (S)	83		%	1	77-119		5/27/2017 22:03	
Bromofluorobenzene (S)	108		%	1	86-123		5/27/2017 22:03	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 22:03	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 22:03	J
1,2-Dichloroethane-d4 (S)	107		%	1	77-125		5/27/2017 22:03	
Toluene-d8 (S)	89		%	1	80-121		5/27/2017 22:03	
Bromofluorobenzene (S)	101		%	1	80-129		5/27/2017 22:03	

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150006** Date Received: 05/23/17 09:00 Matrix: Water  
Sample ID: **17142-MW-7B** Date Collected: 05/22/17 11:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	31		mg/L	1	5.0	0.50	5/23/2017 18:00	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 18:00	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	3.6		mg/L	5	0.05	0.04	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	670		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705150007** Date Received: 05/23/17 09:00 Matrix: Water  
Sample ID: **17142-Trip Blank-2** Date Collected: 05/22/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 22:29	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 22:29	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:29	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 22:29	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 22:29	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:29	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 22:29	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:29	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:29	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:29	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 22:29	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 22:29	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 22:29	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 22:29	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 22:29	J

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150007**  
 Sample ID: **17142-Trip Blank-2**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 22:29	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:29	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 22:29	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 22:29	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 22:29	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:29	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:29	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 22:29	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:29	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 22:29	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:29	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 22:29	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 22:29	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 22:29	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:29	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:29	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 22:29	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:29	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 22:29	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 22:29	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 22:29	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 22:29	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 22:29	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:29	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 22:29	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 22:29	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 22:29	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 22:29	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 22:29	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 22:29	J
1,2-Dichloroethane-d4 (S)	108		%	1	70-128		5/27/2017 22:29	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 22:29	
Bromofluorobenzene (S)	106		%	1	86-123		5/27/2017 22:29	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 22:29	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 22:29	J
1,2-Dichloroethane-d4 (S)	104		%	1	77-125		5/27/2017 22:29	
Toluene-d8 (S)	88		%	1	80-121		5/27/2017 22:29	

Report ID: 488600 - 678264

Page 20 of 31

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### ANALYTICAL RESULTS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705150007**  
Sample ID: **17142-Trip Blank-2**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>99</b>		%	1	80-129		5/27/2017 22:29	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: WCAj/4236 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006

METHOD BLANK: 2362294

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: DGMj/3029 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/25/2017 03:30

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006

METHOD BLANK: 2362329

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.38	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: DGMj/3038 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/26/2017 09:45

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006

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### QUALITY CONTROL DATA

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2364077

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: WCAj/4250 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006

METHOD BLANK: 2364273

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: MSVj/4042 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 05/27/2017 04:41

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006, J1705150007

METHOD BLANK: 2365183

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	106	77-125
Toluene-d8 (S)	%	83	80-121
Bromofluorobenzene (S)	%	112	80-129

QC Batch: MSVj/4052 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 05/27/2017 04:41

Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006, J1705150007

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			

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### QUALITY CONTROL DATA

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U

Report ID: 488600 - 678264

Page 25 of 31

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### QUALITY CONTROL DATA

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit Qualifiers
1,2-Dichloroethane-d4 (S)	%	106	70-128
Toluene-d8 (S)	%	83	77-119
Bromofluorobenzene (S)	%	112	86-123

QC Batch: DGMj/3046 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/30/2017 10:45  
Associated Lab Samples: J1705150001, J1705150002, J1705150003

METHOD BLANK: 2365487

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: DGMj/3048 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/31/2017 09:11  
Associated Lab Samples: J1705150004, J1705150005, J1705150006

METHOD BLANK: 2366540

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: WCAg/5054 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: J1705150001, J1705150002, J1705150003, J1705150004, J1705150005, J1705150006

METHOD BLANK: 2368849

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Ammonia (N)	mg/L	0.01	0.01 U

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## QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

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### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705150001	17142-MW-5A			EPA 300.0	WCAj/4236
J1705150002	17142-MW-5B			EPA 300.0	WCAj/4236
J1705150003	17142-MW-6A			EPA 300.0	WCAj/4236
J1705150004	17142-MW-6B			EPA 300.0	WCAj/4236
J1705150005	17142-MW-7A			EPA 300.0	WCAj/4236
J1705150006	17142-MW-7B			EPA 300.0	WCAj/4236
J1705150001	17142-MW-5A	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150002	17142-MW-5B	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150003	17142-MW-6A	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150004	17142-MW-6B	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150005	17142-MW-7A	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150006	17142-MW-7B	SW-846 3010A	DGMj/3029	SW-846 6010	ICPj/2022
J1705150001	17142-MW-5A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150002	17142-MW-5B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150003	17142-MW-6A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150004	17142-MW-6B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150005	17142-MW-7A	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150006	17142-MW-7B	SW-846 3010A	DGMj/3038	SW-846 6020	ICMj/1551
J1705150001	17142-MW-5A			SM 2540 C	WCAj/4250
J1705150002	17142-MW-5B			SM 2540 C	WCAj/4250
J1705150003	17142-MW-6A			SM 2540 C	WCAj/4250
J1705150004	17142-MW-6B			SM 2540 C	WCAj/4250
J1705150005	17142-MW-7A			SM 2540 C	WCAj/4250
J1705150006	17142-MW-7B			SM 2540 C	WCAj/4250
J1705150001	17142-MW-5A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150002	17142-MW-5B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150003	17142-MW-6A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150004	17142-MW-6B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150005	17142-MW-7A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705150 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705150006	17142-MW-7B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150007	17142-Trip Blank-2	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705150001	17142-MW-5A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150002	17142-MW-5B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150003	17142-MW-6A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150004	17142-MW-6B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150005	17142-MW-7A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150006	17142-MW-7B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150007	17142-Trip Blank-2	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705150001	17142-MW-5A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705150002	17142-MW-5B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705150003	17142-MW-6A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705150004	17142-MW-6B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705150005	17142-MW-7A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705150006	17142-MW-7B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705150001	17142-MW-5A			EPA 350.1	WCAg/5054
J1705150002	17142-MW-5B			EPA 350.1	WCAg/5054
J1705150003	17142-MW-6A			EPA 350.1	WCAg/5054
J1705150004	17142-MW-6B			EPA 350.1	WCAg/5054
J1705150005	17142-MW-7A			EPA 350.1	WCAg/5054
J1705150006	17142-MW-7B			EPA 350.1	WCAg/5054

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# J1705150

1597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE						LABORATORY I.D. NUMBER				
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials	500 mL Plastic	500 mL Plastic	250 mL Plastic							
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED										
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>				App I VOAs+EDB/DBCP	App I Metals+Fe,Hg,Na	C/NO3/TDS	NH3					
FAX:		Project Name and Address:												
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>												
Sampled By: <b>Joe Terry / EPS</b>														
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		<input type="checkbox"/> XADaPT <input type="checkbox"/> EQUIS												
Page <u>1</u> of <u>1</u>														
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION							
			DATE	TIME				HCL	HNO3	Ice	H2SO4			
17142-MW-5A		G	5-22-17	1430	GW	6		X	X	X	X			001
17142-MW-5B				1405										002
17142-MW-6A				1310										003
17142-MW-6B				1240										004
17142-MW-7A				1150										005
17142-MW-7B				1120	GW	6		X	X	X	X			006
17142-Trip Bulk-2		G	5-22-17	0000	DW	2		X						007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celsius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J:9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:			Date	Time	Received by:			Date	Time
1	Joe Terry		5-22-17	1530	Fedex		5-22-17	1530	
2	Fedex		5-23-17	0900	Bjatts		5-23-17	0900	
3									
4									

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





Client: Waste Connections

Project name: J.F.D Landfill

Date/Time Rcvd: 5-23-17 0900

Log-In request number: JT705150

Received by: By

Completed by: By

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4</u>				
Temp taken from	<input checked="" type="checkbox"/> Sample Bottle <input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below:

CHECKLIST				YES	NO	NA
1. Were custody seals on shipping container(s) intact?				/		
2. Were custody papers properly included with samples?				/		
3. Were custody papers properly filled out (ink, signed, match labels)?				/		
4. Did all bottles arrive in good condition (unbroken)?				/		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?				/		
6. Did the sample labels agree with the chain of custody?				/		
7. Were correct bottles used for the tests indicated?				/		
8. Were proper sample preservation techniques indicated on the label?				/		
9. Were samples received within holding times?				/		
10. Were all VOA vials free of the presence of air bubbles?				/		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?						/
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE				/		
13. Was the cooler temperature less than 6°C?				/		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.				/		
15. Was sufficient sample volume provided to perform all tests?				/		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)						/
17. Were all sample containers provided by AEL? (Other than Bacteriological)				/		
18. Were samples accepted into the laboratory?				/		
19. When necessary to split samples into other bottles, is it noted in the comments?				/		

**Comments:** (Note all sample(s) and container (s)) with a "No" checklist response in this comment section)



**Project No.:** J1705150  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The spike recoveries of PCE for the Laboratory Control Sample (LCS) and Duplicate (LCSD) were outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- E. Internal Standard: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---



Advanced Environmental Laboratories, Inc  
6681 Southpoint Pkwy Jacksonville, FL32216  
Payments: P.O. Box 551580 Jacksonville, FL32255-1580

Phone: (904)363-9350  
Fax: (904)363-9354

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, May 23, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Myers', is positioned above the typed name.

Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

Report ID: 488599 - 678250

Page 1 of 30

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### SAMPLE SUMMARY

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705149001	17142-MW-8A	Water	5/22/2017 10:15	5/23/2017 09:00
J1705149002	17142-MW-8B	Water	5/22/2017 09:50	5/23/2017 09:00
J1705149003	17142-MW-9A	Water	5/22/2017 08:35	5/23/2017 09:00
J1705149004	17142-MW-9B	Water	5/22/2017 08:05	5/23/2017 09:00
J1705149005	17142-MW-10A	Water	5/22/2017 07:05	5/23/2017 09:00
J1705149006	17142-MW-10B	Water	5/22/2017 06:25	5/23/2017 09:00
J1705149007	17142-Trip Blank-2	Water	5/22/2017 00:00	5/23/2017 09:00

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## ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149001**  
Sample ID: **17142-MW-8A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 10:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 13:48	J
Barium	39		ug/L	1	2.0	0.28	5/24/2017 13:48	J
Beryllium	0.14	I	ug/L	1	0.30	0.13	5/24/2017 13:48	J
Cadmium	0.40	I	ug/L	1	0.60	0.32	5/24/2017 13:48	J
Chromium	2.1		ug/L	1	1.0	0.50	5/24/2017 13:48	J
Cobalt	3.3	I	ug/L	1	4.0	0.60	5/24/2017 13:48	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:48	J
Iron	19000		ug/L	1	200	30	5/24/2017 13:48	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:48	J
Nickel	2.5	I	ug/L	1	6.5	1.1	5/24/2017 13:48	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:48	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 13:48	J
Sodium	7.5		mg/L	1	0.20	0.16	5/24/2017 13:48	J
Vanadium	3.3	V	ug/L	1	1.5	0.18	5/24/2017 13:48	J
Zinc	2.0	U	ug/L	1	10	2.0	5/24/2017 13:48	J
Analysis Desc: SW846 6020B Analysis,Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.10	I	ug/L	1	0.70	0.046	5/30/2017 16:56	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 16:56	J
Analysis Desc: SW846 7470A Analysis,Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:57	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 14:13	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 14:13	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:13	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 14:13	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 14:13	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:13	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 14:13	J

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## ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149001**  
Sample ID: **17142-MW-8A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 10:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:13	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:13	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:13	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 14:13	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 14:13	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 14:13	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 14:13	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 14:13	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 14:13	J
Benzene	4.1		ug/L	1	1.0	0.16	5/27/2017 14:13	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 14:13	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 14:13	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 14:13	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:13	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:13	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 14:13	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:13	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 14:13	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:13	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:13	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 14:13	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 14:13	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:13	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 14:13	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 14:13	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:13	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 14:13	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:13	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 14:13	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 14:13	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 14:13	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:13	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 14:13	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:13	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 14:13	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:13	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:13	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 14:13	J
1,2-Dichloroethane-d4 (S)	110		%	1	70-128		5/27/2017 14:13	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 14:13	

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149001** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-8A** Date Collected: 05/22/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>108</b>		%	1	86-123		5/27/2017 14:13	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/27/2017 14:13	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/27/2017 14:13	J
1,2-Dichloroethane-d4 (S)	<b>107</b>		%	1	77-125		5/27/2017 14:13	
Toluene-d8 (S)	<b>87</b>		%	1	80-121		5/27/2017 14:13	
Bromofluorobenzene (S)	<b>101</b>		%	1	80-129		5/27/2017 14:13	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>0.91</b>	<b>I</b>	mg/L	1	5.0	0.50	5/23/2017 12:51	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/23/2017 12:51	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>6.3</b>		mg/L	10	0.10	0.08	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>1500</b>		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705149002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-8B** Date Collected: 05/22/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/24/2017 13:52	J
Barium	<b>67</b>		ug/L	1	2.0	0.28	5/24/2017 13:52	J
Beryllium	<b>0.86</b>		ug/L	1	0.30	0.13	5/24/2017 13:52	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/24/2017 13:52	J
Chromium	<b>0.50</b>	<b>U</b>	ug/L	1	1.0	0.50	5/24/2017 13:52	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-8B** Date Collected: 05/22/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	8.3		ug/L	1	4.0	0.60	5/24/2017 13:52	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:52	J
Iron	48000		ug/L	1	200	30	5/24/2017 13:52	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:52	J
Nickel	5.4	I	ug/L	1	6.5	1.1	5/24/2017 13:52	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:52	J
Silver	1.1	I	ug/L	1	4.0	0.44	5/24/2017 13:52	J
Sodium	38		mg/L	1	0.20	0.16	5/24/2017 13:52	J
Vanadium	4.9	V	ug/L	1	1.5	0.18	5/24/2017 13:52	J
Zinc	2.0	U	ug/L	1	10	2.0	5/24/2017 13:52	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.065	I	ug/L	1	0.70	0.046	5/30/2017 17:00	J
Thallium	0.080	I	ug/L	1	0.20	0.057	5/30/2017 17:00	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 16:00	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 14:39	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 14:39	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:39	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 14:39	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 14:39	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:39	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 14:39	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:39	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:39	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:39	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 14:39	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 14:39	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 14:39	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 14:39	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 14:39	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 14:39	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149002**  
 Sample ID: **17142-MW-8B**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 14:39	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 14:39	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 14:39	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 14:39	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:39	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:39	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 14:39	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:39	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 14:39	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:39	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 14:39	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 14:39	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 14:39	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:39	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 14:39	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 14:39	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:39	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 14:39	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 14:39	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 14:39	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 14:39	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 14:39	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:39	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 14:39	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 14:39	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 14:39	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 14:39	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 14:39	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 14:39	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/27/2017 14:39	
Toluene-d8 (S)	83		%	1	77-119		5/27/2017 14:39	
Bromofluorobenzene (S)	106		%	1	86-123		5/27/2017 14:39	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 14:39	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 14:39	J
1,2-Dichloroethane-d4 (S)	104		%	1	77-125		5/27/2017 14:39	
Toluene-d8 (S)	89		%	1	80-121		5/27/2017 14:39	
Bromofluorobenzene (S)	99		%	1	80-129		5/27/2017 14:39	

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149002** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-8B** Date Collected: 05/22/17 09:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	41		mg/L	1	5.0	0.50	5/23/2017 13:10	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 13:10	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.92		mg/L	1	0.01	0.01	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	1100		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705149003** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-9A** Date Collected: 05/22/17 08:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 13:56	J
Barium	9.0		ug/L	1	2.0	0.28	5/24/2017 13:56	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/24/2017 13:56	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/24/2017 13:56	J
Chromium	3.6		ug/L	1	1.0	0.50	5/24/2017 13:56	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/24/2017 13:56	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:56	J
Iron	1200		ug/L	1	200	30	5/24/2017 13:56	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:56	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/24/2017 13:56	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:56	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 13:56	J
Sodium	20		mg/L	1	0.20	0.16	5/24/2017 13:56	J
Vanadium	5.2	V	ug/L	1	1.5	0.18	5/24/2017 13:56	J
Zinc	21		ug/L	1	10	2.0	5/24/2017 13:56	J

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## ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149003**  
Sample ID: **17142-MW-9A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 08:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.047</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 17:04	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 17:04	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 16:03	J

### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/27/2017 15:05	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/27/2017 15:05	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/27/2017 15:05	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/27/2017 15:05	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/27/2017 15:05	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/27/2017 15:05	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/27/2017 15:05	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/27/2017 15:05	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/27/2017 15:05	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/27/2017 15:05	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/27/2017 15:05	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/27/2017 15:05	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/27/2017 15:05	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/27/2017 15:05	J
Acetone	<b>6.6</b>		<b>ug/L</b>	<b>1</b>	5.0	2.1	5/27/2017 15:05	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/27/2017 15:05	J
Benzene	<b>9.4</b>		<b>ug/L</b>	<b>1</b>	1.0	0.16	5/27/2017 15:05	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/27/2017 15:05	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/27/2017 15:05	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/27/2017 15:05	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/27/2017 15:05	J
Carbon Disulfide	<b>0.72</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/27/2017 15:05	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/27/2017 15:05	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/27/2017 15:05	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/27/2017 15:05	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/27/2017 15:05	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/27/2017 15:05	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149003**  
 Sample ID: **17142-MW-9A**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 08:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 15:05	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 15:05	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 15:05	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 15:05	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 15:05	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 15:05	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 15:05	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 15:05	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 15:05	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 15:05	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 15:05	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:05	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 15:05	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 15:05	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 15:05	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:05	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 15:05	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 15:05	J
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		5/27/2017 15:05	
Toluene-d8 (S)	82		%	1	77-119		5/27/2017 15:05	
Bromofluorobenzene (S)	104		%	1	86-123		5/27/2017 15:05	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 15:05	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 15:05	J
1,2-Dichloroethane-d4 (S)	103		%	1	77-125		5/27/2017 15:05	
Toluene-d8 (S)	88		%	1	80-121		5/27/2017 15:05	
Bromofluorobenzene (S)	97		%	1	80-129		5/27/2017 15:05	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	16		mg/L	2	10	1.0	5/23/2017 13:28	J
Nitrate	0.10	U	mg/L	2	1.0	0.10	5/23/2017 13:28	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	3.8		mg/L	5	0.05	0.04	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149003**  
Sample ID: **17142-MW-9A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 08:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>200</b>		<b>mg/L</b>	<b>1</b>	10	10	5/26/2017 11:55	J

Lab ID: **J1705149004**  
Sample ID: **17142-MW-9B**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 08:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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#### METALS

Analysis Desc: SW846 6010B  
Analysis,Water

Preparation Method: SW-846 3010A  
Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/24/2017 14:00	J
Barium	<b>41</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/24/2017 14:00	J
Beryllium	<b>1.1</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/24/2017 14:00	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/24/2017 14:00	J
Chromium	<b>2.0</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/24/2017 14:00	J
Cobalt	<b>3.1</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/24/2017 14:00	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/24/2017 14:00	J
Iron	<b>9400</b>		<b>ug/L</b>	<b>1</b>	200	30	5/24/2017 14:00	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/24/2017 14:00	J
Nickel	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/24/2017 14:00	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/24/2017 14:00	J
Silver	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/24/2017 14:00	J
Sodium	<b>18</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/24/2017 14:00	J
Vanadium	<b>3.6</b>	<b>V</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/24/2017 14:00	J
Zinc	<b>7.0</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/24/2017 14:00	J

Analysis Desc: SW846 6020B  
Analysis,Total

Preparation Method: SW-846 3010A  
Analytical Method: SW-846 6020

Antimony	<b>0.047</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 17:08	J
Thallium	<b>0.069</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 17:08	J

Analysis Desc: SW846 7470A  
Analysis,Water

Preparation Method: SW-846 7470A  
Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 16:06	J
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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149004** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-9B** Date Collected: 05/22/17 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 15:31	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 15:31	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:31	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 15:31	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 15:31	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 15:31	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 15:31	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 15:31	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 15:31	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:31	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 15:31	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 15:31	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 15:31	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 15:31	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 15:31	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 15:31	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 15:31	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 15:31	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 15:31	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 15:31	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 15:31	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 15:31	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 15:31	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 15:31	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 15:31	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 15:31	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 15:31	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 15:31	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 15:31	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 15:31	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 15:31	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 15:31	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 15:31	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 15:31	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 15:31	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 15:31	J

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## ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149004**  
Sample ID: **17142-MW-9B**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 08:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 15:31	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 15:31	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:31	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 15:31	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 15:31	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 15:31	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 15:31	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 15:31	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 15:31	J
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		5/27/2017 15:31	
Toluene-d8 (S)	81		%	1	77-119		5/27/2017 15:31	
Bromofluorobenzene (S)	104		%	1	86-123		5/27/2017 15:31	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 15:31	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 15:31	J
1,2-Dichloroethane-d4 (S)	102		%	1	77-125		5/27/2017 15:31	
Toluene-d8 (S)	87		%	1	80-121		5/27/2017 15:31	
Bromofluorobenzene (S)	97		%	1	80-129		5/27/2017 15:31	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	37		mg/L	1	5.0	0.50	5/23/2017 13:46	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/23/2017 13:46	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.3		mg/L	2	0.02	0.02	6/1/2017 16:44	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	390		mg/L	1	10	10	5/26/2017 11:55	J
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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149005** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-10A** Date Collected: 05/22/17 07:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 14:23	J
Barium	54		ug/L	1	2.0	0.28	5/24/2017 14:23	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/24/2017 14:23	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/24/2017 14:23	J
Chromium	0.94	I	ug/L	1	1.0	0.50	5/24/2017 14:23	J
Cobalt	1.2	I	ug/L	1	4.0	0.60	5/24/2017 14:23	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 14:23	J
Iron	6500		ug/L	1	200	30	5/24/2017 14:23	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 14:23	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/24/2017 14:23	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 14:23	J
Silver	0.65	I	ug/L	1	4.0	0.44	5/24/2017 14:23	J
Sodium	28		mg/L	1	0.20	0.16	5/24/2017 14:23	J
Vanadium	2.6	V	ug/L	1	1.5	0.18	5/24/2017 14:23	J
Zinc	6.8	I	ug/L	1	10	2.0	5/24/2017 14:23	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 17:12	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 17:12	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 16:09	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 18:34	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 18:34	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 18:34	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 18:34	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 18:34	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 18:34	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 18:34	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149005**  
Sample ID: **17142-MW-10A**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 07:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 18:34	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 18:34	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 18:34	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 18:34	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 18:34	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 18:34	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 18:34	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 18:34	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 18:34	J
Benzene	5.2		ug/L	1	1.0	0.16	5/27/2017 18:34	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 18:34	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 18:34	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 18:34	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 18:34	J
Carbon Disulfide	0.70	I	ug/L	1	1.0	0.21	5/27/2017 18:34	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 18:34	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 18:34	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 18:34	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 18:34	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 18:34	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 18:34	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 18:34	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 18:34	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 18:34	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 18:34	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 18:34	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 18:34	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 18:34	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 18:34	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 18:34	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 18:34	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 18:34	J
Xylene (Total)	1.4	I	ug/L	1	2.0	0.53	5/27/2017 18:34	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 18:34	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 18:34	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 18:34	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 18:34	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 18:34	J
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		5/27/2017 18:34	
Toluene-d8 (S)	83		%	1	77-119		5/27/2017 18:34	

Report ID: 488599 - 678250

Page 15 of 30

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149005**  
 Sample ID: **17142-MW-10A**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 07:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>102</b>		%	1	86-123		5/27/2017 18:34	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/27/2017 18:34	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/27/2017 18:34	J
1,2-Dichloroethane-d4 (S)	<b>100</b>		%	1	77-125		5/27/2017 18:34	
Toluene-d8 (S)	<b>88</b>		%	1	80-121		5/27/2017 18:34	
Bromofluorobenzene (S)	<b>95</b>		%	1	80-129		5/27/2017 18:34	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>28</b>		mg/L	1	5.0	0.50	5/23/2017 14:04	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/23/2017 14:04	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>13</b>		mg/L	25	0.25	0.20	6/1/2017 16:44	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>380</b>		mg/L	1	10	10	5/26/2017 11:55	J

Lab ID: **J1705149006**  
 Sample ID: **17142-MW-10B**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 06:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/24/2017 14:27	J
Barium	<b>41</b>		ug/L	1	2.0	0.28	5/24/2017 14:27	J
Beryllium	<b>2.3</b>		ug/L	1	0.30	0.13	5/24/2017 14:27	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/24/2017 14:27	J
Chromium	<b>0.93</b>	<b>I</b>	ug/L	1	1.0	0.50	5/24/2017 14:27	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149006** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-10B** Date Collected: 05/22/17 06:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	9.0		ug/L	1	4.0	0.60	5/24/2017 14:27	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 14:27	J
Iron	13000		ug/L	1	200	30	5/24/2017 14:27	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 14:27	J
Nickel	1.3	I	ug/L	1	6.5	1.1	5/24/2017 14:27	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 14:27	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 14:27	J
Sodium	36		mg/L	1	0.20	0.16	5/24/2017 14:27	J
Vanadium	4.4	V	ug/L	1	1.5	0.18	5/24/2017 14:27	J
Zinc	3.5	I	ug/L	1	10	2.0	5/24/2017 14:27	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 17:16	J
Thallium	0.081	I	ug/L	1	0.20	0.057	5/30/2017 17:16	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 16:12	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 19:00	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/27/2017 19:00	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:00	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 19:00	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/27/2017 19:00	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:00	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/27/2017 19:00	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:00	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:00	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:00	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/27/2017 19:00	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/27/2017 19:00	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/27/2017 19:00	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/27/2017 19:00	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/27/2017 19:00	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 19:00	J

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149006**  
 Sample ID: **17142-MW-10B**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 06:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Benzene	8.1		ug/L	1	1.0	0.16	5/27/2017 19:00	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 19:00	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 19:00	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 19:00	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:00	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:00	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:00	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:00	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:00	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:00	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:00	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:00	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 19:00	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:00	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:00	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 19:00	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:00	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:00	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:00	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 19:00	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 19:00	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 19:00	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:00	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 19:00	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:00	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:00	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:00	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:00	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 19:00	J
1,2-Dichloroethane-d4 (S)	108		%	1	70-128		5/27/2017 19:00	
Toluene-d8 (S)	84		%	1	77-119		5/27/2017 19:00	
Bromofluorobenzene (S)	102		%	1	86-123		5/27/2017 19:00	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 19:00	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 19:00	J
1,2-Dichloroethane-d4 (S)	104		%	1	77-125		5/27/2017 19:00	
Toluene-d8 (S)	90		%	1	80-121		5/27/2017 19:00	
Bromofluorobenzene (S)	96		%	1	80-129		5/27/2017 19:00	

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149006** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-MW-10B** Date Collected: 05/22/17 06:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>WET CHEMISTRY</b>									
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0							
Chloride	<b>39</b>		<b>mg/L</b>	<b>1</b>	5.0	0.50	5/23/2017 14:22	J	
Nitrate	<b>0.050</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	0.50	0.050	5/23/2017 14:22	J	
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1							
Ammonia (N)	<b>9.2</b>		<b>mg/L</b>	<b>20</b>	0.20	0.16	6/1/2017 16:44	G	
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C							
Total Dissolved Solids	<b>900</b>		<b>mg/L</b>	<b>1</b>	10	10	5/26/2017 11:55	J	

Lab ID: **J1705149007** Date Received: 05/23/17 09:00 Matrix: Water  
 Sample ID: **17142-Trip Blank-2** Date Collected: 05/22/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>VOLATILES</b>									
Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B							
		Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/27/2017 19:26	J	
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/27/2017 19:26	J	
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/27/2017 19:26	J	
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/27/2017 19:26	J	
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/27/2017 19:26	J	
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/27/2017 19:26	J	
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/27/2017 19:26	J	
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/27/2017 19:26	J	
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/27/2017 19:26	J	
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/27/2017 19:26	J	
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/27/2017 19:26	J	
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/27/2017 19:26	J	
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/27/2017 19:26	J	
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/27/2017 19:26	J	
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/27/2017 19:26	J	

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149007**  
 Sample ID: **17142-Trip Blank-2**

Date Received: 05/23/17 09:00 Matrix: Water  
 Date Collected: 05/22/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/27/2017 19:26	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:26	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/27/2017 19:26	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/27/2017 19:26	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/27/2017 19:26	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:26	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:26	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:26	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:26	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:26	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:26	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/27/2017 19:26	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/27/2017 19:26	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/27/2017 19:26	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:26	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:26	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/27/2017 19:26	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:26	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/27/2017 19:26	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/27/2017 19:26	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/27/2017 19:26	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/27/2017 19:26	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/27/2017 19:26	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:26	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/27/2017 19:26	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/27/2017 19:26	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/27/2017 19:26	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/27/2017 19:26	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/27/2017 19:26	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/27/2017 19:26	J
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		5/27/2017 19:26	
Toluene-d8 (S)	83		%	1	77-119		5/27/2017 19:26	
Bromofluorobenzene (S)	100		%	1	86-123		5/27/2017 19:26	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/27/2017 19:26	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/27/2017 19:26	J
1,2-Dichloroethane-d4 (S)	102		%	1	77-125		5/27/2017 19:26	
Toluene-d8 (S)	89		%	1	80-121		5/27/2017 19:26	

Report ID: 488599 - 678250

Page 20 of 30

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### ANALYTICAL RESULTS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705149007**  
Sample ID: **17142-Trip Blank-2**

Date Received: 05/23/17 09:00 Matrix: Water  
Date Collected: 05/22/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>94</b>		%	1	80-129		5/27/2017 19:26	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: DGMj/3025 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/24/2017 03:30  
Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

METHOD BLANK: 2361013

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.23	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: DGMj/3027 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/24/2017 09:40  
Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

METHOD BLANK: 2361781

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: WCAj/4236 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

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### QUALITY CONTROL DATA

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362294

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: WCAj/4250 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

METHOD BLANK: 2364273

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: MSVj/4042 Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B Prepared: 05/27/2017 04:41

Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006, J1705149007

METHOD BLANK: 2365183

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	106	77-125
Toluene-d8 (S)	%	83	80-121
Bromofluorobenzene (S)	%	112	80-129

QC Batch: MSVj/4052 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 05/27/2017 04:41

Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006, J1705149007

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			

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### QUALITY CONTROL DATA

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U

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### QUALITY CONTROL DATA

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2365419

Parameter	Units	Blank Result	Reporting Limit Qualifiers
1,2-Dichloroethane-d4 (S)	%	106	70-128
Toluene-d8 (S)	%	83	77-119
Bromofluorobenzene (S)	%	112	86-123

QC Batch: DGMj/3046 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/30/2017 10:45  
Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

METHOD BLANK: 2365487

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: WCAg/5054 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: J1705149001, J1705149002, J1705149003, J1705149004, J1705149005, J1705149006

METHOD BLANK: 2368849

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Ammonia (N)	mg/L	0.01	0.01 U

### QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

#### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705149001	17142-MW-8A	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149002	17142-MW-8B	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149003	17142-MW-9A	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149004	17142-MW-9B	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149005	17142-MW-10A	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149006	17142-MW-10B	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705149001	17142-MW-8A	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149002	17142-MW-8B	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149003	17142-MW-9A	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149004	17142-MW-9B	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149005	17142-MW-10A	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149006	17142-MW-10B	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705149001	17142-MW-8A			EPA 300.0	WCAj/4236
J1705149002	17142-MW-8B			EPA 300.0	WCAj/4236
J1705149003	17142-MW-9A			EPA 300.0	WCAj/4236
J1705149004	17142-MW-9B			EPA 300.0	WCAj/4236
J1705149005	17142-MW-10A			EPA 300.0	WCAj/4236
J1705149006	17142-MW-10B			EPA 300.0	WCAj/4236
J1705149001	17142-MW-8A			SM 2540 C	WCAj/4250
J1705149002	17142-MW-8B			SM 2540 C	WCAj/4250
J1705149003	17142-MW-9A			SM 2540 C	WCAj/4250
J1705149004	17142-MW-9B			SM 2540 C	WCAj/4250
J1705149005	17142-MW-10A			SM 2540 C	WCAj/4250
J1705149006	17142-MW-10B			SM 2540 C	WCAj/4250
J1705149001	17142-MW-8A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149002	17142-MW-8B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149003	17142-MW-9A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149004	17142-MW-9B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149005	17142-MW-10A	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705149 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705149006	17142-MW-10B	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149007	17142-Trip Blank-2	SW-846 5030B	MSVj/4042	SW-846 8260B (SIM)	MSVj/4043
J1705149001	17142-MW-8A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149002	17142-MW-8B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149003	17142-MW-9A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149004	17142-MW-9B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149005	17142-MW-10A	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149006	17142-MW-10B	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149007	17142-Trip Blank-2	SW-846 5030B	MSVj/4052	SW-846 8260B	MSVj/4053
J1705149001	17142-MW-8A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149002	17142-MW-8B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149003	17142-MW-9A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149004	17142-MW-9B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149005	17142-MW-10A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149006	17142-MW-10B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705149001	17142-MW-8A			EPA 350.1	WCAg/5054
J1705149002	17142-MW-8B			EPA 350.1	WCAg/5054
J1705149003	17142-MW-9A			EPA 350.1	WCAg/5054
J1705149004	17142-MW-9B			EPA 350.1	WCAg/5054
J1705149005	17142-MW-10A			EPA 350.1	WCAg/5054
J1705149006	17142-MW-10B			EPA 350.1	WCAg/5054

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- Miramar: 10200 USA Today Way, Miramar, FL 33025 •
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, F.
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813

# J1705149

17.1597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic		LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3		
Tampa, Florida 33619		Project Location:												
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>		PRESERVATION		HCL		HNO3		Ice		H2SO4		
FAX:		Project Name and Address:												
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>		X ADaPT										
Sampled By: <b>Joe Terry / EPS</b>														
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		Special Instructions: <b>Jax Profile: 31172</b>		NO. COUNT										
Page <u>1</u> of <u>1</u>														<input type="checkbox"/> EquiS
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX									
			DATE	TIME		HCL	HNO3	Ice	H2SO4					
17142-MW-8A		G	5-22-17	1015	GW	6	X	X	X	X			001	
17142-MW-8B				0950									002	
17142-MW-9A				0835									003	
17142-MW-9B				0805									004	
17142-MW-10A				0705									005	
17142-MW-10B				0625	GW	6	X	X	X	X			006	
17142-Trip Blank-2		G	5-22-17	0000	DIST H2O	2	X						007	

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Joe Terry</i>	5-22-17	1530	<i>Fedex</i>	5-22-17	1520
<i>Fedex</i>	5-23-17	0900	<i>Byfatts</i>	5-23-17	0900

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_



Client: Waste Connections

Project name: J.F.D. Landfill

Date/Time Rcvd: 5-23-17 0900

Log-In request number: JT705149

Received by: Bj

Completed by: Bj

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4</u>				
Temp taken from	<input type="checkbox"/> Sample Bottle <input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST		YES	NO	NA
1. Were custody seals on shipping container(s) intact?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were custody papers properly included with samples?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were custody papers properly filled out (ink, signed, match labels)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did all bottles arrive in good condition (unbroken)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Did the sample labels agree with the chain of custody?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were correct bottles used for the tests indicated?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were proper sample preservation techniques indicated on the label?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were samples received within holding times?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were all VOA vials free of the presence of air bubbles?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was the cooler temperature less than 6°C?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Was sufficient sample volume provided to perform all tests?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Were all sample containers provided by AEL? (Other than Bacteriological)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Were samples accepted into the laboratory?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. When necessary to split samples into other bottles, is it noted in the comments?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:** (Note all sample(s) and container (s)) with a "No" checklist response in this comment section)





**Project No.:** J1705149  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The spike recoveries of PCE for the Laboratory Control Sample (LCS) and Duplicate (LCSD) were outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- E. Internal Standard: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---



June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, May 19, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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### SAMPLE SUMMARY

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705078001	17138-MW-11A	Water	5/18/2017 13:50	5/19/2017 08:30
J1705078002	17138-MW-11B	Water	5/18/2017 13:20	5/19/2017 08:30
J1705078003	17138-MW-12A	Water	5/18/2017 12:20	5/19/2017 08:30
J1705078004	17138-MW-12B	Water	5/18/2017 11:45	5/19/2017 08:30
J1705078005	17138-Dup	Water	5/18/2017 12:00	5/19/2017 08:30
J1705078006	17138-TripBlank-2	Water	5/18/2017 00:00	5/19/2017 08:30

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078001** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-11A** Date Collected: 05/18/17 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 12:46	J
Barium	19		ug/L	1	2.0	0.28	5/24/2017 12:46	J
Beryllium	0.25	I	ug/L	1	0.30	0.13	5/24/2017 12:46	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/24/2017 12:46	J
Chromium	5.6		ug/L	1	1.0	0.50	5/24/2017 12:46	J
Cobalt	0.94	I	ug/L	1	4.0	0.60	5/24/2017 12:46	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 12:46	J
Iron	13000		ug/L	1	200	30	5/24/2017 12:46	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 12:46	J
Nickel	2.8	I	ug/L	1	6.5	1.1	5/24/2017 12:46	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 12:46	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 12:46	J
Sodium	15		mg/L	1	0.20	0.16	5/24/2017 12:46	J
Vanadium	5.6	V	ug/L	1	1.5	0.18	5/24/2017 12:46	J
Zinc	2.0	U	ug/L	1	10	2.0	5/24/2017 12:46	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.064	I	ug/L	1	0.70	0.046	5/30/2017 15:41	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 15:41	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:35	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 08:37	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 08:37	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:37	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 08:37	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 08:37	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:37	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 08:37	J

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## ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078001**  
Sample ID: **17138-MW-11A**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 13:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:37	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 08:37	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:37	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 08:37	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 08:37	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 08:37	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 08:37	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 08:37	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 08:37	J
Benzene	1.5		ug/L	1	1.0	0.16	5/25/2017 08:37	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 08:37	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 08:37	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 08:37	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:37	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:37	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 08:37	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:37	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 08:37	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:37	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:37	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 08:37	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 08:37	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:37	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 08:37	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 08:37	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 08:37	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 08:37	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 08:37	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 08:37	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 08:37	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 08:37	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:37	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 08:37	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:37	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 08:37	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:37	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:37	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 08:37	J
1,2-Dichloroethane-d4 (S)	113		%	1	70-128		5/25/2017 08:37	
Toluene-d8 (S)	86		%	1	77-119		5/25/2017 08:37	

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078001** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-11A** Date Collected: 05/18/17 13:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>104</b>		%	1	86-123		5/25/2017 08:37	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/25/2017 08:37	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/25/2017 08:37	J
1,2-Dichloroethane-d4 (S)	<b>110</b>		%	1	77-125		5/25/2017 08:37	
Toluene-d8 (S)	<b>92</b>		%	1	80-121		5/25/2017 08:37	
Bromofluorobenzene (S)	<b>98</b>		%	1	80-129		5/25/2017 08:37	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>14</b>		mg/L	1	5.0	0.50	5/19/2017 17:58	J
Nitrate	<b>0.23</b>	<b>I</b>	mg/L	1	0.50	0.050	5/19/2017 17:58	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>3.3</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>150</b>		mg/L	1	10	10	5/24/2017 14:51	J

Lab ID: **J1705078002** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-11B** Date Collected: 05/18/17 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/24/2017 13:05	J
Barium	<b>23</b>		ug/L	1	2.0	0.28	5/24/2017 13:05	J
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	1	0.30	0.13	5/24/2017 13:05	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/24/2017 13:05	J
Chromium	<b>2.5</b>		ug/L	1	1.0	0.50	5/24/2017 13:05	J

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078002** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-11B** Date Collected: 05/18/17 13:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/24/2017 13:05	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:05	J
Iron	360		ug/L	1	200	30	5/24/2017 13:05	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:05	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/24/2017 13:05	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:05	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 13:05	J
Sodium	11		mg/L	1	0.20	0.16	5/24/2017 13:05	J
Vanadium	3.6	V	ug/L	1	1.5	0.18	5/24/2017 13:05	J
Zinc	12		ug/L	1	10	2.0	5/24/2017 13:05	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.048	I	ug/L	1	0.70	0.046	5/30/2017 15:53	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 15:53	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:38	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 09:11	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 09:11	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:11	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 09:11	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 09:11	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 09:11	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 09:11	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 09:11	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 09:11	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:11	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 09:11	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 09:11	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 09:11	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 09:11	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 09:11	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 09:11	J

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## ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078002**  
Sample ID: **17138-MW-11B**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 13:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 09:11	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 09:11	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 09:11	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 09:11	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 09:11	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 09:11	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 09:11	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 09:11	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 09:11	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 09:11	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 09:11	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 09:11	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 09:11	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 09:11	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 09:11	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 09:11	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 09:11	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 09:11	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 09:11	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 09:11	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 09:11	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 09:11	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:11	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 09:11	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 09:11	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 09:11	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:11	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 09:11	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 09:11	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/25/2017 09:11	
Toluene-d8 (S)	85		%	1	77-119		5/25/2017 09:11	
Bromofluorobenzene (S)	109		%	1	86-123		5/25/2017 09:11	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 09:11	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 09:11	J
1,2-Dichloroethane-d4 (S)	107		%	1	77-125		5/25/2017 09:11	
Toluene-d8 (S)	91		%	1	80-121		5/25/2017 09:11	
Bromofluorobenzene (S)	102		%	1	80-129		5/25/2017 09:11	

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078002** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-11B** Date Collected: 05/18/17 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	11		mg/L	1	5.0	0.50	5/19/2017 18:16	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/19/2017 18:16	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.03		mg/L	1	0.01	0.01	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	60		mg/L	1	10	10	5/24/2017 14:51	J

Lab ID: **J1705078003** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-12A** Date Collected: 05/18/17 12:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 13:24	J
Barium	21		ug/L	1	2.0	0.28	5/24/2017 13:24	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/24/2017 13:24	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/24/2017 13:24	J
Chromium	1.9		ug/L	1	1.0	0.50	5/24/2017 13:24	J
Cobalt	0.82	I	ug/L	1	4.0	0.60	5/24/2017 13:24	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:24	J
Iron	28000		ug/L	1	200	30	5/24/2017 13:24	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:24	J
Nickel	2.0	I	ug/L	1	6.5	1.1	5/24/2017 13:24	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:24	J
Silver	0.55	I	ug/L	1	4.0	0.44	5/24/2017 13:24	J
Sodium	26		mg/L	1	0.20	0.16	5/24/2017 13:24	J
Vanadium	4.9	V	ug/L	1	1.5	0.18	5/24/2017 13:24	J
Zinc	2.0	U	ug/L	1	10	2.0	5/24/2017 13:24	J

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078003** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12A** Date Collected: 05/18/17 12:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.056</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 15:57	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 15:57	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 15:41	J

#### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/25/2017 09:42	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 09:42	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 09:42	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 09:42	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/25/2017 09:42	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 09:42	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 09:42	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 09:42	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/25/2017 09:42	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 09:42	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 09:42	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/25/2017 09:42	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/25/2017 09:42	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/25/2017 09:42	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/25/2017 09:42	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/25/2017 09:42	J
Benzene	<b>6.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/25/2017 09:42	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/25/2017 09:42	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/25/2017 09:42	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/25/2017 09:42	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/25/2017 09:42	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 09:42	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/25/2017 09:42	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 09:42	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/25/2017 09:42	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 09:42	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 09:42	J

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078003** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12A** Date Collected: 05/18/17 12:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 09:42	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 09:42	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 09:42	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 09:42	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 09:42	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 09:42	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 09:42	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 09:42	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 09:42	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 09:42	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 09:42	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:42	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 09:42	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 09:42	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 09:42	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 09:42	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 09:42	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 09:42	J
1,2-Dichloroethane-d4 (S)	112		%	1	70-128		5/25/2017 09:42	
Toluene-d8 (S)	84		%	1	77-119		5/25/2017 09:42	
Bromofluorobenzene (S)	108		%	1	86-123		5/25/2017 09:42	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 09:42	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 09:42	J
1,2-Dichloroethane-d4 (S)	109		%	1	77-125		5/25/2017 09:42	
Toluene-d8 (S)	90		%	1	80-121		5/25/2017 09:42	
Bromofluorobenzene (S)	101		%	1	80-129		5/25/2017 09:42	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	62		mg/L	1	5.0	0.50	5/19/2017 18:35	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/19/2017 18:35	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	1.9		mg/L	5	0.05	0.04	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078003** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12A** Date Collected: 05/18/17 12:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>310</b>		<b>mg/L</b>	<b>1</b>	10	10	5/24/2017 14:51	J

Lab ID: **J1705078004** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12B** Date Collected: 05/18/17 11:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
 Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/24/2017 13:28	J
Barium	<b>21</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/24/2017 13:28	J
Beryllium	<b>0.13</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.30	0.13	5/24/2017 13:28	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/24/2017 13:28	J
Chromium	<b>1.0</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/24/2017 13:28	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/24/2017 13:28	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/24/2017 13:28	J
Iron	<b>730</b>		<b>ug/L</b>	<b>1</b>	200	30	5/24/2017 13:28	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/24/2017 13:28	J
Nickel	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/24/2017 13:28	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/24/2017 13:28	J
Silver	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/24/2017 13:28	J
Sodium	<b>7.6</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/24/2017 13:28	J
Vanadium	<b>1.4</b>	<b>I,V</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/24/2017 13:28	J
Zinc	<b>11</b>		<b>ug/L</b>	<b>1</b>	10	2.0	5/24/2017 13:28	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 16:01	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 16:01	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 15:50	J
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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078004** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12B** Date Collected: 05/18/17 11:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 10:12	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 10:12	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:12	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 10:12	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 10:12	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:12	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 10:12	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:12	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:12	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:12	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 10:12	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 10:12	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 10:12	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 10:12	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 10:12	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 10:12	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 10:12	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 10:12	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 10:12	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 10:12	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:12	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:12	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 10:12	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:12	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 10:12	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:12	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:12	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 10:12	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 10:12	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:12	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 10:12	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 10:12	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:12	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 10:12	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:12	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 10:12	J

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078004** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-12B** Date Collected: 05/18/17 11:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 10:12	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 10:12	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:12	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 10:12	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:12	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 10:12	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:12	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:12	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 10:12	J
1,2-Dichloroethane-d4 (S)	112		%	1	70-128		5/25/2017 10:12	
Toluene-d8 (S)	84		%	1	77-119		5/25/2017 10:12	
Bromofluorobenzene (S)	104		%	1	86-123		5/25/2017 10:12	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 10:12	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 10:12	J
1,2-Dichloroethane-d4 (S)	109		%	1	77-125		5/25/2017 10:12	
Toluene-d8 (S)	90		%	1	80-121		5/25/2017 10:12	
Bromofluorobenzene (S)	97		%	1	80-129		5/25/2017 10:12	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	15		mg/L	1	5.0	0.50	5/19/2017 18:53	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/19/2017 18:53	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	0.09		mg/L	1	0.01	0.01	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	60		mg/L	1	10	10	5/24/2017 14:51	J
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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078005** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-Dup** Date Collected: 05/18/17 12:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/24/2017 13:32	J
Barium	120		ug/L	1	2.0	0.28	5/24/2017 13:32	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/24/2017 13:32	J
Cadmium	0.88		ug/L	1	0.60	0.32	5/24/2017 13:32	J
Chromium	4.1		ug/L	1	1.0	0.50	5/24/2017 13:32	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/24/2017 13:32	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/24/2017 13:32	J
Iron	2100		ug/L	1	200	30	5/24/2017 13:32	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/24/2017 13:32	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/24/2017 13:32	J
Selenium	6.8	U	ug/L	1	20	6.8	5/24/2017 13:32	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/24/2017 13:32	J
Sodium	160		mg/L	1	0.20	0.16	5/24/2017 13:32	J
Vanadium	10	V	ug/L	1	1.5	0.18	5/24/2017 13:32	J
Zinc	2.0	U	ug/L	1	10	2.0	5/24/2017 13:32	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.59	I	ug/L	1	0.70	0.046	5/30/2017 16:05	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 16:05	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:53	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 10:42	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 10:42	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:42	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 10:42	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 10:42	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:42	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 10:42	J

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## ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078005**  
Sample ID: **17138-Dup**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 12:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:42	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:42	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:42	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 10:42	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 10:42	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 10:42	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 10:42	J
Acetone	6.0		ug/L	1	5.0	2.1	5/25/2017 10:42	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 10:42	J
Benzene	2.6		ug/L	1	1.0	0.16	5/25/2017 10:42	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 10:42	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 10:42	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 10:42	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:42	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:42	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 10:42	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:42	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 10:42	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:42	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 10:42	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 10:42	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 10:42	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:42	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 10:42	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 10:42	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:42	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 10:42	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 10:42	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 10:42	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 10:42	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 10:42	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:42	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 10:42	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 10:42	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 10:42	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 10:42	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 10:42	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 10:42	J
1,2-Dichloroethane-d4 (S)	118		%	1	70-128		5/25/2017 10:42	
Toluene-d8 (S)	84		%	1	77-119		5/25/2017 10:42	

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078005**

Date Received: 05/19/17 08:30 Matrix: Water

Sample ID: **17138-Dup**

Date Collected: 05/18/17 12:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>104</b>		%	1	86-123		5/25/2017 10:42	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/25/2017 10:42	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/25/2017 10:42	J
1,2-Dichloroethane-d4 (S)	<b>114</b>		%	1	77-125		5/25/2017 10:42	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/25/2017 10:42	
Bromofluorobenzene (S)	<b>97</b>		%	1	80-129		5/25/2017 10:42	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	<b>350</b>		mg/L	5	25	2.5	5/19/2017 19:11	J
Nitrate	<b>0.52</b>	<b>I</b>	mg/L	5	2.5	0.25	5/19/2017 19:11	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	<b>4.8</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	<b>1200</b>		mg/L	1	10	10	5/24/2017 14:51	J
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Lab ID: **J1705078006**

Date Received: 05/19/17 08:30 Matrix: Water

Sample ID: **17138-TripBlank-2**

Date Collected: 05/18/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	ug/L	1	1.0	0.26	5/25/2017 11:13	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/25/2017 11:13	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/25/2017 11:13	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/25/2017 11:13	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	ug/L	1	1.0	0.14	5/25/2017 11:13	J

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## ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078006**  
Sample ID: **17138-TripBlank-2**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 11:13	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 11:13	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 11:13	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 11:13	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 11:13	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 11:13	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 11:13	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 11:13	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 11:13	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 11:13	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 11:13	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 11:13	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 11:13	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 11:13	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 11:13	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 11:13	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 11:13	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 11:13	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 11:13	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 11:13	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 11:13	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 11:13	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 11:13	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 11:13	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 11:13	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 11:13	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 11:13	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 11:13	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 11:13	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 11:13	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 11:13	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 11:13	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 11:13	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 11:13	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 11:13	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 11:13	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 11:13	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 11:13	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 11:13	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 11:13	J

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### ANALYTICAL RESULTS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705078006** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-TripBlank-2** Date Collected: 05/18/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	<b>109</b>		%	1	70-128		5/25/2017 11:13	
Toluene-d8 (S)	<b>84</b>		%	1	77-119		5/25/2017 11:13	
Bromofluorobenzene (S)	<b>105</b>		%	1	86-123		5/25/2017 11:13	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/25/2017 11:13	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/25/2017 11:13	J
1,2-Dichloroethane-d4 (S)	<b>106</b>		%	1	77-125		5/25/2017 11:13	
Toluene-d8 (S)	<b>90</b>		%	1	80-121		5/25/2017 11:13	
Bromofluorobenzene (S)	<b>99</b>		%	1	80-129		5/25/2017 11:13	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: DGMJ/3025 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/24/2017 03:30  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

METHOD BLANK: 2361013

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.23	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: WCAg/4981 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

METHOD BLANK: 2361687

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Ammonia (N)	mg/L	0.01	0.01 U

QC Batch: DGMJ/3027 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/24/2017 09:40  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

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### QUALITY CONTROL DATA

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2361781

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: WCAj/4232 Analysis Method: SM 2540 C  
QC Batch Method: SM 2540 C Prepared:  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

METHOD BLANK: 2362171

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: WCAj/4237 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

METHOD BLANK: 2362325

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: MSVj/4024 Analysis Method: SW-846 8260B  
QC Batch Method: SW-846 5030B Prepared: 05/24/2017 13:52  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005, J1705078006

METHOD BLANK: 2362861

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Chloromethane	ug/L	0.21	0.21 U
Vinyl Chloride	ug/L	0.20	0.20 U
Bromomethane	ug/L	0.24	0.24 U

Report ID: 488129 - 666540

Page 21 of 27

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### QUALITY CONTROL DATA

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362861

Parameter	Units	Blank Result	Reporting	
			Limit	Qualifiers
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U
1,2-Dichloroethane-d4 (S)	%	113	70-128	
Toluene-d8 (S)	%	83	77-119	
Bromofluorobenzene (S)	%	110	86-123	

Report ID: 488129 - 666540

Page 22 of 27

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### QUALITY CONTROL DATA

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362861

QC Batch: MSVj/4026 Analysis Method: SW-846 8260B (SIM)  
QC Batch Method: SW-846 5030B Prepared: 05/24/2017 13:52  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005, J1705078006

METHOD BLANK: 2362869

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	105	77-125
Toluene-d8 (S)	%	92	80-121
Bromofluorobenzene (S)	%	101	80-129

QC Batch: DGMj/3046 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/30/2017 10:45  
Associated Lab Samples: J1705078001, J1705078002, J1705078003, J1705078004, J1705078005

METHOD BLANK: 2365487

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

### QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

#### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705078001	17138-MW-11A	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705078002	17138-MW-11B	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705078003	17138-MW-12A	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705078004	17138-MW-12B	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705078005	17138-Dup	SW-846 3010A	DGMj/3025	SW-846 6010	ICPj/2020
J1705078001	17138-MW-11A			EPA 350.1	WCAg/4981
J1705078002	17138-MW-11B			EPA 350.1	WCAg/4981
J1705078003	17138-MW-12A			EPA 350.1	WCAg/4981
J1705078004	17138-MW-12B			EPA 350.1	WCAg/4981
J1705078005	17138-Dup			EPA 350.1	WCAg/4981
J1705078001	17138-MW-11A	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705078002	17138-MW-11B	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705078003	17138-MW-12A	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705078004	17138-MW-12B	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705078005	17138-Dup	SW-846 3010A	DGMj/3027	SW-846 6020	ICMj/1549
J1705078001	17138-MW-11A			SM 2540 C	WCAj/4232
J1705078002	17138-MW-11B			SM 2540 C	WCAj/4232
J1705078003	17138-MW-12A			SM 2540 C	WCAj/4232
J1705078004	17138-MW-12B			SM 2540 C	WCAj/4232
J1705078005	17138-Dup			SM 2540 C	WCAj/4232
J1705078001	17138-MW-11A			EPA 300.0	WCAj/4237
J1705078002	17138-MW-11B			EPA 300.0	WCAj/4237
J1705078003	17138-MW-12A			EPA 300.0	WCAj/4237
J1705078004	17138-MW-12B			EPA 300.0	WCAj/4237
J1705078005	17138-Dup			EPA 300.0	WCAj/4237
J1705078001	17138-MW-11A	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705078002	17138-MW-11B	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705078003	17138-MW-12A	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705078 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705078004	17138-MW-12B	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705078005	17138-Dup	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705078006	17138-TripBlank-2	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705078001	17138-MW-11A	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078002	17138-MW-11B	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078003	17138-MW-12A	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078004	17138-MW-12B	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078005	17138-Dup	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078006	17138-TripBlank-2	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705078001	17138-MW-11A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705078002	17138-MW-11B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705078003	17138-MW-12A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705078004	17138-MW-12B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705078005	17138-Dup	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455

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- Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.731.1111
- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.889.2222
- Tallahassee: 1286 Cedar Center Drive, Tallahassee, FL 32301 • 904.437.1111
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9610

# J1705078

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE																LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic										
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3								
Phone: <b>813-388-1026</b>		FDEP Facility No: <b>89544</b>																		
FAX:		Project Name and Address:																		
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>																		
Sampled By: <b>Joe Terry / EPS</b>				<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS																
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH																				
Page <u>1</u> of <u>1</u>																				

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4											
			DATE	TIME																		
17138-MW-11A		G	5-18-17	1350	GW	6		X	X	X	X											001
17138-MW-11B				1320		6																002
17138-MW-12A				1220		6																003
17138-MW-12B				1145		6																004
17138-Dup		↓		1200	GW	6		↓	X	X	X											005
17138-Trip Blank-2		G	5-18-17	0000	DI H <sub>2</sub> O	2		X														006

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J-9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:		Date	Time	Received by:		Date	Time
Joe Terry		5-18-17	1500	Fedex			
Fedex		5-19-17	8:30	Bull Ouf		5-19-17	8:30

**FOR DRINKING WATER USE:**  
 (When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





Client: Waste Connections

Project name: J.E.D Landfill

Date/Time Rcvd: 5-19-17 8:30

Log-In request number: J1765078

Received by: BA

Completed by: BA

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4°C</u>				
Temp taken from	<input checked="" type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?	/		
2. Were custody papers properly included with samples?	/		
3. Were custody papers properly filled out (ink, signed, match labels)?	/		
4. Did all bottles arrive in good condition (unbroken)?	/		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	/		
6. Did the sample labels agree with the chain of custody?	/		
7. Were correct bottles used for the tests indicated?	/		
8. Were proper sample preservation techniques indicated on the label?	/		
9. Were samples received within holding times?	/		
10. Were all VOA vials free of the presence of air bubbles?	/		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			/
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	/		
13. Was the cooler temperature less than 6°C?	/		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	/		
15. Was sufficient sample volume provided to perform all tests?	/		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			/
17. Were all sample containers provided by AEL? (Other than Bacteriological)	/		
18. Were samples accepted into the laboratory?	/		
19. When necessary to split samples into other bottles, is it noted in the comments?	/		

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)





**Project No.:** J1705078  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The spike recovery of PCE for the Laboratory Control Sample Duplicate(LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- E. Internal Standard: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---



**Project No.:** J1705078  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Duplicates:
- D. Spikes: The upper control criterion was exceeded for the following analyte in the matrix spike for analytical batch 4237: Nitrate. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.
- E. Serial Dilution:
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, May 19, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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### SAMPLE SUMMARY

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705077001	17138-MW-13A	Water	5/18/2017 10:35	5/19/2017 08:30
J1705077002	17138-MW-13B	Water	5/18/2017 10:15	5/19/2017 08:30
J1705077003	17138-MW-16AR	Water	5/18/2017 09:00	5/19/2017 08:30
J1705077004	17138-MW-16BR	Water	5/18/2017 08:30	5/19/2017 08:30
J1705077005	17138-MW-17AR	Water	5/18/2017 07:25	5/19/2017 08:30
J1705077006	17138-MW-17BR	Water	5/18/2017 06:55	5/19/2017 08:30
J1705077007	17138-TripBlank-1	Water	5/18/2017 00:00	5/19/2017 08:30

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077001** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-13A** Date Collected: 05/18/17 10:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 17:24	J
Barium	57		ug/L	1	2.0	0.28	5/23/2017 17:24	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/23/2017 17:24	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/23/2017 17:24	J
Chromium	2.1		ug/L	1	1.0	0.50	5/23/2017 17:24	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 17:24	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 17:24	J
Iron	4800		ug/L	1	200	30	5/23/2017 17:24	J
Lead	4.5	I	ug/L	1	7.0	1.3	5/23/2017 17:24	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 17:24	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 17:24	J
Silver	1.0	I	ug/L	1	4.0	0.44	5/23/2017 17:24	J
Sodium	58		mg/L	1	0.20	0.16	5/23/2017 17:24	J
Vanadium	6.6	V	ug/L	1	1.5	0.18	5/23/2017 17:24	J
Zinc	4.7	I	ug/L	1	10	2.0	5/23/2017 17:24	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 22:10	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 22:10	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 14:59	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 01:10	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 01:10	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:10	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 01:10	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 01:10	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:10	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 01:10	J

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077001**  
Sample ID: **17138-MW-13A**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 10:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:10	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:10	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:10	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 01:10	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 01:10	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 01:10	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 01:10	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 01:10	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 01:10	J
Benzene	3.2		ug/L	1	1.0	0.16	5/25/2017 01:10	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 01:10	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 01:10	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 01:10	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:10	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:10	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 01:10	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:10	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 01:10	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:10	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:10	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 01:10	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 01:10	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:10	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 01:10	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 01:10	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:10	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 01:10	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:10	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 01:10	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 01:10	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 01:10	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:10	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 01:10	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:10	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 01:10	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:10	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:10	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 01:10	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/25/2017 01:10	
Toluene-d8 (S)	85		%	1	77-119		5/25/2017 01:10	

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077001** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-13A** Date Collected: 05/18/17 10:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>107</b>		%	1	86-123		5/25/2017 01:10	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/25/2017 01:10	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/25/2017 01:10	J
1,2-Dichloroethane-d4 (S)	<b>107</b>		%	1	77-125		5/25/2017 01:10	
Toluene-d8 (S)	<b>90</b>		%	1	80-121		5/25/2017 01:10	
Bromofluorobenzene (S)	<b>100</b>		%	1	80-129		5/25/2017 01:10	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>120</b>	<b>J4</b>	mg/L	1	5.0	0.50	5/19/2017 15:11	J
Nitrate	<b>0.050</b>	<b>U,J4</b>	mg/L	1	0.50	0.050	5/19/2017 15:11	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>1.7</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>370</b>		mg/L	1	10	10	5/24/2017 14:51	J

Lab ID: **J1705077002** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-13B** Date Collected: 05/18/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/23/2017 17:28	J
Barium	<b>15</b>		ug/L	1	2.0	0.28	5/23/2017 17:28	J
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	1	0.30	0.13	5/23/2017 17:28	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/23/2017 17:28	J
Chromium	<b>0.79</b>	<b>I</b>	ug/L	1	1.0	0.50	5/23/2017 17:28	J

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077002** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-13B** Date Collected: 05/18/17 10:15

Sample Description: \_\_\_\_\_ Location: \_\_\_\_\_

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 17:28	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 17:28	J
Iron	1100		ug/L	1	200	30	5/23/2017 17:28	J
Lead	6.9	I	ug/L	1	7.0	1.3	5/23/2017 17:28	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 17:28	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 17:28	J
Silver	0.88	I	ug/L	1	4.0	0.44	5/23/2017 17:28	J
Sodium	10		mg/L	1	0.20	0.16	5/23/2017 17:28	J
Vanadium	0.94	I,V	ug/L	1	1.5	0.18	5/23/2017 17:28	J
Zinc	7.1	I	ug/L	1	10	2.0	5/23/2017 17:28	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 22:14	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 22:14	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:20	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 01:41	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 01:41	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:41	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 01:41	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 01:41	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:41	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 01:41	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:41	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:41	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:41	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 01:41	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 01:41	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 01:41	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 01:41	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 01:41	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 01:41	J

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077002**  
 Sample ID: **17138-MW-13B**

Date Received: 05/19/17 08:30 Matrix: Water  
 Date Collected: 05/18/17 10:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 01:41	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 01:41	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 01:41	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 01:41	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:41	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:41	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 01:41	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:41	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 01:41	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:41	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 01:41	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 01:41	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 01:41	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:41	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 01:41	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 01:41	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:41	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 01:41	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 01:41	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 01:41	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 01:41	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 01:41	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:41	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 01:41	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 01:41	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 01:41	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 01:41	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 01:41	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 01:41	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/25/2017 01:41	
Toluene-d8 (S)	83		%	1	77-119		5/25/2017 01:41	
Bromofluorobenzene (S)	109		%	1	86-123		5/25/2017 01:41	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 01:41	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 01:41	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/25/2017 01:41	
Toluene-d8 (S)	89		%	1	80-121		5/25/2017 01:41	
Bromofluorobenzene (S)	102		%	1	80-129		5/25/2017 01:41	

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077002** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-13B** Date Collected: 05/18/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	27		mg/L	1	5.0	0.50	5/19/2017 15:47	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/19/2017 15:47	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.12		mg/L	1	0.01	0.01	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	74		mg/L	1	10	10	5/24/2017 14:51	J

Lab ID: **J1705077003** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-16AR** Date Collected: 05/18/17 09:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 17:31	J
Barium	120		ug/L	1	2.0	0.28	5/23/2017 17:31	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/23/2017 17:31	J
Cadmium	0.68		ug/L	1	0.60	0.32	5/23/2017 17:31	J
Chromium	3.7		ug/L	1	1.0	0.50	5/23/2017 17:31	J
Cobalt	0.63	I	ug/L	1	4.0	0.60	5/23/2017 17:31	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 17:31	J
Iron	1900		ug/L	1	200	30	5/23/2017 17:31	J
Lead	3.6	I	ug/L	1	7.0	1.3	5/23/2017 17:31	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 17:31	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 17:31	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/23/2017 17:31	J
Sodium	140		mg/L	1	0.20	0.16	5/23/2017 17:31	J
Vanadium	11	V	ug/L	1	1.5	0.18	5/23/2017 17:31	J
Zinc	5.6	I	ug/L	1	10	2.0	5/23/2017 17:31	J

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077003** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-16AR** Date Collected: 05/18/17 09:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.65</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 22:26	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 22:26	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 15:23	J

### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/25/2017 02:11	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 02:11	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 02:11	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 02:11	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/25/2017 02:11	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 02:11	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 02:11	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 02:11	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/25/2017 02:11	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 02:11	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 02:11	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/25/2017 02:11	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/25/2017 02:11	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/25/2017 02:11	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/25/2017 02:11	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/25/2017 02:11	J
Benzene	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/25/2017 02:11	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/25/2017 02:11	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/25/2017 02:11	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/25/2017 02:11	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/25/2017 02:11	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 02:11	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/25/2017 02:11	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 02:11	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/25/2017 02:11	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 02:11	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/25/2017 02:11	J

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077003**  
Sample ID: **17138-MW-16AR**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 09:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 02:11	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 02:11	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 02:11	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 02:11	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 02:11	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 02:11	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 02:11	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 02:11	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 02:11	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 02:11	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 02:11	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 02:11	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 02:11	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 02:11	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 02:11	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 02:11	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 02:11	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 02:11	J
1,2-Dichloroethane-d4 (S)	114		%	1	70-128		5/25/2017 02:11	
Toluene-d8 (S)	82		%	1	77-119		5/25/2017 02:11	
Bromofluorobenzene (S)	108		%	1	86-123		5/25/2017 02:11	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 02:11	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 02:11	J
1,2-Dichloroethane-d4 (S)	110		%	1	77-125		5/25/2017 02:11	
Toluene-d8 (S)	88		%	1	80-121		5/25/2017 02:11	
Bromofluorobenzene (S)	101		%	1	80-129		5/25/2017 02:11	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	360		mg/L	5	25	2.5	5/19/2017 16:05	J
Nitrate	0.36	I	mg/L	5	2.5	0.25	5/19/2017 16:05	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	4.8		mg/L	10	0.10	0.08	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077003** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-16AR** Date Collected: 05/18/17 09:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>1200</b>		<b>mg/L</b>	<b>1</b>	10	10	5/24/2017 14:51	J

Lab ID: **J1705077004** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-16BR** Date Collected: 05/18/17 08:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis,Water		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/23/2017 17:35	J
Barium	<b>24</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/23/2017 17:35	J
Beryllium	<b>0.13</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.30	0.13	5/23/2017 17:35	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/23/2017 17:35	J
Chromium	<b>0.87</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	1.0	0.50	5/23/2017 17:35	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/23/2017 17:35	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/23/2017 17:35	J
Iron	<b>1300</b>		<b>ug/L</b>	<b>1</b>	200	30	5/23/2017 17:35	J
Lead	<b>9.1</b>		<b>ug/L</b>	<b>1</b>	7.0	1.3	5/23/2017 17:35	J
Nickel	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/23/2017 17:35	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/23/2017 17:35	J
Silver	<b>0.70</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/23/2017 17:35	J
Sodium	<b>6.4</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/23/2017 17:35	J
Vanadium	<b>1.3</b>	<b>I,V</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/23/2017 17:35	J
Zinc	<b>8.8</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/23/2017 17:35	J

Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis,Total		Analytical Method: SW-846 6020						
Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/30/2017 22:30	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/30/2017 22:30	J

Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis,Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/30/2017 15:26	J

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**ANALYTICAL RESULTS**

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077004** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-16BR** Date Collected: 05/18/17 08:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 06:37	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 06:37	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 06:37	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 06:37	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 06:37	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 06:37	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 06:37	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 06:37	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 06:37	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 06:37	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 06:37	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 06:37	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 06:37	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 06:37	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 06:37	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 06:37	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 06:37	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 06:37	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 06:37	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 06:37	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 06:37	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 06:37	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 06:37	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 06:37	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 06:37	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 06:37	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 06:37	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 06:37	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 06:37	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 06:37	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 06:37	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 06:37	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 06:37	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 06:37	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 06:37	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 06:37	J

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077004**  
Sample ID: **17138-MW-16BR**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 08:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 06:37	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 06:37	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 06:37	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 06:37	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 06:37	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 06:37	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 06:37	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 06:37	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 06:37	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/25/2017 06:37	
Toluene-d8 (S)	84		%	1	77-119		5/25/2017 06:37	
Bromofluorobenzene (S)	106		%	1	86-123		5/25/2017 06:37	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.31		ug/L	1	0.20	0.11	5/25/2017 06:37	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 06:37	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/25/2017 06:37	
Toluene-d8 (S)	90		%	1	80-121		5/25/2017 06:37	
Bromofluorobenzene (S)	99		%	1	80-129		5/25/2017 06:37	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	16		mg/L	1	5.0	0.50	5/19/2017 17:03	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/19/2017 17:03	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.21		mg/L	1	0.01	0.01	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	54		mg/L	1	10	10	5/24/2017 14:51	J
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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077005** Date Received: 05/19/17 08:30 Matrix: Water  
Sample ID: **17138-MW-17AR** Date Collected: 05/18/17 07:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 17:39	J
Barium	79		ug/L	1	2.0	0.28	5/23/2017 17:39	J
Beryllium	0.16	I	ug/L	1	0.30	0.13	5/23/2017 17:39	J
Cadmium	1.4		ug/L	1	0.60	0.32	5/23/2017 17:39	J
Chromium	1.0		ug/L	1	1.0	0.50	5/23/2017 17:39	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 17:39	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 17:39	J
Iron	750		ug/L	1	200	30	5/23/2017 17:39	J
Lead	8.5		ug/L	1	7.0	1.3	5/23/2017 17:39	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 17:39	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 17:39	J
Silver	0.76	I	ug/L	1	4.0	0.44	5/23/2017 17:39	J
Sodium	13		mg/L	1	0.20	0.16	5/23/2017 17:39	J
Vanadium	6.3	V	ug/L	1	1.5	0.18	5/23/2017 17:39	J
Zinc	6.2	I	ug/L	1	10	2.0	5/23/2017 17:39	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.33	I	ug/L	1	0.70	0.046	5/30/2017 22:34	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 22:34	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:29	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 07:06	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 07:06	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:06	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 07:06	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 07:06	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:06	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 07:06	J

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077005**  
Sample ID: **17138-MW-17AR**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 07:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:06	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:06	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:06	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 07:06	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 07:06	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 07:06	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 07:06	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 07:06	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 07:06	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:06	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 07:06	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 07:06	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 07:06	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:06	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:06	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 07:06	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:06	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 07:06	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:06	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:06	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 07:06	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 07:06	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:06	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:06	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 07:06	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:06	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 07:06	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:06	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 07:06	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 07:06	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 07:06	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:06	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 07:06	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:06	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:06	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:06	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:06	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 07:06	J
1,2-Dichloroethane-d4 (S)	110		%	1	70-128		5/25/2017 07:06	
Toluene-d8 (S)	83		%	1	77-119		5/25/2017 07:06	

Report ID: 488127 - 667718

Page 15 of 32

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077005** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-17AR** Date Collected: 05/18/17 07:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>109</b>		%	1	86-123		5/25/2017 07:06	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/25/2017 07:06	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/25/2017 07:06	J
1,2-Dichloroethane-d4 (S)	<b>106</b>		%	1	77-125		5/25/2017 07:06	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/25/2017 07:06	
Bromofluorobenzene (S)	<b>102</b>		%	1	80-129		5/25/2017 07:06	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>16</b>		mg/L	1	5.0	0.50	5/19/2017 17:40	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/19/2017 17:40	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>1.9</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>180</b>		mg/L	1	10	10	5/24/2017 14:51	J

Lab ID: **J1705077006** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-17BR** Date Collected: 05/18/17 06:55

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/23/2017 17:43	J
Barium	<b>26</b>		ug/L	1	2.0	0.28	5/23/2017 17:43	J
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	1	0.30	0.13	5/23/2017 17:43	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/23/2017 17:43	J
Chromium	<b>1.7</b>		ug/L	1	1.0	0.50	5/23/2017 17:43	J

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077006** Date Received: 05/19/17 08:30 Matrix: Water  
 Sample ID: **17138-MW-17BR** Date Collected: 05/18/17 06:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 17:43	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 17:43	J
Iron	630		ug/L	1	200	30	5/23/2017 17:43	J
Lead	11		ug/L	1	7.0	1.3	5/23/2017 17:43	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 17:43	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 17:43	J
Silver	1.1	I	ug/L	1	4.0	0.44	5/23/2017 17:43	J
Sodium	15		mg/L	1	0.20	0.16	5/23/2017 17:43	J
Vanadium	2.3	V	ug/L	1	1.5	0.18	5/23/2017 17:43	J
Zinc	9.1	I	ug/L	1	10	2.0	5/23/2017 17:43	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.046	U	ug/L	1	0.70	0.046	5/30/2017 22:38	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/30/2017 22:38	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/30/2017 15:32	J
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#### VOLATILES

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	0.11		mg/L	1	0.01	0.01	5/23/2017 13:55	G
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Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 07:35	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 07:35	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:35	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 07:35	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 07:35	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:35	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 07:35	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:35	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:35	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:35	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 07:35	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 07:35	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 07:35	J

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077006**  
 Sample ID: **17138-MW-17BR**

Date Received: 05/19/17 08:30 Matrix: Water  
 Date Collected: 05/18/17 06:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 07:35	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 07:35	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 07:35	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:35	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 07:35	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 07:35	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 07:35	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:35	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:35	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 07:35	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:35	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 07:35	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:35	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 07:35	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 07:35	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 07:35	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:35	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:35	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 07:35	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:35	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 07:35	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 07:35	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 07:35	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 07:35	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 07:35	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:35	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 07:35	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 07:35	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 07:35	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 07:35	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 07:35	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 07:35	J
1,2-Dichloroethane-d4 (S)	110		%	1	70-128		5/25/2017 07:35	
Toluene-d8 (S)	83		%	1	77-119		5/25/2017 07:35	
Bromofluorobenzene (S)	105		%	1	86-123		5/25/2017 07:35	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 07:35	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 07:35	J

Report ID: 488127 - 667718

Page 18 of 32

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077006**  
 Sample ID: **17138-MW-17BR**

Date Received: 05/19/17 08:30 Matrix: Water  
 Date Collected: 05/18/17 06:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	<b>107</b>		%	1	77-125		5/25/2017 07:35	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/25/2017 07:35	
Bromofluorobenzene (S)	<b>98</b>		%	1	80-129		5/25/2017 07:35	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	<b>26</b>		mg/L	1	5.0	0.50	5/19/2017 19:29	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/19/2017 19:29	J

Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	<b>71</b>		mg/L	1	10	10	5/24/2017 14:51	J
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Lab ID: **J1705077007**  
 Sample ID: **17138-TripBlank-1**

Date Received: 05/19/17 08:30 Matrix: Water  
 Date Collected: 05/18/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	ug/L	1	1.0	0.26	5/25/2017 08:04	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/25/2017 08:04	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/25/2017 08:04	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/25/2017 08:04	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	ug/L	1	1.0	0.14	5/25/2017 08:04	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/25/2017 08:04	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/25/2017 08:04	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/25/2017 08:04	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	ug/L	1	1.0	0.23	5/25/2017 08:04	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/25/2017 08:04	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/25/2017 08:04	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	ug/L	1	5.0	0.43	5/25/2017 08:04	J
2-Hexanone	<b>0.44</b>	<b>U</b>	ug/L	1	5.0	0.44	5/25/2017 08:04	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	ug/L	1	1.0	0.47	5/25/2017 08:04	J
Acetone	<b>2.1</b>	<b>U</b>	ug/L	1	5.0	2.1	5/25/2017 08:04	J

Report ID: 488127 - 667718

Page 19 of 32

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## ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077007**  
Sample ID: **17138-TripBlank-1**

Date Received: 05/19/17 08:30 Matrix: Water  
Date Collected: 05/18/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 08:04	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 08:04	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 08:04	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 08:04	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 08:04	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:04	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:04	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 08:04	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:04	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 08:04	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:04	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 08:04	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 08:04	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 08:04	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:04	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 08:04	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 08:04	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 08:04	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 08:04	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 08:04	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 08:04	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 08:04	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 08:04	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:04	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 08:04	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 08:04	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 08:04	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 08:04	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 08:04	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 08:04	J
1,2-Dichloroethane-d4 (S)	113		%	1	70-128		5/25/2017 08:04	
Toluene-d8 (S)	83		%	1	77-119		5/25/2017 08:04	
Bromofluorobenzene (S)	106		%	1	86-123		5/25/2017 08:04	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 08:04	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 08:04	J
1,2-Dichloroethane-d4 (S)	109		%	1	77-125		5/25/2017 08:04	
Toluene-d8 (S)	89		%	1	80-121		5/25/2017 08:04	

Report ID: 488127 - 667718

Page 20 of 32

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### ANALYTICAL RESULTS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705077007**

Date Received: 05/19/17 08:30 Matrix: Water

Sample ID: **17138-TripBlank-1**

Date Collected: 05/18/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>99</b>		%	1	80-129		5/25/2017 08:04	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination
- J4 Estimated Result

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: DGMj/3013 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/23/2017 03:30  
Associated Lab Samples: J1705077001, J1705077002, J1705077003, J1705077004, J1705077005, J1705077006

METHOD BLANK: 2358806

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: DGMj/3014 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/23/2017 03:30  
Associated Lab Samples: J1705077001, J1705077002, J1705077003, J1705077004, J1705077005, J1705077006

METHOD BLANK: 2358927

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.20	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: WCAj/4198 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705077001, J1705077002, J1705077003

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### QUALITY CONTROL DATA

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2359043

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: WCAg/4981 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1705077001, J1705077002, J1705077003, J1705077004, J1705077005, J1705077006

METHOD BLANK: 2361687

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Ammonia (N)	mg/L	0.01	0.01 U

QC Batch: WCAj/4232 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1705077001, J1705077002, J1705077003, J1705077004, J1705077005, J1705077006

METHOD BLANK: 2362171

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: WCAj/4237 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: J1705077004, J1705077005, J1705077006

METHOD BLANK: 2362325

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

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### QUALITY CONTROL DATA

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch:	MSVJ/4020	Analysis Method:	SW-846 8260B
QC Batch Method:	SW-846 5030B	Prepared:	05/24/2017 13:52
Associated Lab Samples:	J1705077001		

METHOD BLANK: 2362852

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Chloromethane	ug/L	0.21	0.21 U
Vinyl Chloride	ug/L	0.20	0.20 U
Bromomethane	ug/L	0.24	0.24 U
Chloroethane	ug/L	0.33	0.33 U
Trichlorofluoromethane	ug/L	0.32	0.32 U
Acetone	ug/L	2.1	2.1 U
1,1-Dichloroethylene	ug/L	0.18	0.18 U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16 U
Acrylonitrile	ug/L	1.1	1.1 U
Methylene Chloride	ug/L	2.5	2.5 U
Carbon Disulfide	ug/L	0.21	0.21 U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20 U
1,1-Dichloroethane	ug/L	0.14	0.14 U
Vinyl Acetate	ug/L	0.19	0.19 U
2-Butanone (MEK)	ug/L	0.43	0.43 U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24 U
Bromochloromethane	ug/L	0.17	0.17 U
Chloroform	ug/L	0.18	0.18 U
1,2-Dichloroethane	ug/L	0.23	0.23 U
1,1,1-Trichloroethane	ug/L	0.22	0.22 U
Carbon Tetrachloride	ug/L	0.36	0.36 U
Benzene	ug/L	0.16	0.16 U
Dibromomethane	ug/L	0.26	0.26 U
1,2-Dichloropropane	ug/L	0.20	0.20 U
Trichloroethene	ug/L	0.29	0.29 U
Bromodichloromethane	ug/L	0.25	0.25 U
cis-1,3-Dichloropropene	ug/L	0.16	0.16 U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47 U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18 U
1,1,2-Trichloroethane	ug/L	0.30	0.30 U
Toluene	ug/L	0.23	0.23 U
2-Hexanone	ug/L	0.44	0.44 U
Dibromochloromethane	ug/L	0.33	0.33 U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36 U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26 U
Chlorobenzene	ug/L	0.21	0.21 U
Ethylbenzene	ug/L	0.24	0.24 U
Bromoform	ug/L	0.43	0.43 U
Styrene	ug/L	0.23	0.23 U

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### QUALITY CONTROL DATA

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362861

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16 U
Acrylonitrile	ug/L	1.1	1.1 U
Methylene Chloride	ug/L	2.5	2.5 U
Carbon Disulfide	ug/L	0.21	0.21 U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20 U
1,1-Dichloroethane	ug/L	0.14	0.14 U
Vinyl Acetate	ug/L	0.19	0.19 U
2-Butanone (MEK)	ug/L	0.43	0.43 U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24 U
Bromochloromethane	ug/L	0.17	0.17 U
Chloroform	ug/L	0.18	0.18 U
1,2-Dichloroethane	ug/L	0.23	0.23 U
1,1,1-Trichloroethane	ug/L	0.22	0.22 U
Carbon Tetrachloride	ug/L	0.36	0.36 U
Benzene	ug/L	0.16	0.16 U
Dibromomethane	ug/L	0.26	0.26 U
1,2-Dichloropropane	ug/L	0.20	0.20 U
Trichloroethene	ug/L	0.29	0.29 U
Bromodichloromethane	ug/L	0.25	0.25 U
cis-1,3-Dichloropropene	ug/L	0.16	0.16 U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47 U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18 U
1,1,2-Trichloroethane	ug/L	0.30	0.30 U
Toluene	ug/L	0.23	0.23 U
2-Hexanone	ug/L	0.44	0.44 U
Dibromochloromethane	ug/L	0.33	0.33 U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36 U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26 U
Chlorobenzene	ug/L	0.21	0.21 U
Ethylbenzene	ug/L	0.24	0.24 U
Bromoform	ug/L	0.43	0.43 U
Styrene	ug/L	0.23	0.23 U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20 U
1,2,3-Trichloropropane	ug/L	0.30	0.30 U
1,4-Dichlorobenzene	ug/L	0.22	0.22 U
1,2-Dichlorobenzene	ug/L	0.18	0.18 U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8 U
Xylene (Total)	ug/L	0.53	0.53 U
1,2-Dichloroethane-d4 (S)	%	113	70-128
Toluene-d8 (S)	%	83	77-119
Bromofluorobenzene (S)	%	110	86-123

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### QUALITY CONTROL DATA

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: MSVj/4026 Analysis Method: SW-846 8260B (SIM)  
QC Batch Method: SW-846 5030B Prepared: 05/24/2017 13:52  
Associated Lab Samples: J1705077002, J1705077003, J1705077004, J1705077005, J1705077006, J1705077007

METHOD BLANK: 2362869

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	105	77-125
Toluene-d8 (S)	%	92	80-121
Bromofluorobenzene (S)	%	101	80-129

QC Batch: DGMj/3046 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/30/2017 10:45  
Associated Lab Samples: J1705077001, J1705077002, J1705077003, J1705077004, J1705077005, J1705077006

METHOD BLANK: 2365487

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

### QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

#### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705077001	17138-MW-13A	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077002	17138-MW-13B	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077003	17138-MW-16AR	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077004	17138-MW-16BR	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077005	17138-MW-17AR	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077006	17138-MW-17BR	SW-846 3010A	DGMj/3013	SW-846 6020	ICMj/1552
J1705077001	17138-MW-13A	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077002	17138-MW-13B	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077003	17138-MW-16AR	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077004	17138-MW-16BR	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077005	17138-MW-17AR	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077006	17138-MW-17BR	SW-846 3010A	DGMj/3014	SW-846 6010	ICPj/2019
J1705077001	17138-MW-13A			EPA 300.0	WCAj/4198
J1705077002	17138-MW-13B			EPA 300.0	WCAj/4198
J1705077003	17138-MW-16AR			EPA 300.0	WCAj/4198
J1705077001	17138-MW-13A			EPA 350.1	WCAg/4981
J1705077002	17138-MW-13B			EPA 350.1	WCAg/4981
J1705077003	17138-MW-16AR			EPA 350.1	WCAg/4981
J1705077004	17138-MW-16BR			EPA 350.1	WCAg/4981
J1705077005	17138-MW-17AR			EPA 350.1	WCAg/4981
J1705077006	17138-MW-17BR			EPA 350.1	WCAg/4981
J1705077001	17138-MW-13A			SM 2540 C	WCAj/4232
J1705077002	17138-MW-13B			SM 2540 C	WCAj/4232
J1705077003	17138-MW-16AR			SM 2540 C	WCAj/4232
J1705077004	17138-MW-16BR			SM 2540 C	WCAj/4232
J1705077005	17138-MW-17AR			SM 2540 C	WCAj/4232
J1705077006	17138-MW-17BR			SM 2540 C	WCAj/4232
J1705077004	17138-MW-16BR			EPA 300.0	WCAj/4237

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705077 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705077005	17138-MW-17AR			EPA 300.0	WCAj/4237
J1705077006	17138-MW-17BR			EPA 300.0	WCAj/4237
J1705077001	17138-MW-13A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705077001	17138-MW-13A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705077002	17138-MW-13B	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077003	17138-MW-16AR	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077004	17138-MW-16BR	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077005	17138-MW-17AR	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077006	17138-MW-17BR	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077007	17138-TripBlank-1	SW-846 5030B	MSVj/4024	SW-846 8260B	MSVj/4025
J1705077002	17138-MW-13B	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077003	17138-MW-16AR	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077004	17138-MW-16BR	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077005	17138-MW-17AR	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077006	17138-MW-17BR	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077007	17138-TripBlank-1	SW-846 5030B	MSVj/4026	SW-846 8260B (SIM)	MSVj/4027
J1705077001	17138-MW-13A	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705077002	17138-MW-13B	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705077003	17138-MW-16AR	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705077004	17138-MW-16BR	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705077005	17138-MW-17AR	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455
J1705077006	17138-MW-17BR	SW-846 7470A	DGMj/3046	SW-846 7470A	CVAj/1455

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- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813-631-1111

# J1705077

7

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE						LABORATORY I.D. NUMBER	
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials	500 mL Plastic	500 mL Plastic	250 mL Plastic				
<b>Tampa, Florida 33619</b>		Project Location:		ANALYSIS REQUIRED							
Phone: <b>813-388-1026</b>		FDEP Facility No: 89544				App I VOAs+EDB/DBCP	App I Metals+Fe,Hg,Na	C/NO3/TDS	NH3		
FAX:		Project Name and Address:									
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>									
Sampled By: <b>Joe Terry / EPS</b>		<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS									
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH											
Page <u>1</u> of <u>1</u>											

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION						
			DATE	TIME				HCL	HNO3	Ice	H2SO4		
17138-MW-13A		G	5/18/17	1035	GW	6		X	X	X	X		001
17138-MW-13B				1015		6							002
17138-MW-16AR				0900		6							003
17138-MW-16BR				0830		6							004
17138-MW-17AR				0725		6							005
17138-MW-17BR		↓	↓	0655	GW	6		↓	X	X	X		006
17138-Trip Blank-1		G	5/18/17	0000	DI H <sub>2</sub> O	2		X					007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:		Date	Time	Received by:		Date	Time
1	<i>Joe Terry</i>	5-18-17	1500	<i>Fedex</i>			
2	<i>Fedex</i>	5-19-17	8:30	<i>Bil Auf</i>	5-19-17	8:30	
3							
4							

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





Client: Waste Connections

Project name: J.E.D Landfill

Date/Time Rcvd: 5-19-17 8:30

Log-In request number: J1705077

Received by: BA

Completed by: BA

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4°C</u>				
Temp taken from	<input checked="" type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?	/		
2. Were custody papers properly included with samples?	/		
3. Were custody papers properly filled out (ink, signed, match labels)?	/		
4. Did all bottles arrive in good condition (unbroken)?	/		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	/		
6. Did the sample labels agree with the chain of custody?	/		
7. Were correct bottles used for the tests indicated?	/		
8. Were proper sample preservation techniques indicated on the label?	/		
9. Were samples received within holding times?	/		
10. Were all VOA vials free of the presence of air bubbles?	/		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			/
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	/		
13. Was the cooler temperature less than 6°C?	/		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	/		
15. Was sufficient sample volume provided to perform all tests?	/		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			/
17. Were all sample containers provided by AEL? (Other than Bacteriological)	/		
18. Were samples accepted into the laboratory?	/		
19. When necessary to split samples into other bottles, is it noted in the comments?	/		

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)



**Project No.:** J1705077  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

A. Calibration: All acceptance criteria were met.  
B. Blanks: All acceptance criteria were met.  
C. Surrogates: All acceptance criteria were met.  
D. Spikes: The spike recovery of PCE for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

The control criteria for matrix spike recoveries of xylenes for S1700735001 are not applicable. The analyte concentration in the sample was greater than 4 times the added spike concentrations, preventing accurate evaluation of the spike recovery. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.  
F. Samples: S1700735001 required reanalysis at dilution due to the presence of target analytes.  
G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---



**Project No.:** J1705077  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The spike recovery of PCE for the Laboratory Control Sample Duplicate(LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- E. Internal Standard: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

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**Project No.:** J1705077  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

A. Calibration: All acceptance criteria were met.  
B. Blanks: All acceptance criteria were met.  
C. Duplicates:  
D. Spikes:

The matrix spike recoveries of Chloride and Nitrate for J1705077001 were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The affected sample is qualified to indicate matrix interference.

The upper control criterion was exceeded for the following analyte in the matrix spike and matrix spike duplicate for analytical batch 4198: Nitrate. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.

E. Serial Dilution:  
F. Samples: J1705054001-004 were analyzed at the lowest possible dilution due to high Chloride in the sample that could affect the instrument.  
G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

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**Project No.:** J1705077  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Duplicates: All acceptance criteria were met.
- D. Spikes: The upper control criterion was exceeded for the following analyte in the matrix spike for analytical batch 4237: Nitrate. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. No further corrective action was required.
- E. Serial Diluion: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, May 17, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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### SAMPLE SUMMARY

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1704958001	17136-MW-22AR	Water	5/16/2017 15:15	5/17/2017 08:30
J1704958002	17136-MW-22BR	Water	5/16/2017 14:35	5/17/2017 08:30
J1704958003	17136-MW-24A	Water	5/16/2017 12:25	5/17/2017 08:30
J1704958004	17136-MW-24B	Water	5/16/2017 12:00	5/17/2017 08:30
J1704958005	17136-MW-25A	Water	5/16/2017 13:45	5/17/2017 08:30
J1704958006	17136-MW-25B	Water	5/16/2017 13:10	5/17/2017 08:30
J1704958007	17136-TripBlank	Water	5/16/2017 00:00	5/17/2017 08:30

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958001** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-22AR** Date Collected: 05/16/17 15:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/22/2017 15:15	J
Barium	19		ug/L	1	2.0	0.28	5/22/2017 15:15	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/22/2017 15:15	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/22/2017 15:15	J
Chromium	4.3		ug/L	1	1.0	0.50	5/22/2017 15:15	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/22/2017 15:15	J
Copper	3.0	I	ug/L	1	4.0	2.5	5/22/2017 15:15	J
Iron	1400		ug/L	1	200	30	5/22/2017 15:15	J
Lead	58		ug/L	1	7.0	1.3	5/22/2017 15:15	J
Nickel	1.2	I	ug/L	1	6.5	1.1	5/22/2017 15:15	J
Selenium	6.8	U	ug/L	1	20	6.8	5/22/2017 15:15	J
Silver	0.95	I	ug/L	1	4.0	0.44	5/22/2017 15:15	J
Sodium	19		mg/L	1	0.20	0.16	5/22/2017 15:15	J
Vanadium	3.1		ug/L	1	1.5	0.18	5/22/2017 15:15	J
Zinc	3.8	I	ug/L	1	10	2.0	5/22/2017 15:15	J
Analysis Desc: SW846 6020B Analysis,Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.061	I	ug/L	1	0.70	0.046	5/19/2017 17:14	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/19/2017 17:14	J
Analysis Desc: SW846 7470A Analysis,Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 14:16	J
<b>VOLATILES</b>								
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	310		mg/L	1	10	10	5/22/2017 14:21	J
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 16:01	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 16:01	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:01	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958001**  
 Sample ID: **17136-MW-22AR**

Date Received: 05/17/17 08:30 Matrix: Water  
 Date Collected: 05/16/17 15:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 16:01	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 16:01	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:01	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 16:01	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:01	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:01	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:01	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 16:01	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 16:01	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 16:01	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 16:01	J
Acetone	7.5		ug/L	1	5.0	2.1	5/24/2017 16:01	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 16:01	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:01	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 16:01	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 16:01	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 16:01	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:01	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:01	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 16:01	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:01	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 16:01	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:01	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:01	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 16:01	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 16:01	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:01	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:01	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 16:01	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:01	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 16:01	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:01	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 16:01	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 16:01	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 16:01	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:01	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 16:01	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:01	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:01	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:01	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958001**  
 Sample ID: **17136-MW-22AR**

Date Received: 05/17/17 08:30 Matrix: Water  
 Date Collected: 05/16/17 15:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:01	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 16:01	J
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		5/24/2017 16:01	
Toluene-d8 (S)	85		%	1	77-119		5/24/2017 16:01	
Bromofluorobenzene (S)	107		%	1	86-123		5/24/2017 16:01	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 16:01	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 16:01	J
1,2-Dichloroethane-d4 (S)	103		%	1	77-125		5/24/2017 16:01	
Toluene-d8 (S)	91		%	1	80-121		5/24/2017 16:01	
Bromofluorobenzene (S)	100		%	1	80-129		5/24/2017 16:01	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	48	I	mg/L	10	50	5.0	5/17/2017 14:09	J
Nitrate	0.50	U	mg/L	10	5.0	0.50	5/17/2017 14:09	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	5.0		mg/L	10	0.10	0.08	5/23/2017 13:55	G
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Lab ID: **J1704958002**  
 Sample ID: **17136-MW-22BR**

Date Received: 05/17/17 08:30 Matrix: Water  
 Date Collected: 05/16/17 14:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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#### METALS

Analysis Desc: SW846 6010B Analysis,Water

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6010

Arsenic	8.5	U	ug/L	1	10	8.5	5/22/2017 15:19	J
Barium	77		ug/L	1	2.0	0.28	5/22/2017 15:19	J
Beryllium	0.39		ug/L	1	0.30	0.13	5/22/2017 15:19	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/22/2017 15:19	J
Chromium	0.50	U	ug/L	1	1.0	0.50	5/22/2017 15:19	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958002** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-22BR** Date Collected: 05/16/17 14:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	3.5	I	ug/L	1	4.0	0.60	5/22/2017 15:19	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/22/2017 15:19	J
Iron	13000		ug/L	1	200	30	5/22/2017 15:19	J
Lead	39		ug/L	1	7.0	1.3	5/22/2017 15:19	J
Nickel	2.9	I	ug/L	1	6.5	1.1	5/22/2017 15:19	J
Selenium	6.8	U	ug/L	1	20	6.8	5/22/2017 15:19	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/22/2017 15:19	J
Sodium	29		mg/L	1	0.20	0.16	5/22/2017 15:19	J
Vanadium	2.1		ug/L	1	1.5	0.18	5/22/2017 15:19	J
Zinc	5.5	I	ug/L	1	10	2.0	5/22/2017 15:19	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.048	I	ug/L	1	0.70	0.046	5/19/2017 17:18	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/19/2017 17:18	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 14:38	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 16:31	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 16:31	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:31	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 16:31	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 16:31	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:31	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 16:31	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:31	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:31	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:31	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 16:31	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 16:31	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 16:31	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 16:31	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 16:31	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 16:31	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958002**  
 Sample ID: **17136-MW-22BR**

Date Received: 05/17/17 08:30 Matrix: Water  
 Date Collected: 05/16/17 14:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:31	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 16:31	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 16:31	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 16:31	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:31	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:31	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 16:31	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:31	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 16:31	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:31	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 16:31	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 16:31	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 16:31	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:31	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:31	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 16:31	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:31	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 16:31	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 16:31	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 16:31	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 16:31	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 16:31	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:31	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 16:31	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 16:31	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 16:31	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 16:31	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 16:31	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 16:31	J
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		5/24/2017 16:31	
Toluene-d8 (S)	85		%	1	77-119		5/24/2017 16:31	
Bromofluorobenzene (S)	111		%	1	86-123		5/24/2017 16:31	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 16:31	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 16:31	J
1,2-Dichloroethane-d4 (S)	101		%	1	77-125		5/24/2017 16:31	
Toluene-d8 (S)	91		%	1	80-121		5/24/2017 16:31	
Bromofluorobenzene (S)	104		%	1	80-129		5/24/2017 16:31	

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958002** Date Received: 05/17/17 08:30 Matrix: Water  
Sample ID: **17136-MW-22BR** Date Collected: 05/16/17 14:35

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>WET CHEMISTRY</b>									
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0							
Chloride	<b>76</b>		mg/L	<b>10</b>	50	5.0	5/17/2017 14:27	J	
Nitrate	<b>0.50</b>	<b>U</b>	mg/L	<b>10</b>	5.0	0.50	5/17/2017 14:27	J	
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1							
Ammonia (N)	<b>0.30</b>		mg/L	<b>1</b>	0.01	0.01	5/23/2017 11:48	G	
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C							
Total Dissolved Solids	<b>330</b>		mg/L	<b>1</b>	10	10	5/22/2017 14:21	J	

Lab ID: **J1704958003** Date Received: 05/17/17 08:30 Matrix: Water  
Sample ID: **17136-MW-24A** Date Collected: 05/16/17 12:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>METALS</b>									
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	<b>1</b>	10	8.5	5/22/2017 15:22	J	
Barium	<b>9.6</b>		ug/L	<b>1</b>	2.0	0.28	5/22/2017 15:22	J	
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	<b>1</b>	0.30	0.13	5/22/2017 15:22	J	
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	<b>1</b>	0.60	0.32	5/22/2017 15:22	J	
Chromium	<b>1.1</b>		ug/L	<b>1</b>	1.0	0.50	5/22/2017 15:22	J	
Cobalt	<b>0.60</b>	<b>U</b>	ug/L	<b>1</b>	4.0	0.60	5/22/2017 15:22	J	
Copper	<b>2.5</b>	<b>U</b>	ug/L	<b>1</b>	4.0	2.5	5/22/2017 15:22	J	
Iron	<b>440</b>		ug/L	<b>1</b>	200	30	5/22/2017 15:22	J	
Lead	<b>46</b>		ug/L	<b>1</b>	7.0	1.3	5/22/2017 15:22	J	
Nickel	<b>1.2</b>	<b>I</b>	ug/L	<b>1</b>	6.5	1.1	5/22/2017 15:22	J	
Selenium	<b>6.8</b>	<b>U</b>	ug/L	<b>1</b>	20	6.8	5/22/2017 15:22	J	
Silver	<b>0.44</b>	<b>U</b>	ug/L	<b>1</b>	4.0	0.44	5/22/2017 15:22	J	
Sodium	<b>11</b>		mg/L	<b>1</b>	0.20	0.16	5/22/2017 15:22	J	
Vanadium	<b>0.74</b>	<b>I</b>	ug/L	<b>1</b>	1.5	0.18	5/22/2017 15:22	J	
Zinc	<b>10</b>		ug/L	<b>1</b>	10	2.0	5/22/2017 15:22	J	

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## ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958003** Date Received: 05/17/17 08:30 Matrix: Water  
Sample ID: **17136-MW-24A** Date Collected: 05/16/17 12:25

Sample Description: \_\_\_\_\_ Location: \_\_\_\_\_

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/19/2017 17:22	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/19/2017 17:22	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/23/2017 14:41	J

### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/24/2017 17:05	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 17:05	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 17:05	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 17:05	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/24/2017 17:05	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 17:05	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 17:05	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 17:05	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/24/2017 17:05	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 17:05	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 17:05	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/24/2017 17:05	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/24/2017 17:05	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/24/2017 17:05	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/24/2017 17:05	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/24/2017 17:05	J
Benzene	<b>0.16</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/24/2017 17:05	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/24/2017 17:05	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/24/2017 17:05	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/24/2017 17:05	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/24/2017 17:05	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 17:05	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/24/2017 17:05	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 17:05	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/24/2017 17:05	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 17:05	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 17:05	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958003** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-24A** Date Collected: 05/16/17 12:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 17:05	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 17:05	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 17:05	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 17:05	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 17:05	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 17:05	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 17:05	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 17:05	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 17:05	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 17:05	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 17:05	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:05	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 17:05	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 17:05	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 17:05	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:05	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 17:05	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 17:05	J
1,2-Dichloroethane-d4 (S)	114		%	1	70-128		5/24/2017 17:05	
Toluene-d8 (S)	83		%	1	77-119		5/24/2017 17:05	
Bromofluorobenzene (S)	108		%	1	86-123		5/24/2017 17:05	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 17:05	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 17:05	J
1,2-Dichloroethane-d4 (S)	110		%	1	77-125		5/24/2017 17:05	
Toluene-d8 (S)	89		%	1	80-121		5/24/2017 17:05	
Bromofluorobenzene (S)	101		%	1	80-129		5/24/2017 17:05	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	47	I	mg/L	10	50	5.0	5/17/2017 14:45	J
Nitrate	0.50	U	mg/L	10	5.0	0.50	5/17/2017 14:45	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	0.37		mg/L	1	0.01	0.01	5/23/2017 11:48	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958003**  
Sample ID: **17136-MW-24A**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 12:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>77</b>		<b>mg/L</b>	<b>1</b>	10	10	5/22/2017 14:21	J

Lab ID: **J1704958004**  
Sample ID: **17136-MW-24B**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 12:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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#### METALS

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/22/2017 15:26	J
Barium	<b>7.2</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/22/2017 15:26	J
Beryllium	<b>0.13</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.30	0.13	5/22/2017 15:26	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/22/2017 15:26	J
Chromium	<b>1.2</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/22/2017 15:26	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/22/2017 15:26	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/22/2017 15:26	J
Iron	<b>430</b>		<b>ug/L</b>	<b>1</b>	200	30	5/22/2017 15:26	J
Lead	<b>46</b>		<b>ug/L</b>	<b>1</b>	7.0	1.3	5/22/2017 15:26	J
Nickel	<b>1.6</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/22/2017 15:26	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/22/2017 15:26	J
Silver	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/22/2017 15:26	J
Sodium	<b>4.5</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/22/2017 15:26	J
Vanadium	<b>1.1</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/22/2017 15:26	J
Zinc	<b>9.9</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/22/2017 15:26	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/19/2017 17:25	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/19/2017 17:25	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/23/2017 14:44	J
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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958004** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-24B** Date Collected: 05/16/17 12:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 17:36	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 17:36	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:36	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 17:36	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 17:36	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 17:36	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 17:36	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 17:36	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 17:36	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:36	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 17:36	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 17:36	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 17:36	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 17:36	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 17:36	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 17:36	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 17:36	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 17:36	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 17:36	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 17:36	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 17:36	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 17:36	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 17:36	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 17:36	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 17:36	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 17:36	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 17:36	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 17:36	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 17:36	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 17:36	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 17:36	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 17:36	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 17:36	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 17:36	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 17:36	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 17:36	J

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## ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958004**  
Sample ID: **17136-MW-24B**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 12:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 17:36	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 17:36	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:36	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 17:36	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 17:36	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 17:36	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 17:36	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 17:36	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 17:36	J
1,2-Dichloroethane-d4 (S)	112		%	1	70-128		5/24/2017 17:36	
Toluene-d8 (S)	83		%	1	77-119		5/24/2017 17:36	
Bromofluorobenzene (S)	108		%	1	86-123		5/24/2017 17:36	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 17:36	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 17:36	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/24/2017 17:36	
Toluene-d8 (S)	88		%	1	80-121		5/24/2017 17:36	
Bromofluorobenzene (S)	101		%	1	80-129		5/24/2017 17:36	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	14	I	mg/L	10	50	5.0	5/17/2017 15:03	J
Nitrate	0.50	U	mg/L	10	5.0	0.50	5/17/2017 15:03	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.11		mg/L	1	0.01	0.01	5/23/2017 11:48	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	65		mg/L	1	10	10	5/22/2017 14:21	J
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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958005** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-25A** Date Collected: 05/16/17 13:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/22/2017 15:30	J
Barium	140		ug/L	1	2.0	0.28	5/22/2017 15:30	J
Beryllium	1.2		ug/L	1	0.30	0.13	5/22/2017 15:30	J
Cadmium	0.34	I	ug/L	1	0.60	0.32	5/22/2017 15:30	J
Chromium	0.77	I	ug/L	1	1.0	0.50	5/22/2017 15:30	J
Cobalt	2.5	I	ug/L	1	4.0	0.60	5/22/2017 15:30	J
Copper	4.8		ug/L	1	4.0	2.5	5/22/2017 15:30	J
Iron	19000		ug/L	1	200	30	5/22/2017 15:30	J
Lead	32		ug/L	1	7.0	1.3	5/22/2017 15:30	J
Nickel	2.4	I	ug/L	1	6.5	1.1	5/22/2017 15:30	J
Selenium	6.8	U	ug/L	1	20	6.8	5/22/2017 15:30	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/22/2017 15:30	J
Sodium	64		mg/L	1	0.20	0.16	5/22/2017 15:30	J
Vanadium	5.4		ug/L	1	1.5	0.18	5/22/2017 15:30	J
Zinc	3.4	I	ug/L	1	10	2.0	5/22/2017 15:30	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.046	U	ug/L	1	0.70	0.046	5/19/2017 17:29	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/19/2017 17:29	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 14:47	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 18:06	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 18:06	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:06	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 18:06	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 18:06	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:06	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 18:06	J

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## ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958005**  
Sample ID: **17136-MW-25A**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 13:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:06	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:06	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:06	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 18:06	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 18:06	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 18:06	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 18:06	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 18:06	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 18:06	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:06	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 18:06	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 18:06	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 18:06	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:06	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:06	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 18:06	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:06	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 18:06	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:06	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:06	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 18:06	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 18:06	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:06	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:06	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 18:06	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:06	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 18:06	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:06	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 18:06	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 18:06	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 18:06	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:06	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 18:06	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:06	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:06	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:06	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:06	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 18:06	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/24/2017 18:06	
Toluene-d8 (S)	85		%	1	77-119		5/24/2017 18:06	

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958005** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-25A** Date Collected: 05/16/17 13:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>105</b>		%	1	86-123		5/24/2017 18:06	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/24/2017 18:06	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/24/2017 18:06	J
1,2-Dichloroethane-d4 (S)	<b>108</b>		%	1	77-125		5/24/2017 18:06	
Toluene-d8 (S)	<b>91</b>		%	1	80-121		5/24/2017 18:06	
Bromofluorobenzene (S)	<b>98</b>		%	1	80-129		5/24/2017 18:06	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>250</b>		mg/L	10	50	5.0	5/17/2017 15:21	J
Nitrate	<b>0.50</b>	<b>U</b>	mg/L	10	5.0	0.50	5/17/2017 15:21	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>2.7</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>730</b>		mg/L	1	10	10	5/22/2017 14:21	J

Lab ID: **J1704958006** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-MW-25B** Date Collected: 05/16/17 13:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/22/2017 15:34	J
Barium	<b>91</b>		ug/L	1	2.0	0.28	5/22/2017 15:34	J
Beryllium	<b>0.36</b>		ug/L	1	0.30	0.13	5/22/2017 15:34	J
Cadmium	<b>0.52</b>	<b>I</b>	ug/L	1	0.60	0.32	5/22/2017 15:34	J
Chromium	<b>6.3</b>		ug/L	1	1.0	0.50	5/22/2017 15:34	J

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## ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958006**  
Sample ID: **17136-MW-25B**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 13:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/22/2017 15:34	J
Copper	2.7	I	ug/L	1	4.0	2.5	5/22/2017 15:34	J
Iron	1200		ug/L	1	200	30	5/22/2017 15:34	J
Lead	45		ug/L	1	7.0	1.3	5/22/2017 15:34	J
Nickel	3.0	I	ug/L	1	6.5	1.1	5/22/2017 15:34	J
Selenium	6.8	U	ug/L	1	20	6.8	5/22/2017 15:34	J
Silver	0.44	U	ug/L	1	4.0	0.44	5/22/2017 15:34	J
Sodium	11		mg/L	1	0.20	0.16	5/22/2017 15:34	J
Vanadium	10		ug/L	1	1.5	0.18	5/22/2017 15:34	J
Zinc	9.2	I	ug/L	1	10	2.0	5/22/2017 15:34	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis, Total Analytical Method: SW-846 6020

Antimony	0.080	I	ug/L	1	0.70	0.046	5/19/2017 17:32	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/19/2017 17:32	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.031	I	ug/L	1	0.10	0.011	5/23/2017 14:50	J
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### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 18:36	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 18:36	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:36	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 18:36	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 18:36	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:36	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 18:36	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:36	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:36	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:36	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 18:36	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 18:36	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 18:36	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 18:36	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 18:36	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 18:36	J

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## ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958006**  
Sample ID: **17136-MW-25B**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 13:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:36	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 18:36	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 18:36	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 18:36	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:36	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:36	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 18:36	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:36	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 18:36	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:36	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 18:36	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 18:36	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 18:36	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:36	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:36	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 18:36	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:36	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 18:36	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 18:36	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 18:36	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 18:36	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 18:36	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:36	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 18:36	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 18:36	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 18:36	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 18:36	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 18:36	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 18:36	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/24/2017 18:36	
Toluene-d8 (S)	86		%	1	77-119		5/24/2017 18:36	
Bromofluorobenzene (S)	107		%	1	86-123		5/24/2017 18:36	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 18:36	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 18:36	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/24/2017 18:36	
Toluene-d8 (S)	91		%	1	80-121		5/24/2017 18:36	
Bromofluorobenzene (S)	100		%	1	80-129		5/24/2017 18:36	

Report ID: 487506 - 648591

Page 18 of 30

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958006** Date Received: 05/17/17 08:30 Matrix: Water  
Sample ID: **17136-MW-25B** Date Collected: 05/16/17 13:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	50		mg/L	10	50	5.0	5/17/2017 15:39	J
Nitrate	0.50	U	mg/L	10	5.0	0.50	5/17/2017 15:39	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.20		mg/L	1	0.01	0.01	5/23/2017 11:48	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	150		mg/L	1	10	10	5/22/2017 14:21	J

Lab ID: **J1704958007** Date Received: 05/17/17 08:30 Matrix: Water  
Sample ID: **17136-TripBlank** Date Collected: 05/16/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 19:07	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 19:07	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 19:07	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 19:07	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 19:07	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 19:07	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 19:07	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 19:07	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 19:07	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 19:07	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 19:07	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 19:07	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 19:07	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 19:07	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 19:07	J

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958007** Date Received: 05/17/17 08:30 Matrix: Water  
 Sample ID: **17136-TripBlank** Date Collected: 05/16/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 19:07	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 19:07	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 19:07	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 19:07	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 19:07	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 19:07	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 19:07	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 19:07	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 19:07	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 19:07	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 19:07	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 19:07	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 19:07	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 19:07	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 19:07	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 19:07	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 19:07	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 19:07	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 19:07	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 19:07	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 19:07	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 19:07	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 19:07	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 19:07	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 19:07	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 19:07	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 19:07	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 19:07	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 19:07	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 19:07	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/24/2017 19:07	
Toluene-d8 (S)	85		%	1	77-119		5/24/2017 19:07	
Bromofluorobenzene (S)	109		%	1	86-123		5/24/2017 19:07	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 19:07	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 19:07	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/24/2017 19:07	
Toluene-d8 (S)	91		%	1	80-121		5/24/2017 19:07	

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### ANALYTICAL RESULTS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1704958007**  
Sample ID: **17136-TripBlank**

Date Received: 05/17/17 08:30 Matrix: Water  
Date Collected: 05/16/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>102</b>		%	1	80-129		5/24/2017 19:07	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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**QUALITY CONTROL DATA**

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: DGMj/2999 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/18/2017 03:30  
Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006

METHOD BLANK: 2355974

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: DGMj/3001 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/19/2017 03:30  
Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006

METHOD BLANK: 2356297

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.18	0.18 U
Zinc	ug/L	2.0	2.0 U

QC Batch: WCAj/4186 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006

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### QUALITY CONTROL DATA

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2357384

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: WCAj/4206 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006

METHOD BLANK: 2359864

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: DGMj/3022 Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A Prepared: 05/23/2017 09:50

Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006

METHOD BLANK: 2360675

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Mercury	ug/L	0.011	0.011 U

QC Batch: WCAg/4976 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1704958002, J1704958003, J1704958004, J1704958006

METHOD BLANK: 2361386

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Ammonia (N)	mg/L	0.01	0.01 U

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### QUALITY CONTROL DATA

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: WCAg/4981 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: J1704958001, J1704958005

METHOD BLANK: 2361687

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Ammonia (N)	mg/L	0.01	0.01 U

QC Batch: MSVj/4020 Analysis Method: SW-846 8260B  
QC Batch Method: SW-846 5030B Prepared: 05/24/2017 13:52  
Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006, J1704958007

METHOD BLANK: 2362852

Parameter	Units	Blank Result	Reporting Limit Qualifiers
VOLATILES			
Chloromethane	ug/L	0.21	0.21 U
Vinyl Chloride	ug/L	0.20	0.20 U
Bromomethane	ug/L	0.24	0.24 U
Chloroethane	ug/L	0.33	0.33 U
Trichlorofluoromethane	ug/L	0.32	0.32 U
Acetone	ug/L	2.1	2.1 U
1,1-Dichloroethylene	ug/L	0.18	0.18 U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16 U
Acrylonitrile	ug/L	1.1	1.1 U
Methylene Chloride	ug/L	2.5	2.5 U
Carbon Disulfide	ug/L	0.21	0.21 U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20 U
1,1-Dichloroethane	ug/L	0.14	0.14 U
Vinyl Acetate	ug/L	0.19	0.19 U
2-Butanone (MEK)	ug/L	0.43	0.43 U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24 U
Bromochloromethane	ug/L	0.17	0.17 U
Chloroform	ug/L	0.18	0.18 U
1,2-Dichloroethane	ug/L	0.23	0.23 U
1,1,1-Trichloroethane	ug/L	0.22	0.22 U
Carbon Tetrachloride	ug/L	0.36	0.36 U
Benzene	ug/L	0.16	0.16 U
Dibromomethane	ug/L	0.26	0.26 U
1,2-Dichloropropane	ug/L	0.20	0.20 U
Trichloroethene	ug/L	0.29	0.29 U
Bromodichloromethane	ug/L	0.25	0.25 U

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### QUALITY CONTROL DATA

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362852

Parameter	Units	Blank Result	Reporting Limit Qualifiers
cis-1,3-Dichloropropene	ug/L	0.16	0.16 U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47 U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18 U
1,1,2-Trichloroethane	ug/L	0.30	0.30 U
Toluene	ug/L	0.23	0.23 U
2-Hexanone	ug/L	0.44	0.44 U
Dibromochloromethane	ug/L	0.33	0.33 U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36 U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26 U
Chlorobenzene	ug/L	0.21	0.21 U
Ethylbenzene	ug/L	0.24	0.24 U
Bromoform	ug/L	0.43	0.43 U
Styrene	ug/L	0.23	0.23 U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20 U
1,2,3-Trichloropropane	ug/L	0.30	0.30 U
1,4-Dichlorobenzene	ug/L	0.22	0.22 U
1,2-Dichlorobenzene	ug/L	0.18	0.18 U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8 U
Xylene (Total)	ug/L	0.53	0.53 U
1,2-Dichloroethane-d4 (S)	%	113	70-128
Toluene-d8 (S)	%	83	77-119
Bromofluorobenzene (S)	%	110	86-123

QC Batch: MSVj4022

Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B

Prepared: 05/24/2017 13:52

Associated Lab Samples: J1704958001, J1704958002, J1704958003, J1704958004, J1704958005, J1704958006, J1704958007

METHOD BLANK: 2362857

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	113	77-125
Toluene-d8 (S)	%	83	80-121
Bromofluorobenzene (S)	%	110	80-129

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1704958001	17136-MW-22AR	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958002	17136-MW-22BR	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958003	17136-MW-24A	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958004	17136-MW-24B	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958005	17136-MW-25A	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958006	17136-MW-25B	SW-846 3010A	DGMj/2999	SW-846 6020	ICMj/1537
J1704958001	17136-MW-22AR	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958002	17136-MW-22BR	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958003	17136-MW-24A	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958004	17136-MW-24B	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958005	17136-MW-25A	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958006	17136-MW-25B	SW-846 3010A	DGMj/3001	SW-846 6010	ICPj/2012
J1704958001	17136-MW-22AR			EPA 300.0	WCAj/4186
J1704958002	17136-MW-22BR			EPA 300.0	WCAj/4186
J1704958003	17136-MW-24A			EPA 300.0	WCAj/4186
J1704958004	17136-MW-24B			EPA 300.0	WCAj/4186
J1704958005	17136-MW-25A			EPA 300.0	WCAj/4186
J1704958006	17136-MW-25B			EPA 300.0	WCAj/4186
J1704958001	17136-MW-22AR			SM 2540 C	WCAj/4206
J1704958002	17136-MW-22BR			SM 2540 C	WCAj/4206
J1704958003	17136-MW-24A			SM 2540 C	WCAj/4206
J1704958004	17136-MW-24B			SM 2540 C	WCAj/4206
J1704958005	17136-MW-25A			SM 2540 C	WCAj/4206
J1704958006	17136-MW-25B			SM 2540 C	WCAj/4206
J1704958001	17136-MW-22AR	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1704958002	17136-MW-22BR	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1704958003	17136-MW-24A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1704958004	17136-MW-24B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1704958005	17136-MW-25A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1704958 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1704958006	17136-MW-25B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1704958002	17136-MW-22BR			EPA 350.1	WCAg/4976
J1704958003	17136-MW-24A			EPA 350.1	WCAg/4976
J1704958004	17136-MW-24B			EPA 350.1	WCAg/4976
J1704958006	17136-MW-25B			EPA 350.1	WCAg/4976
J1704958001	17136-MW-22AR			EPA 350.1	WCAg/4981
J1704958005	17136-MW-25A			EPA 350.1	WCAg/4981
J1704958001	17136-MW-22AR	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958002	17136-MW-22BR	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958003	17136-MW-24A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958004	17136-MW-24B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958005	17136-MW-25A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958006	17136-MW-25B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958007	17136-TripBlank	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1704958001	17136-MW-22AR	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958002	17136-MW-22BR	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958003	17136-MW-24A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958004	17136-MW-24B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958005	17136-MW-25A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958006	17136-MW-25B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1704958007	17136-TripBlank	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023

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# J1704958

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic		LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3		
<b>Tampa, Florida 33619</b>		Project Location: <i>Ho St. Clair, FL</i>												
Phone: <i>813-388-1026</i>		FDEP Facility No: 89544		PRESERVATION		HCL		HNO3		Ice		H2SO4		
FAX:		Project Name and Address:												
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>		X ADaPT <input type="checkbox"/> EQUIS		X		X		X		X		
Sampled By: <i>Soe Terry/EPs</i>														
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH														
Page <u>1</u> of <u>1</u>														

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	HCL	HNO3	Ice	H2SO4							
			DATE	TIME														
17136-MW-22AR		G	5/16/17	1515	GW	6		X	X	X	X							001
17136-MW-22BR				1435		6												002
17136-MW-24A				1225		6												003
17136-MW-24B				1200		6												004
17136-MW-25A				1345		6												005
17136-MW-25B		↓	↓	1310	GW	6		↓	X	X	X							006
17136-TripBank		G	5/16/17	0000		2		X										007

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 5 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J:9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Soe Terry</i>	5/16/17	1630	<i>Fedex</i>		
<i>Fedex</i>	5-17-17	8:30	<i>Bob Andy</i>	5-17-17	8:30

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_



Client: Waste Connections Inc.

Project name: JED Landfill

Oak Hammock

Date/Time Rcvd: 5-17-17 8:30

Log-In request number: J1704958

Received by: BA

Completed by: BA

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>5°C</u>				
Temp taken from	<input checked="" type="checkbox"/> Sample Bottle <input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST				YES	NO	NA
1.	Were custody seals on shipping container(s) intact?	/				
2.	Were custody papers properly included with samples?	/				
3.	Were custody papers properly filled out (ink, signed, match labels)?	/				
4.	Did all bottles arrive in good condition (unbroken)?	/				
5.	Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	/				
6.	Did the sample labels agree with the chain of custody?	/				
7.	Were correct bottles used for the tests indicated?	/				
8.	Were proper sample preservation techniques indicated on the label?	/				
9.	Were samples received within holding times?	/				
10.	Were all VOA vials free of the presence of air bubbles?	/				
11.	Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			/		
12.	Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	/				
13.	Was the cooler temperature less than 6°C?	/				
14.	Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	/				
15.	Was sufficient sample volume provided to perform all tests?	/				
16.	If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			/		
17.	Were all sample containers provided by AEL? (Other than Bacteriological)	/				
18.	Were samples accepted into the laboratory?	/				
19.	When necessary to split samples into other bottles, is it noted in the comments?	/				

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)





**Project No.:** J1704958  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

A. Calibration: All acceptance criteria were met.  
B. Blanks: All acceptance criteria were met.  
C. Surrogates: All acceptance criteria were met.  
D. Spikes: The spike recovery of PCE for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

The control criteria for matrix spike recoveries of xylenes for S1700735001 are not applicable. The analyte concentration in the sample was greater than 4 times the added spike concentrations, preventing accurate evaluation of the spike recovery. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.  
F. Samples: S1700735001 required reanalysis at dilution due to the presence of target analytes.  
G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---





**Project No.:** J1704958  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Duplicates:
- D. Spikes: The upper control criterion was exceeded for the following analytes in the matrix spike and matrix spike duplicate for analytical batch 4186: Nitrite and Nitrate. The analytes in question were not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected and no further corrective action was required.
- E. Serial Dilution:
- F. Samples: J1704958001 through -006 were analyzed at the lowest possible dilution due to color of the samples that could affect the instrument.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

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Advanced Environmental Laboratories, Inc  
6681 Southpoint Pkwy Jacksonville, FL32216  
Payments: P.O. Box 551580 Jacksonville, FL32255-1580

Phone: (904)363-9350  
Fax: (904)363-9354

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, May 18, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig Myers', is positioned above the typed name.

Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

Report ID: 487886 - 667407

Page 1 of 42

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**SAMPLE SUMMARY**

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705011001	17137-MW-27A	Water	5/17/2017 07:40	5/18/2017 08:30
J1705011002	17137-MW-27B	Water	5/17/2017 07:15	5/18/2017 08:30
J1705011003	17137-MW-28A	Water	5/17/2017 11:45	5/18/2017 08:30
J1705011004	17137-MW-28B	Water	5/17/2017 11:15	5/18/2017 08:30
J1705011005	17137-MW-29A	Water	5/17/2017 13:20	5/18/2017 08:30
J1705011006	17137-MW-29B	Water	5/17/2017 12:45	5/18/2017 08:30
J1705011007	17137-MW-31A	Water	5/17/2017 08:50	5/18/2017 08:30
J1705011008	17137-MW-31B	Water	5/17/2017 09:25	5/18/2017 08:30
J1705011009	17137-EB	Water	5/17/2017 10:00	5/18/2017 08:30
J1705011010	17137-TripBlank	Water	5/17/2017 00:00	5/18/2017 08:30

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011001** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-27A** Date Collected: 05/17/17 07:40

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 13:30	J
Barium	9.4		ug/L	1	2.0	0.28	5/23/2017 13:30	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/23/2017 13:30	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/23/2017 13:30	J
Chromium	4.5		ug/L	1	1.0	0.50	5/23/2017 13:30	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 13:30	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/23/2017 13:30	J
Iron	610		ug/L	1	200	30	5/23/2017 13:30	J
Lead	6.3	I	ug/L	1	7.0	1.3	5/23/2017 13:30	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 13:30	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:30	J
Silver	0.66	I	ug/L	1	4.0	0.44	5/23/2017 13:30	J
Sodium	10		mg/L	1	0.20	0.16	5/23/2017 13:30	J
Vanadium	11		ug/L	1	1.5	0.18	5/23/2017 13:30	J
Zinc	9.6	I	ug/L	1	10	2.0	5/23/2017 13:30	J
Analysis Desc: SW846 6020B Analysis,Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.18	I	ug/L	1	0.70	0.046	5/25/2017 16:11	J
Thallium	0.097	I	ug/L	1	0.20	0.057	5/25/2017 16:11	J
Analysis Desc: SW846 7470A Analysis,Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 15:08	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 20:07	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 20:07	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:07	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 20:07	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 20:07	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:07	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 20:07	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011001**  
Sample ID: **17137-MW-27A**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 07:40

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:07	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 20:07	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:07	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 20:07	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 20:07	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 20:07	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 20:07	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 20:07	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 20:07	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:07	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 20:07	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 20:07	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 20:07	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:07	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:07	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 20:07	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:07	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 20:07	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:07	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:07	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 20:07	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 20:07	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:07	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:07	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 20:07	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 20:07	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 20:07	J
Toluene	1.1	U	ug/L	1	1.0	0.23	5/24/2017 20:07	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 20:07	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 20:07	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 20:07	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:07	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 20:07	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:07	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:07	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:07	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:07	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 20:07	J
1,2-Dichloroethane-d4 (S)	112		%	1	70-128		5/24/2017 20:07	
Toluene-d8 (S)	84		%	1	77-119		5/24/2017 20:07	

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011001** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-27A** Date Collected: 05/17/17 07:40

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>106</b>		%	1	86-123		5/24/2017 20:07	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/24/2017 20:07	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/24/2017 20:07	J
1,2-Dichloroethane-d4 (S)	<b>108</b>		%	1	77-125		5/24/2017 20:07	
Toluene-d8 (S)	<b>90</b>		%	1	80-121		5/24/2017 20:07	
Bromofluorobenzene (S)	<b>100</b>		%	1	80-129		5/24/2017 20:07	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>14</b>		mg/L	1	5.0	0.50	5/18/2017 16:21	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/18/2017 16:21	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>2.9</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>110</b>		mg/L	1	10	10	5/23/2017 14:51	J

Lab ID: **J1705011002** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-27B** Date Collected: 05/17/17 07:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/23/2017 13:34	J
Barium	<b>31</b>		ug/L	1	2.0	0.28	5/23/2017 13:34	J
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	1	0.30	0.13	5/23/2017 13:34	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/23/2017 13:34	J
Chromium	<b>4.1</b>		ug/L	1	1.0	0.50	5/23/2017 13:34	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011002**  
Sample ID: **17137-MW-27B**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 07:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 13:34	J
Copper	3.4	I	ug/L	1	4.0	2.5	5/23/2017 13:34	J
Iron	620		ug/L	1	200	30	5/23/2017 13:34	J
Lead	10		ug/L	1	7.0	1.3	5/23/2017 13:34	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 13:34	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:34	J
Silver	0.65	I	ug/L	1	4.0	0.44	5/23/2017 13:34	J
Sodium	21		mg/L	1	0.20	0.16	5/23/2017 13:34	J
Vanadium	4.8		ug/L	1	1.5	0.18	5/23/2017 13:34	J
Zinc	8.6	I	ug/L	1	10	2.0	5/23/2017 13:34	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis, Total Analytical Method: SW-846 6020

Antimony	0.053	I	ug/L	1	0.70	0.046	5/25/2017 16:15	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/25/2017 16:15	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 15:11	J
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### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 20:38	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 20:38	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:38	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 20:38	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 20:38	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:38	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 20:38	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:38	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 20:38	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:38	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 20:38	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 20:38	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 20:38	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 20:38	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 20:38	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 20:38	J

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011002**  
 Sample ID: **17137-MW-27B**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 07:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:38	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 20:38	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 20:38	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 20:38	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:38	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:38	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 20:38	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:38	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 20:38	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:38	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 20:38	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 20:38	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 20:38	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:38	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:38	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 20:38	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 20:38	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 20:38	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 20:38	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 20:38	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 20:38	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 20:38	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:38	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 20:38	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 20:38	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 20:38	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 20:38	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 20:38	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 20:38	J
1,2-Dichloroethane-d4 (S)	110		%	1	70-128		5/24/2017 20:38	
Toluene-d8 (S)	83		%	1	77-119		5/24/2017 20:38	
Bromofluorobenzene (S)	107		%	1	86-123		5/24/2017 20:38	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 20:38	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 20:38	J
1,2-Dichloroethane-d4 (S)	107		%	1	77-125		5/24/2017 20:38	
Toluene-d8 (S)	88		%	1	80-121		5/24/2017 20:38	
Bromofluorobenzene (S)	100		%	1	80-129		5/24/2017 20:38	

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011002** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-27B** Date Collected: 05/17/17 07:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	35		mg/L	1	5.0	0.50	5/18/2017 16:40	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/18/2017 16:40	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.08		mg/L	1	0.01	0.01	5/23/2017 11:48	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	110		mg/L	1	10	10	5/23/2017 14:51	J

Lab ID: **J1705011003** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-28A** Date Collected: 05/17/17 11:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 13:38	J
Barium	13		ug/L	1	2.0	0.28	5/23/2017 13:38	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/23/2017 13:38	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/23/2017 13:38	J
Chromium	9.1		ug/L	1	1.0	0.50	5/23/2017 13:38	J
Cobalt	1.3	I	ug/L	1	4.0	0.60	5/23/2017 13:38	J
Copper	4.4		ug/L	1	4.0	2.5	5/23/2017 13:38	J
Iron	2200		ug/L	1	200	30	5/23/2017 13:38	J
Lead	12		ug/L	1	7.0	1.3	5/23/2017 13:38	J
Nickel	5.4	I	ug/L	1	6.5	1.1	5/23/2017 13:38	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:38	J
Silver	0.97	I	ug/L	1	4.0	0.44	5/23/2017 13:38	J
Sodium	11		mg/L	1	0.20	0.16	5/23/2017 13:38	J
Vanadium	11		ug/L	1	1.5	0.18	5/23/2017 13:38	J
Zinc	11		ug/L	1	10	2.0	5/23/2017 13:38	J

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011003** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-28A** Date Collected: 05/17/17 11:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.064</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/25/2017 16:19	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/25/2017 16:19	J

Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.037</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/23/2017 15:14	J

#### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/24/2017 21:08	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 21:08	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 21:08	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 21:08	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/24/2017 21:08	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 21:08	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 21:08	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 21:08	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/24/2017 21:08	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 21:08	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 21:08	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/24/2017 21:08	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/24/2017 21:08	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/24/2017 21:08	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/24/2017 21:08	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/24/2017 21:08	J
Benzene	<b>0.16</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/24/2017 21:08	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/24/2017 21:08	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/24/2017 21:08	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/24/2017 21:08	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/24/2017 21:08	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 21:08	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/24/2017 21:08	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 21:08	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/24/2017 21:08	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 21:08	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 21:08	J

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011003** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-28A** Date Collected: 05/17/17 11:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 21:08	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 21:08	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 21:08	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 21:08	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 21:08	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 21:08	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 21:08	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 21:08	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 21:08	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 21:08	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 21:08	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 21:08	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 21:08	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 21:08	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 21:08	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 21:08	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 21:08	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 21:08	J
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		5/24/2017 21:08	
Toluene-d8 (S)	84		%	1	77-119		5/24/2017 21:08	
Bromofluorobenzene (S)	106		%	1	86-123		5/24/2017 21:08	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 21:08	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 21:08	J
1,2-Dichloroethane-d4 (S)	108		%	1	77-125		5/24/2017 21:08	
Toluene-d8 (S)	89		%	1	80-121		5/24/2017 21:08	
Bromofluorobenzene (S)	100		%	1	80-129		5/24/2017 21:08	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	18		mg/L	1	5.0	0.50	5/18/2017 16:58	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/18/2017 16:58	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	2.7		mg/L	5	0.05	0.04	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Report ID: 487886 - 667407

Page 10 of 42

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011003**  
 Sample ID: **17137-MW-28A**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 11:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>140</b>		<b>mg/L</b>	<b>1</b>	10	10	5/23/2017 14:51	J

Lab ID: **J1705011004**  
 Sample ID: **17137-MW-28B**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 11:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B Preparation Method: SW-846 3010A  
 Analysis,Water Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/23/2017 13:42	J
Barium	<b>32</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/23/2017 13:42	J
Beryllium	<b>0.13</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.30	0.13	5/23/2017 13:42	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/23/2017 13:42	J
Chromium	<b>1.6</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/23/2017 13:42	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/23/2017 13:42	J
Copper	<b>3.7</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/23/2017 13:42	J
Iron	<b>1100</b>		<b>ug/L</b>	<b>1</b>	200	30	5/23/2017 13:42	J
Lead	<b>10</b>		<b>ug/L</b>	<b>1</b>	7.0	1.3	5/23/2017 13:42	J
Nickel	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/23/2017 13:42	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/23/2017 13:42	J
Silver	<b>0.48</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/23/2017 13:42	J
Sodium	<b>14</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/23/2017 13:42	J
Vanadium	<b>2.8</b>		<b>ug/L</b>	<b>1</b>	1.5	0.18	5/23/2017 13:42	J
Zinc	<b>9.1</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/23/2017 13:42	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis,Total Analytical Method: SW-846 6020

Antimony	<b>0.046</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/25/2017 16:23	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/25/2017 16:23	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis,Water Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/23/2017 15:17	J
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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011004** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-28B** Date Collected: 05/17/17 11:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 21:38	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 21:38	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 21:38	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 21:38	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 21:38	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 21:38	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 21:38	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 21:38	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 21:38	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 21:38	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 21:38	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 21:38	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 21:38	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 21:38	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 21:38	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 21:38	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 21:38	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 21:38	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 21:38	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 21:38	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 21:38	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 21:38	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 21:38	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 21:38	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 21:38	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 21:38	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 21:38	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 21:38	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 21:38	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 21:38	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 21:38	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 21:38	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 21:38	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 21:38	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 21:38	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 21:38	J

Report ID: 487886 - 667407

Page 12 of 42

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011004** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-28B** Date Collected: 05/17/17 11:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	<b>0.32</b>	<b>U</b>	ug/L	1	1.0	0.32	5/24/2017 21:38	J
Vinyl Acetate	<b>0.19</b>	<b>U</b>	ug/L	1	1.0	0.19	5/24/2017 21:38	J
Vinyl Chloride	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/24/2017 21:38	J
Xylene (Total)	<b>0.53</b>	<b>U</b>	ug/L	1	2.0	0.53	5/24/2017 21:38	J
cis-1,2-Dichloroethylene	<b>0.24</b>	<b>U</b>	ug/L	1	1.0	0.24	5/24/2017 21:38	J
cis-1,3-Dichloropropene	<b>0.16</b>	<b>U</b>	ug/L	1	1.0	0.16	5/24/2017 21:38	J
trans-1,2-Dichloroethylene	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/24/2017 21:38	J
trans-1,3-Dichloropropylene	<b>0.18</b>	<b>U</b>	ug/L	1	1.0	0.18	5/24/2017 21:38	J
trans-1,4-Dichloro-2-butene	<b>1.8</b>	<b>U</b>	ug/L	1	10	1.8	5/24/2017 21:38	J
1,2-Dichloroethane-d4 (S)	<b>111</b>		%	1	70-128		5/24/2017 21:38	
Toluene-d8 (S)	<b>84</b>		%	1	77-119		5/24/2017 21:38	
Bromofluorobenzene (S)	<b>108</b>		%	1	86-123		5/24/2017 21:38	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/24/2017 21:38	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/24/2017 21:38	J
1,2-Dichloroethane-d4 (S)	<b>108</b>		%	1	77-125		5/24/2017 21:38	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/24/2017 21:38	
Bromofluorobenzene (S)	<b>101</b>		%	1	80-129		5/24/2017 21:38	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	<b>31</b>		mg/L	1	5.0	0.50	5/18/2017 18:47	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/18/2017 18:47	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	<b>0.10</b>		mg/L	1	0.01	0.01	5/23/2017 11:48	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	<b>91</b>		mg/L	1	10	10	5/23/2017 14:51	J
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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011005** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-29A** Date Collected: 05/17/17 13:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 13:45	J
Barium	19		ug/L	1	2.0	0.28	5/23/2017 13:45	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/23/2017 13:45	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/23/2017 13:45	J
Chromium	2.9		ug/L	1	1.0	0.50	5/23/2017 13:45	J
Cobalt	0.99	I	ug/L	1	4.0	0.60	5/23/2017 13:45	J
Copper	3.2	I	ug/L	1	4.0	2.5	5/23/2017 13:45	J
Iron	3500		ug/L	1	200	30	5/23/2017 13:45	J
Lead	10		ug/L	1	7.0	1.3	5/23/2017 13:45	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 13:45	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:45	J
Silver	0.48	I	ug/L	1	4.0	0.44	5/23/2017 13:45	J
Sodium	8.7		mg/L	1	0.20	0.16	5/23/2017 13:45	J
Vanadium	18		ug/L	1	1.5	0.18	5/23/2017 13:45	J
Zinc	7.8	I	ug/L	1	10	2.0	5/23/2017 13:45	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.12	I	ug/L	1	0.70	0.046	5/25/2017 16:27	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/25/2017 16:27	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 15:20	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 22:08	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 22:08	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:08	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 22:08	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 22:08	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:08	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 22:08	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011005**  
Sample ID: **17137-MW-29A**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 13:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:08	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:08	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:08	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 22:08	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 22:08	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 22:08	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 22:08	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 22:08	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 22:08	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:08	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 22:08	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 22:08	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 22:08	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:08	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:08	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 22:08	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:08	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 22:08	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:08	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:08	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 22:08	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 22:08	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:08	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:08	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 22:08	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:08	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 22:08	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:08	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 22:08	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 22:08	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 22:08	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:08	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 22:08	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:08	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:08	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:08	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:08	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 22:08	J
1,2-Dichloroethane-d4 (S)	114		%	1	70-128		5/24/2017 22:08	
Toluene-d8 (S)	83		%	1	77-119		5/24/2017 22:08	

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011005**  
 Sample ID: **17137-MW-29A**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 13:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>107</b>		%	1	86-123		5/24/2017 22:08	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/24/2017 22:08	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/24/2017 22:08	J
1,2-Dichloroethane-d4 (S)	<b>110</b>		%	1	77-125		5/24/2017 22:08	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/24/2017 22:08	
Bromofluorobenzene (S)	<b>101</b>		%	1	80-129		5/24/2017 22:08	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	<b>9.7</b>		mg/L	1	5.0	0.50	5/18/2017 19:05	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/18/2017 19:05	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	<b>3.0</b>		mg/L	5	0.05	0.04	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	<b>140</b>		mg/L	1	10	10	5/23/2017 14:51	J
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Lab ID: **J1705011006**  
 Sample ID: **17137-MW-29B**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 12:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/23/2017 13:49	J
Barium	<b>75</b>		ug/L	1	2.0	0.28	5/23/2017 13:49	J
Beryllium	<b>0.22</b>	<b>I</b>	ug/L	1	0.30	0.13	5/23/2017 13:49	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/23/2017 13:49	J
Chromium	<b>1.2</b>		ug/L	1	1.0	0.50	5/23/2017 13:49	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011006**  
Sample ID: **17137-MW-29B**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 12:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	I	ug/L	1	4.0	0.60	5/23/2017 13:49	J
Copper	3.1	I	ug/L	1	4.0	2.5	5/23/2017 13:49	J
Iron	2300		ug/L	1	200	30	5/23/2017 13:49	J
Lead	9.3		ug/L	1	7.0	1.3	5/23/2017 13:49	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 13:49	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:49	J
Silver	0.56	I	ug/L	1	4.0	0.44	5/23/2017 13:49	J
Sodium	21		mg/L	1	0.20	0.16	5/23/2017 13:49	J
Vanadium	2.7		ug/L	1	1.5	0.18	5/23/2017 13:49	J
Zinc	6.8	I	ug/L	1	10	2.0	5/23/2017 13:49	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis, Total Analytical Method: SW-846 6020

Antimony	0.048	I	ug/L	1	0.70	0.046	5/25/2017 16:39	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/25/2017 16:39	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 15:23	J
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### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 22:39	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/24/2017 22:39	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:39	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 22:39	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/24/2017 22:39	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:39	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/24/2017 22:39	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:39	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:39	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:39	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 22:39	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 22:39	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 22:39	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 22:39	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 22:39	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 22:39	J

Report ID: 487886 - 667407

Page 17 of 42

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011006**  
Sample ID: **17137-MW-29B**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 12:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:39	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 22:39	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 22:39	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 22:39	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:39	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:39	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 22:39	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:39	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 22:39	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:39	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 22:39	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 22:39	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 22:39	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:39	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:39	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 22:39	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:39	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 22:39	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 22:39	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 22:39	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 22:39	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 22:39	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:39	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 22:39	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 22:39	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 22:39	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 22:39	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 22:39	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 22:39	J
1,2-Dichloroethane-d4 (S)	115		%	1	70-128		5/24/2017 22:39	
Toluene-d8 (S)	82		%	1	77-119		5/24/2017 22:39	
Bromofluorobenzene (S)	108		%	1	86-123		5/24/2017 22:39	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 22:39	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 22:39	J
1,2-Dichloroethane-d4 (S)	112		%	1	77-125		5/24/2017 22:39	
Toluene-d8 (S)	88		%	1	80-121		5/24/2017 22:39	
Bromofluorobenzene (S)	101		%	1	80-129		5/24/2017 22:39	

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011006** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-29B** Date Collected: 05/17/17 12:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	30		mg/L	1	5.0	0.50	5/18/2017 19:23	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/18/2017 19:23	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.10		mg/L	1	0.01	0.01	5/23/2017 11:48	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	160		mg/L	1	10	10	5/23/2017 14:51	J

Lab ID: **J1705011007** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-31A** Date Collected: 05/17/17 08:50

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B Analysis,Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/23/2017 13:52	J
Barium	16		ug/L	1	2.0	0.28	5/23/2017 13:52	J
Beryllium	0.33		ug/L	1	0.30	0.13	5/23/2017 13:52	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/23/2017 13:52	J
Chromium	1.3		ug/L	1	1.0	0.50	5/23/2017 13:52	J
Cobalt	1.3	I	ug/L	1	4.0	0.60	5/23/2017 13:52	J
Copper	3.0	I	ug/L	1	4.0	2.5	5/23/2017 13:52	J
Iron	6400		ug/L	1	200	30	5/23/2017 13:52	J
Lead	11		ug/L	1	7.0	1.3	5/23/2017 13:52	J
Nickel	1.3	I	ug/L	1	6.5	1.1	5/23/2017 13:52	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 13:52	J
Silver	0.65	I	ug/L	1	4.0	0.44	5/23/2017 13:52	J
Sodium	13		mg/L	1	0.20	0.16	5/23/2017 13:52	J
Vanadium	0.73	I	ug/L	1	1.5	0.18	5/23/2017 13:52	J
Zinc	7.0	I	ug/L	1	10	2.0	5/23/2017 13:52	J

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011007** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-31A** Date Collected: 05/17/17 08:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.088</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	5/25/2017 16:44	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	5/25/2017 16:44	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/23/2017 15:26	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/24/2017 23:09	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 23:09	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 23:09	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 23:09	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/24/2017 23:09	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 23:09	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/24/2017 23:09	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 23:09	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/24/2017 23:09	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/24/2017 23:09	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/24/2017 23:09	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/24/2017 23:09	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/24/2017 23:09	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/24/2017 23:09	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/24/2017 23:09	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/24/2017 23:09	J
Benzene	<b>0.16</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/24/2017 23:09	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/24/2017 23:09	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/24/2017 23:09	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/24/2017 23:09	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/24/2017 23:09	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 23:09	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/24/2017 23:09	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 23:09	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/24/2017 23:09	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/24/2017 23:09	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/24/2017 23:09	J

Report ID: 487886 - 667407

Page 20 of 42

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011007** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-31A** Date Collected: 05/17/17 08:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 23:09	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 23:09	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 23:09	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 23:09	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 23:09	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 23:09	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 23:09	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 23:09	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 23:09	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 23:09	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 23:09	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 23:09	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 23:09	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 23:09	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 23:09	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 23:09	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 23:09	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 23:09	J
1,2-Dichloroethane-d4 (S)	115		%	1	70-128		5/24/2017 23:09	
Toluene-d8 (S)	82		%	1	77-119		5/24/2017 23:09	
Bromofluorobenzene (S)	111		%	1	86-123		5/24/2017 23:09	

Analysis Desc: 8260B SIM Analysis, Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/24/2017 23:09	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/24/2017 23:09	J
1,2-Dichloroethane-d4 (S)	111		%	1	77-125		5/24/2017 23:09	
Toluene-d8 (S)	88		%	1	80-121		5/24/2017 23:09	
Bromofluorobenzene (S)	104		%	1	80-129		5/24/2017 23:09	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	27		mg/L	1	5.0	0.50	5/18/2017 19:41	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/18/2017 19:41	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.7		mg/L	5	0.05	0.04	5/23/2017 13:55	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Report ID: 487886 - 667407

Page 21 of 42

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011007**  
 Sample ID: **17137-MW-31A**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 08:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>84</b>		<b>mg/L</b>	<b>1</b>	10	10	5/23/2017 14:51	J

Lab ID: **J1705011008**  
 Sample ID: **17137-MW-31B**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 09:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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**METALS**

Analysis Desc: SW846 6010B  
 Analysis,Water

Preparation Method: SW-846 3010A  
 Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/23/2017 13:56	J
Barium	<b>75</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/23/2017 13:56	J
Beryllium	<b>0.37</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/23/2017 13:56	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/23/2017 13:56	J
Chromium	<b>9.4</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/23/2017 13:56	J
Cobalt	<b>0.80</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/23/2017 13:56	J
Copper	<b>4.6</b>		<b>ug/L</b>	<b>1</b>	4.0	2.5	5/23/2017 13:56	J
Iron	<b>1900</b>		<b>ug/L</b>	<b>1</b>	200	30	5/23/2017 13:56	J
Lead	<b>18</b>		<b>ug/L</b>	<b>1</b>	7.0	1.3	5/23/2017 13:56	J
Nickel	<b>1.5</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/23/2017 13:56	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/23/2017 13:56	J
Silver	<b>0.88</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/23/2017 13:56	J
Sodium	<b>11</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/23/2017 13:56	J
Vanadium	<b>13</b>		<b>ug/L</b>	<b>1</b>	1.5	0.18	5/23/2017 13:56	J
Zinc	<b>7.3</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	10	2.0	5/23/2017 13:56	J

Analysis Desc: SW846 6010B  
 Analysis,Dissolved

Preparation Method: SW-846 3005A  
 Analytical Method: SW-846 6010,Dissolved

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/26/2017 11:02	J
Barium	<b>25</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/26/2017 11:02	J
Beryllium	<b>0.13</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.30	0.13	5/26/2017 11:02	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/26/2017 11:02	J
Chromium	<b>0.94</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.50	5/26/2017 11:02	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/26/2017 11:02	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/26/2017 11:02	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011008** Date Received: 05/18/17 08:30 Matrix: Water  
Sample ID: **17137-MW-31B** Date Collected: 05/17/17 09:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Iron	<b>1500</b>		ug/L	1	200	38	5/26/2017 11:02	J
Lead	<b>1.3</b>	U	ug/L	1	7.0	1.3	5/26/2017 11:02	J
Nickel	<b>1.1</b>	U	ug/L	1	6.5	1.1	5/26/2017 11:02	J
Selenium	<b>6.8</b>	U	ug/L	1	20	6.8	5/26/2017 11:02	J
Silver	<b>0.44</b>	U	ug/L	1	4.0	0.44	5/26/2017 11:02	J
Sodium	<b>12</b>		mg/L	1	0.20	0.026	5/26/2017 11:02	J
Vanadium	<b>1.5</b>	I,V	ug/L	1	1.5	0.18	5/26/2017 11:02	J
Zinc	<b>12</b>		ug/L	1	10	2.0	5/26/2017 11:02	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis, Total

Analytical Method: SW-846 6020

Antimony	<b>0.15</b>	I	ug/L	1	0.70	0.046	5/25/2017 16:48	J
Thallium	<b>0.057</b>	U	ug/L	1	0.20	0.057	5/25/2017 16:48	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Water

Analytical Method: SW-846 7470A

Mercury	<b>0.062</b>	I	ug/L	1	0.10	0.011	5/23/2017 15:29	J
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### METALS, DISSOLVED

Analysis Desc: SW846 6020B Preparation Method: SW-846 3005A  
Analysis, Dissolved

Analytical Method: SW-846 6020

Antimony	<b>0.046</b>	U	ug/L	1	0.70	0.046	5/30/2017 17:45	J
Thallium	<b>0.057</b>	U	ug/L	1	0.20	0.057	5/30/2017 17:45	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Dissolved

Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	U	ug/L	1	0.10	0.011	5/23/2017 15:38	J
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### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	<b>0.26</b>	U	ug/L	1	1.0	0.26	5/24/2017 23:39	J
1,1,1-Trichloroethane	<b>0.22</b>	U	ug/L	1	1.0	0.22	5/24/2017 23:39	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	U	ug/L	1	1.0	0.20	5/24/2017 23:39	J
1,1,2-Trichloroethane	<b>0.30</b>	U	ug/L	1	1.0	0.30	5/24/2017 23:39	J
1,1-Dichloroethane	<b>0.14</b>	U	ug/L	1	1.0	0.14	5/24/2017 23:39	J
1,1-Dichloroethylene	<b>0.18</b>	U	ug/L	1	1.0	0.18	5/24/2017 23:39	J
1,2,3-Trichloropropane	<b>0.30</b>	U	ug/L	1	1.0	0.30	5/24/2017 23:39	J

Report ID: 487886 - 667407

Page 23 of 42

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011008**  
Sample ID: **17137-MW-31B**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 09:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 23:39	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/24/2017 23:39	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/24/2017 23:39	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/24/2017 23:39	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/24/2017 23:39	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/24/2017 23:39	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/24/2017 23:39	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/24/2017 23:39	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/24/2017 23:39	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 23:39	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/24/2017 23:39	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/24/2017 23:39	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/24/2017 23:39	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/24/2017 23:39	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/24/2017 23:39	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/24/2017 23:39	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/24/2017 23:39	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 23:39	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/24/2017 23:39	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/24/2017 23:39	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/24/2017 23:39	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/24/2017 23:39	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 23:39	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/24/2017 23:39	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/24/2017 23:39	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 23:39	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/24/2017 23:39	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/24/2017 23:39	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/24/2017 23:39	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/24/2017 23:39	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/24/2017 23:39	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/24/2017 23:39	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/24/2017 23:39	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/24/2017 23:39	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/24/2017 23:39	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/24/2017 23:39	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/24/2017 23:39	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/24/2017 23:39	J
1,2-Dichloroethane-d4 (S)	113		%	1	70-128		5/24/2017 23:39	
Toluene-d8 (S)	83		%	1	77-119		5/24/2017 23:39	

Report ID: 487886 - 667407

Page 24 of 42

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011008** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-MW-31B** Date Collected: 05/17/17 09:25

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>110</b>		%	1	86-123		5/24/2017 23:39	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/24/2017 23:39	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/24/2017 23:39	J
1,2-Dichloroethane-d4 (S)	<b>110</b>		%	1	77-125		5/24/2017 23:39	
Toluene-d8 (S)	<b>89</b>		%	1	80-121		5/24/2017 23:39	
Bromofluorobenzene (S)	<b>103</b>		%	1	80-129		5/24/2017 23:39	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>23</b>		mg/L	1	5.0	0.50	5/18/2017 19:59	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/18/2017 19:59	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>0.32</b>		mg/L	1	0.01	0.01	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>160</b>		mg/L	1	10	10	5/23/2017 14:51	J

Lab ID: **J1705011009** Date Received: 05/18/17 08:30 Matrix: Water  
 Sample ID: **17137-EB** Date Collected: 05/17/17 10:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/23/2017 14:00	J
Barium	<b>0.28</b>	<b>U</b>	ug/L	1	2.0	0.28	5/23/2017 14:00	J
Beryllium	<b>0.13</b>	<b>U</b>	ug/L	1	0.30	0.13	5/23/2017 14:00	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/23/2017 14:00	J
Chromium	<b>0.50</b>	<b>U</b>	ug/L	1	1.0	0.50	5/23/2017 14:00	J

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011009**  
 Sample ID: **17137-EB**

Date Received: 05/18/17 08:30 Matrix: Water  
 Date Collected: 05/17/17 10:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/23/2017 14:00	J
Copper	4.3		ug/L	1	4.0	2.5	5/23/2017 14:00	J
Iron	30	U	ug/L	1	200	30	5/23/2017 14:00	J
Lead	17		ug/L	1	7.0	1.3	5/23/2017 14:00	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/23/2017 14:00	J
Selenium	6.8	U	ug/L	1	20	6.8	5/23/2017 14:00	J
Silver	0.90	I	ug/L	1	4.0	0.44	5/23/2017 14:00	J
Sodium	0.16	U	mg/L	1	0.20	0.16	5/23/2017 14:00	J
Vanadium	0.18	U	ug/L	1	1.5	0.18	5/23/2017 14:00	J
Zinc	4.7	I	ug/L	1	10	2.0	5/23/2017 14:00	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
 Analysis, Total Analytical Method: SW-846 6020

Antimony	0.046	U	ug/L	1	0.70	0.046	5/25/2017 16:52	J
Thallium	0.057	U	ug/L	1	0.20	0.057	5/25/2017 16:52	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
 Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/23/2017 15:41	J
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#### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 00:10	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/25/2017 00:10	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:10	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 00:10	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/25/2017 00:10	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:10	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/25/2017 00:10	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:10	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/25/2017 00:10	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:10	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/25/2017 00:10	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/25/2017 00:10	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/25/2017 00:10	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/25/2017 00:10	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/25/2017 00:10	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 00:10	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011009**  
Sample ID: **17137-EB**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 10:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted		Analyzed	Lab
					PQL	MDL		
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:10	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 00:10	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 00:10	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 00:10	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:10	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:10	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 00:10	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:10	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 00:10	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:10	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:10	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 00:10	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 00:10	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:10	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:10	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 00:10	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 00:10	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 00:10	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 00:10	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 00:10	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 00:10	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 00:10	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:10	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 00:10	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:10	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:10	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:10	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:10	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 00:10	J
1,2-Dichloroethane-d4 (S)	114		%	1	70-128		5/25/2017 00:10	
Toluene-d8 (S)	82		%	1	77-119		5/25/2017 00:10	
Bromofluorobenzene (S)	104		%	1	86-123		5/25/2017 00:10	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 00:10	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 00:10	J
1,2-Dichloroethane-d4 (S)	111		%	1	77-125		5/25/2017 00:10	
Toluene-d8 (S)	88		%	1	80-121		5/25/2017 00:10	
Bromofluorobenzene (S)	97		%	1	80-129		5/25/2017 00:10	

Report ID: 487886 - 667407

Page 27 of 42

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011009**

Date Received: 05/18/17 08:30 Matrix: Water

Sample ID: **17137-EB**

Date Collected: 05/17/17 10:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	<b>0.50</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	5.0	0.50	5/18/2017 20:17	J
Nitrate	<b>0.050</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	0.50	0.050	5/18/2017 20:17	J
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	<b>0.02</b>		<b>mg/L</b>	<b>1</b>	0.01	0.01	5/23/2017 13:55	G
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	<b>10</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	10	10	5/23/2017 14:51	J

Lab ID: **J1705011010**

Date Received: 05/18/17 08:30 Matrix: Water

Sample ID: **17137-TripBlank**

Date Collected: 05/17/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/25/2017 00:40	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 00:40	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 00:40	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 00:40	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/25/2017 00:40	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 00:40	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/25/2017 00:40	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/25/2017 00:40	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/25/2017 00:40	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/25/2017 00:40	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/25/2017 00:40	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/25/2017 00:40	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/25/2017 00:40	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/25/2017 00:40	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/25/2017 00:40	J

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## ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011010**  
Sample ID: **17137-TripBlank**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/25/2017 00:40	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:40	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/25/2017 00:40	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/25/2017 00:40	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/25/2017 00:40	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:40	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:40	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/25/2017 00:40	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:40	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 00:40	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:40	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/25/2017 00:40	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/25/2017 00:40	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/25/2017 00:40	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:40	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:40	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/25/2017 00:40	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 00:40	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/25/2017 00:40	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/25/2017 00:40	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/25/2017 00:40	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/25/2017 00:40	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/25/2017 00:40	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:40	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/25/2017 00:40	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/25/2017 00:40	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/25/2017 00:40	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/25/2017 00:40	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/25/2017 00:40	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/25/2017 00:40	J
1,2-Dichloroethane-d4 (S)	113		%	1	70-128		5/25/2017 00:40	
Toluene-d8 (S)	84		%	1	77-119		5/25/2017 00:40	
Bromofluorobenzene (S)	103		%	1	86-123		5/25/2017 00:40	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/25/2017 00:40	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/25/2017 00:40	J
1,2-Dichloroethane-d4 (S)	109		%	1	77-125		5/25/2017 00:40	
Toluene-d8 (S)	90		%	1	80-121		5/25/2017 00:40	

Report ID: 487886 - 667407

Page 29 of 42

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### ANALYTICAL RESULTS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705011010**  
Sample ID: **17137-TripBlank**

Date Received: 05/18/17 08:30 Matrix: Water  
Date Collected: 05/17/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>96</b>		%	<b>1</b>	80-129		5/25/2017 00:40	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: DGMj/3007 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/19/2017 09:40  
Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

METHOD BLANK: 2358292

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: WCAj/4193 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705011001, J1705011002, J1705011003

METHOD BLANK: 2358414

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: WCAj/4194 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705011004, J1705011005, J1705011006, J1705011007, J1705011008, J1705011009

METHOD BLANK: 2358418

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: DGMj/3012 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/22/2017 08:00  
Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2358495

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.18	0.18 U
Zinc	ug/L	2.0	2.0 U

QC Batch: DGMj/3022

Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A

Prepared: 05/23/2017 09:50

Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

METHOD BLANK: 2360675

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: DGMj/3026

Analysis Method: SW-846 6010,Dissolved

QC Batch Method: SW-846 3010A

Prepared: 05/25/2017 11:20

Associated Lab Samples: J1705011008

METHOD BLANK: 2361029

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U

Report ID: 487886 - 667407

Page 33 of 42

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2361029

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	38	38 U
Sodium	mg/L	0.028	0.026 I
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.38	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: WCAj/4226 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

METHOD BLANK: 2361164

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: WCAg/4976 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1705011002, J1705011004, J1705011006

METHOD BLANK: 2361386

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Ammonia (N)	mg/L	0.01	0.01 U

QC Batch: WCAg/4981 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: J1705011001, J1705011003, J1705011005, J1705011007, J1705011008, J1705011009

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2361687

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Ammonia (N)	mg/L	0.01	0.01 U

QC Batch: DGMj/3028

Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A

Prepared: 05/25/2017 03:30

Associated Lab Samples: J1705011008

METHOD BLANK: 2362317

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: MSVj/4020

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 05/24/2017 13:52

Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

METHOD BLANK: 2362852

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Chloromethane	ug/L	0.21	0.21 U
Vinyl Chloride	ug/L	0.20	0.20 U
Bromomethane	ug/L	0.24	0.24 U
Chloroethane	ug/L	0.33	0.33 U
Trichlorofluoromethane	ug/L	0.32	0.32 U
Acetone	ug/L	2.1	2.1 U
1,1-Dichloroethylene	ug/L	0.18	0.18 U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16 U
Acrylonitrile	ug/L	1.1	1.1 U
Methylene Chloride	ug/L	2.5	2.5 U
Carbon Disulfide	ug/L	0.21	0.21 U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20 U
1,1-Dichloroethane	ug/L	0.14	0.14 U
Vinyl Acetate	ug/L	0.19	0.19 U
2-Butanone (MEK)	ug/L	0.43	0.43 U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24 U
Bromochloromethane	ug/L	0.17	0.17 U
Chloroform	ug/L	0.18	0.18 U

Report ID: 487886 - 667407

Page 35 of 42

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2362852

Parameter	Units	Blank Result	Reporting Limit Qualifiers
1,2-Dichloroethane	ug/L	0.23	0.23 U
1,1,1-Trichloroethane	ug/L	0.22	0.22 U
Carbon Tetrachloride	ug/L	0.36	0.36 U
Benzene	ug/L	0.16	0.16 U
Dibromomethane	ug/L	0.26	0.26 U
1,2-Dichloropropane	ug/L	0.20	0.20 U
Trichloroethene	ug/L	0.29	0.29 U
Bromodichloromethane	ug/L	0.25	0.25 U
cis-1,3-Dichloropropene	ug/L	0.16	0.16 U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47 U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18 U
1,1,2-Trichloroethane	ug/L	0.30	0.30 U
Toluene	ug/L	0.23	0.23 U
2-Hexanone	ug/L	0.44	0.44 U
Dibromochloromethane	ug/L	0.33	0.33 U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36 U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26 U
Chlorobenzene	ug/L	0.21	0.21 U
Ethylbenzene	ug/L	0.24	0.24 U
Bromoform	ug/L	0.43	0.43 U
Styrene	ug/L	0.23	0.23 U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20 U
1,2,3-Trichloropropane	ug/L	0.30	0.30 U
1,4-Dichlorobenzene	ug/L	0.22	0.22 U
1,2-Dichlorobenzene	ug/L	0.18	0.18 U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8 U
Xylene (Total)	ug/L	0.53	0.53 U
1,2-Dichloroethane-d4 (S)	%	113	70-128
Toluene-d8 (S)	%	83	77-119
Bromofluorobenzene (S)	%	110	86-123

QC Batch: MSVj/4022

Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B

Prepared: 05/24/2017 13:52

Associated Lab Samples: J1705011001, J1705011002, J1705011003, J1705011004, J1705011005, J1705011006, J1705011007, J1705011008,

METHOD BLANK: 2362857

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	113	77-125

Report ID: 487886 - 667407

Page 36 of 42

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### QUALITY CONTROL DATA

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

---

METHOD BLANK: 2362857

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Toluene-d8 (S)	%	83	80-121
Bromofluorobenzene (S)	%	110	80-129

### QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

---

#### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- J4 Estimated Result
- V Method Blank Contamination

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705011001	17137-MW-27A	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011002	17137-MW-27B	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011003	17137-MW-28A	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011004	17137-MW-28B	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011005	17137-MW-29A	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011006	17137-MW-29B	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011007	17137-MW-31A	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011008	17137-MW-31B	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011009	17137-EB	SW-846 3010A	DGMj/3007	SW-846 6020	ICMj/1546
J1705011001	17137-MW-27A			EPA 300.0	WCAj/4193
J1705011002	17137-MW-27B			EPA 300.0	WCAj/4193
J1705011003	17137-MW-28A			EPA 300.0	WCAj/4193
J1705011004	17137-MW-28B			EPA 300.0	WCAj/4194
J1705011005	17137-MW-29A			EPA 300.0	WCAj/4194
J1705011006	17137-MW-29B			EPA 300.0	WCAj/4194
J1705011007	17137-MW-31A			EPA 300.0	WCAj/4194
J1705011008	17137-MW-31B			EPA 300.0	WCAj/4194
J1705011009	17137-EB			EPA 300.0	WCAj/4194
J1705011001	17137-MW-27A	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011002	17137-MW-27B	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011003	17137-MW-28A	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011004	17137-MW-28B	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011005	17137-MW-29A	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011006	17137-MW-29B	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011007	17137-MW-31A	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011008	17137-MW-31B	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011009	17137-EB	SW-846 3010A	DGMj/3012	SW-846 6010	ICPj/2014
J1705011001	17137-MW-27A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011002	17137-MW-27B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705011003	17137-MW-28A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011004	17137-MW-28B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011005	17137-MW-29A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011006	17137-MW-29B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011007	17137-MW-31A	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011008	17137-MW-31B	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011009	17137-EB	SW-846 7470A	DGMj/3022	SW-846 7470A	CVAj/1450
J1705011008	17137-MW-31B	SW-846 3005A	DGMj/3026	SW-846 6010,Dissolved	ICPj/2024
J1705011001	17137-MW-27A			SM 2540 C	WCAj/4226
J1705011002	17137-MW-27B			SM 2540 C	WCAj/4226
J1705011003	17137-MW-28A			SM 2540 C	WCAj/4226
J1705011004	17137-MW-28B			SM 2540 C	WCAj/4226
J1705011005	17137-MW-29A			SM 2540 C	WCAj/4226
J1705011006	17137-MW-29B			SM 2540 C	WCAj/4226
J1705011007	17137-MW-31A			SM 2540 C	WCAj/4226
J1705011008	17137-MW-31B			SM 2540 C	WCAj/4226
J1705011009	17137-EB			SM 2540 C	WCAj/4226
J1705011002	17137-MW-27B			EPA 350.1	WCAg/4976
J1705011004	17137-MW-28B			EPA 350.1	WCAg/4976
J1705011006	17137-MW-29B			EPA 350.1	WCAg/4976
J1705011001	17137-MW-27A			EPA 350.1	WCAg/4981
J1705011003	17137-MW-28A			EPA 350.1	WCAg/4981
J1705011005	17137-MW-29A			EPA 350.1	WCAg/4981
J1705011007	17137-MW-31A			EPA 350.1	WCAg/4981
J1705011008	17137-MW-31B			EPA 350.1	WCAg/4981
J1705011009	17137-EB			EPA 350.1	WCAg/4981
J1705011008	17137-MW-31B	SW-846 3005A	DGMj/3028	SW-846 6020	ICMj/1550

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705011 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705011001	17137-MW-27A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011002	17137-MW-27B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011003	17137-MW-28A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011004	17137-MW-28B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011005	17137-MW-29A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011006	17137-MW-29B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011007	17137-MW-31A	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011008	17137-MW-31B	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011009	17137-EB	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011010	17137-TripBlank	SW-846 5030B	MSVj/4020	SW-846 8260B	MSVj/4021
J1705011001	17137-MW-27A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011002	17137-MW-27B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011003	17137-MW-28A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011004	17137-MW-28B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011005	17137-MW-29A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011006	17137-MW-29B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011007	17137-MW-31A	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011008	17137-MW-31B	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011009	17137-EB	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023
J1705011010	17137-TripBlank	SW-846 5030B	MSVj/4022	SW-846 8260B (SIM)	MSVj/4023

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- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954
- Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32309 •
- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.634.1111

# J1705011

597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (F/K/A OAK HAMMOCK DISPOSAL)</b>				BOTTLE SIZE & TYPE						LABORATORY I.D. NUMBER						
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:				40 mL Vials		500 mL Plastic		500 mL Plastic			250 mL Plastic					
Tampa, Florida 33619		Project Location: <i>St Cloud, FL</i>				ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na			C/NO3/TDS		NH3		<i>500ml Plastic</i>	
Phone: <i>813-388-1026</i>		FDEP Facility No: 89544																
FAX:		Project Name and Address:																
Contact: <b>Kirk Wills</b>																		
Sampled By: <i>Joe Terry / EPS</i>																		
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH		Special Instructions: <b>Jax Profile: 31172</b>																
Page <u>1</u> of <u>1</u>		<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUIS																
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION											
			DATE	TIME				HCL	HNO3	Ice	H2SO4	HNO3						
17137-MW-27A		G	5/17/17	0710	GW	6		X	X	X	X					001		
17137-MW-27B				0715		6										002		
17137-MW-28A				1145		6										003		
17137-MW-28B				1115		6										004		
17137-MW-29A				1320		6										005		
17137-MW-29B				1245		6										006		
17137-MW-31A				0850	↓	6										007		
17137-MW-31B				0925	GW	7			↓	↓	↓		X			008		
17137-EB		↓		1000	H <sub>2</sub> O	6		↓	X	X	X					009		
17137-Trip Blank		G	5/17/17	0000	H <sub>2</sub> O	2		X								010		

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S=(H2SO4) N=(HNO3) T=(Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 5 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Joe Terry</i>	5/17/17	14:30	<i>FedEx</i>		
<i>FedEx</i>	5/18/17	8:30	<i>Bob O'Neil</i>	5/18/17	8:30

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site Address: \_\_\_\_\_





Client: Waste Connections

Project name: JED Landfill

Date/Time Rcvd: 5-18-17 8:30

Log-In request number: J1705011

Received by: BA

Completed by: BA

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>5°C</u>				
Temp taken from	<input checked="" type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?	/		
2. Were custody papers properly included with samples?	/		
3. Were custody papers properly filled out (ink, signed, match labels)?	/		
4. Did all bottles arrive in good condition (unbroken)?	/		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	/		
6. Did the sample labels agree with the chain of custody?	/		
7. Were correct bottles used for the tests indicated?	/		
8. Were proper sample preservation techniques indicated on the label?	/		
9. Were samples received within holding times?	/		
10. Were all VOA vials free of the presence of air bubbles?	/		
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			/
12. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	/		
13. Was the cooler temperature less than 6°C?	/		
14. Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	/		
15. Was sufficient sample volume provided to perform all tests?	/		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			/
17. Were all sample containers provided by AEL? (Other than Bacteriological)	/		
18. Were samples accepted into the laboratory?	/		
19. When necessary to split samples into other bottles, is it noted in the comments?	/		

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)



**Project No.:** J1705011  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: SW-846 8260B  
Preparation: SW-846 5030B

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

A. Calibration: All acceptance criteria were met.  
B. Blanks: All acceptance criteria were met.  
C. Surrogates: All acceptance criteria were met.  
D. Spikes: The spike recovery of PCE for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion. The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

The control criteria for matrix spike recoveries of xylenes for S1700735001 are not applicable. The analyte concentration in the sample was greater than 4 times the added spike concentrations, preventing accurate evaluation of the spike recovery. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.  
F. Samples: S1700735001 required reanalysis at dilution due to the presence of target analytes.  
G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---





**Project No.:** J1705011  
**Client Name:** Waste Connections  
**ProjectID:** J.E.D LANDFILL (F/K/A OAK HAMM)

**I. Receipt**

No Exceptions were encountered.

**II. Holding Times**

Preparation: All holding times were met.  
Analysis: All holding times were met.

**III. Method**

Analysis: EPA 300.0  
Preparation: None

**IV. Preparation**

Sample preparation proceeded normally.

**V. Analysis**

- A. Calibration: All acceptance criteria were met.
- B. Blanks: All acceptance criteria were met.
- C. Duplicates:
- D. Spikes: The matrix spike recoveries of Fluoride, Chloride, Nitrate, and Sulfate for J1705026001 were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The affected sample is qualified to indicate matrix interference.
- E. Serial Diluion:
- F. Samples: Sample analyses proceeded normally.
- G. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Advanced Environmental Laboratories, Inc. and by the client, both technically and for completeness, except for the conditions detailed above. The Quality Assurance Officer, or designee, as verified by the following signature, has authorized release of the data contained in this data package:

---

June 15, 2017

Kirk Wills  
Waste Connections  
5135 Madison Avenue  
Tampa, FL 33619

RE: Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM

Dear Kirk Wills:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, May 25, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Craig Myers - Client Services Manager  
CMyers@AELLab.com

Enclosures

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### SAMPLE SUMMARY

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
J1705283001	17144-MW-23A	Water	5/24/2017 07:00	5/25/2017 08:30
J1705283002	17144-MW-23B	Water	5/24/2017 06:30	5/25/2017 08:30
J1705283003	17144-CW-1A	Water	5/24/2017 08:05	5/25/2017 08:30
J1705283004	17144-CW-2A	Water	5/24/2017 09:15	5/25/2017 08:30
J1705283005	17144-CW-3A	Water	5/24/2017 10:00	5/25/2017 08:30
J1705283006	17144-Trip Blank	Water	5/24/2017 00:00	5/25/2017 08:30

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283001** Date Received: 05/25/17 08:30 Matrix: Water  
Sample ID: **17144-MW-23A** Date Collected: 05/24/17 07:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/31/2017 14:31	J
Barium	7.6		ug/L	1	2.0	0.28	5/31/2017 14:31	J
Beryllium	0.13	U	ug/L	1	0.30	0.13	5/31/2017 14:31	J
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/31/2017 14:31	J
Chromium	1.7		ug/L	1	1.0	0.50	5/31/2017 14:31	J
Cobalt	0.60	U	ug/L	1	4.0	0.60	5/31/2017 14:31	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/31/2017 14:31	J
Iron	190	I	ug/L	1	200	30	5/31/2017 14:31	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/31/2017 14:31	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/31/2017 14:31	J
Selenium	6.8	U	ug/L	1	20	6.8	5/31/2017 14:31	J
Silver	1.0	I	ug/L	1	4.0	0.44	5/31/2017 14:31	J
Sodium	21		mg/L	1	0.20	0.16	5/31/2017 14:31	J
Vanadium	3.2	V	ug/L	1	1.5	0.18	5/31/2017 14:31	J
Zinc	7.3	I	ug/L	1	10	2.0	5/31/2017 14:31	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.068	I	ug/L	1	0.70	0.046	6/6/2017 13:19	J
Thallium	0.057	U	ug/L	1	0.20	0.057	6/6/2017 13:19	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 13:01	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 15:43	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 15:43	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:43	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 15:43	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 15:43	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:43	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 15:43	J

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283001**  
Sample ID: **17144-MW-23A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 07:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:43	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:43	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:43	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 15:43	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 15:43	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 15:43	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 15:43	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 15:43	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 15:43	J
Benzene	0.86	I	ug/L	1	1.0	0.16	5/30/2017 15:43	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 15:43	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 15:43	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 15:43	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:43	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:43	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 15:43	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:43	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 15:43	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:43	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 15:43	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 15:43	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 15:43	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:43	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 15:43	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 15:43	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:43	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 15:43	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 15:43	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 15:43	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 15:43	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 15:43	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:43	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 15:43	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 15:43	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 15:43	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 15:43	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 15:43	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 15:43	J
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		5/30/2017 15:43	
Toluene-d8 (S)	100		%	1	77-119		5/30/2017 15:43	

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283001** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-MW-23A** Date Collected: 05/24/17 07:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>101</b>		%	1	86-123		5/30/2017 15:43	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/30/2017 15:43	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/30/2017 15:43	J
1,2-Dichloroethane-d4 (S)	<b>104</b>		%	1	77-125		5/30/2017 15:43	
Toluene-d8 (S)	<b>84</b>		%	1	80-121		5/30/2017 15:43	
Bromofluorobenzene (S)	<b>94</b>		%	1	80-129		5/30/2017 15:43	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>600</b>		mg/L	10	50	5.0	5/25/2017 13:46	J
Nitrate	<b>0.50</b>	<b>U</b>	mg/L	10	5.0	0.50	5/25/2017 13:46	J
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>3.0</b>		mg/L	5	0.05	0.04	6/6/2017 13:18	G
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	<b>320</b>		mg/L	1	10	10	5/31/2017 13:11	J

Lab ID: **J1705283002** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-MW-23B** Date Collected: 05/24/17 06:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A						
		Analytical Method: SW-846 6010						
Arsenic	<b>8.5</b>	<b>U</b>	ug/L	1	10	8.5	5/31/2017 14:35	J
Barium	<b>100</b>		ug/L	1	2.0	0.28	5/31/2017 14:35	J
Beryllium	<b>0.59</b>		ug/L	1	0.30	0.13	5/31/2017 14:35	J
Cadmium	<b>0.32</b>	<b>U</b>	ug/L	1	0.60	0.32	5/31/2017 14:35	J
Chromium	<b>0.86</b>	<b>I</b>	ug/L	1	1.0	0.50	5/31/2017 14:35	J

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283002**  
Sample ID: **17144-MW-23B**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 06:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cobalt	0.94	I	ug/L	1	4.0	0.60	5/31/2017 14:35	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/31/2017 14:35	J
Iron	3100		ug/L	1	200	30	5/31/2017 14:35	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/31/2017 14:35	J
Nickel	1.1	U	ug/L	1	6.5	1.1	5/31/2017 14:35	J
Selenium	6.8	U	ug/L	1	20	6.8	5/31/2017 14:35	J
Silver	1.2	I	ug/L	1	4.0	0.44	5/31/2017 14:35	J
Sodium	92		mg/L	1	0.20	0.16	5/31/2017 14:35	J
Vanadium	5.8	V	ug/L	1	1.5	0.18	5/31/2017 14:35	J
Zinc	6.4	I	ug/L	1	10	2.0	5/31/2017 14:35	J

Analysis Desc: SW846 6020B Preparation Method: SW-846 3010A  
Analysis, Total Analytical Method: SW-846 6020

Antimony	0.068	I	ug/L	1	0.70	0.046	6/6/2017 13:23	J
Thallium	0.057	U	ug/L	1	0.20	0.057	6/6/2017 13:23	J

Analysis Desc: SW846 7470A Preparation Method: SW-846 7470A  
Analysis, Water Analytical Method: SW-846 7470A

Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 13:04	J
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### VOLATILES

Analysis Desc: 8260B Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 16:09	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 16:09	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:09	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 16:09	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 16:09	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 16:09	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 16:09	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 16:09	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 16:09	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:09	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 16:09	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 16:09	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 16:09	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 16:09	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 16:09	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 16:09	J

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283002**  
Sample ID: **17144-MW-23B**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 06:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 16:09	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 16:09	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 16:09	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 16:09	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 16:09	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 16:09	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 16:09	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 16:09	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 16:09	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 16:09	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 16:09	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 16:09	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 16:09	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 16:09	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 16:09	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 16:09	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 16:09	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 16:09	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 16:09	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 16:09	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 16:09	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 16:09	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:09	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 16:09	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 16:09	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 16:09	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:09	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 16:09	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 16:09	J
1,2-Dichloroethane-d4 (S)	109		%	1	70-128		5/30/2017 16:09	
Toluene-d8 (S)	101		%	1	77-119		5/30/2017 16:09	
Bromofluorobenzene (S)	101		%	1	86-123		5/30/2017 16:09	

Analysis Desc: 8260B SIM Analysis,  
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 16:09	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 16:09	J
1,2-Dichloroethane-d4 (S)	105		%	1	77-125		5/30/2017 16:09	
Toluene-d8 (S)	85		%	1	80-121		5/30/2017 16:09	
Bromofluorobenzene (S)	95		%	1	80-129		5/30/2017 16:09	

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283002** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-MW-23B** Date Collected: 05/24/17 06:30

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>WET CHEMISTRY</b>									
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0							
Chloride	59		mg/L	10	50	5.0	5/25/2017 14:05	J	
Nitrate	0.50	U	mg/L	10	5.0	0.50	5/25/2017 14:05	J	
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1							
Ammonia (N)	2.9		mg/L	5	0.05	0.04	6/6/2017 13:18	G	
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C							
Total Dissolved Solids	600		mg/L	1	10	10	5/31/2017 13:11	J	

Lab ID: **J1705283003** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-CW-1A** Date Collected: 05/24/17 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
<b>METALS</b>									
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A							
		Analytical Method: SW-846 6010							
Arsenic	120		ug/L	1	10	8.5	5/31/2017 14:39	J	
Barium	95		ug/L	1	2.0	0.28	5/31/2017 14:39	J	
Beryllium	0.21	I	ug/L	1	0.30	0.13	5/31/2017 14:39	J	
Cadmium	0.32	U	ug/L	1	0.60	0.32	5/31/2017 14:39	J	
Chromium	15		ug/L	1	1.0	0.50	5/31/2017 14:39	J	
Cobalt	2.8	I	ug/L	1	4.0	0.60	5/31/2017 14:39	J	
Copper	2.5	U	ug/L	1	4.0	2.5	5/31/2017 14:39	J	
Iron	19000		ug/L	1	200	30	5/31/2017 14:39	J	
Lead	1.3	U	ug/L	1	7.0	1.3	5/31/2017 14:39	J	
Nickel	1.8	I	ug/L	1	6.5	1.1	5/31/2017 14:39	J	
Selenium	6.8	U	ug/L	1	20	6.8	5/31/2017 14:39	J	
Silver	1.1	I	ug/L	1	4.0	0.44	5/31/2017 14:39	J	
Sodium	38		mg/L	1	0.20	0.16	5/31/2017 14:39	J	
Vanadium	9.4	V	ug/L	1	1.5	0.18	5/31/2017 14:39	J	
Zinc	2.0	U	ug/L	1	10	2.0	5/31/2017 14:39	J	

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283003**  
Sample ID: **17144-CW-1A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 08:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.21</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	6/6/2017 13:27	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	6/6/2017 13:27	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 13:08	J

### VOLATILES

Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.26	5/30/2017 16:35	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 16:35	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 16:35	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 16:35	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.14	5/30/2017 16:35	J
1,1-Dichloroethylene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 16:35	J
1,2,3-Trichloropropane	<b>0.30</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.30	5/30/2017 16:35	J
1,2-Dichlorobenzene	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 16:35	J
1,2-Dichloroethane	<b>0.23</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.23	5/30/2017 16:35	J
1,2-Dichloropropane	<b>0.20</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.20	5/30/2017 16:35	J
1,4-Dichlorobenzene	<b>0.22</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.22	5/30/2017 16:35	J
2-Butanone (MEK)	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.43	5/30/2017 16:35	J
2-Hexanone	<b>0.44</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	0.44	5/30/2017 16:35	J
4-Methyl-2-pentanone (MIBK)	<b>0.47</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.47	5/30/2017 16:35	J
Acetone	<b>2.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	5.0	2.1	5/30/2017 16:35	J
Acrylonitrile	<b>1.1</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	1.1	5/30/2017 16:35	J
Benzene	<b>0.16</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.16	5/30/2017 16:35	J
Bromochloromethane	<b>0.17</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.17	5/30/2017 16:35	J
Bromodichloromethane	<b>0.25</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.25	5/30/2017 16:35	J
Bromoform	<b>0.43</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.43	5/30/2017 16:35	J
Bromomethane	<b>0.24</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.24	5/30/2017 16:35	J
Carbon Disulfide	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 16:35	J
Carbon Tetrachloride	<b>0.36</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.36	5/30/2017 16:35	J
Chlorobenzene	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 16:35	J
Chloroethane	<b>0.33</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.33	5/30/2017 16:35	J
Chloroform	<b>0.18</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.18	5/30/2017 16:35	J
Chloromethane	<b>0.21</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	1.0	0.21	5/30/2017 16:35	J

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283003** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-CW-1A** Date Collected: 05/24/17 08:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 16:35	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 16:35	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 16:35	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 16:35	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 16:35	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 16:35	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 16:35	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 16:35	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 16:35	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 16:35	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 16:35	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:35	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 16:35	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 16:35	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 16:35	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 16:35	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 16:35	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 16:35	J
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		5/30/2017 16:35	
Toluene-d8 (S)	101		%	1	77-119		5/30/2017 16:35	
Bromofluorobenzene (S)	100		%	1	86-123		5/30/2017 16:35	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
 Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 16:35	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 16:35	J
1,2-Dichloroethane-d4 (S)	102		%	1	77-125		5/30/2017 16:35	
Toluene-d8 (S)	85		%	1	80-121		5/30/2017 16:35	
Bromofluorobenzene (S)	94		%	1	80-129		5/30/2017 16:35	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	25		mg/L	1	5.0	0.50	5/25/2017 14:23	J
Nitrate	0.050	U	mg/L	1	0.50	0.050	5/25/2017 14:23	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	4.2		mg/L	10	0.10	0.08	6/6/2017 13:18	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283003**  
Sample ID: **17144-CW-1A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 08:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Total Dissolved Solids	<b>710</b>		<b>mg/L</b>	<b>1</b>	10	10	5/31/2017 13:11	J

Lab ID: **J1705283004**  
Sample ID: **17144-CW-2A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 09:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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#### METALS

Analysis Desc: SW846 6010B  
Analysis, Water

Preparation Method: SW-846 3010A  
Analytical Method: SW-846 6010

Arsenic	<b>8.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	10	8.5	5/31/2017 15:03	J
Barium	<b>57</b>		<b>ug/L</b>	<b>1</b>	2.0	0.28	5/31/2017 15:03	J
Beryllium	<b>0.33</b>		<b>ug/L</b>	<b>1</b>	0.30	0.13	5/31/2017 15:03	J
Cadmium	<b>0.32</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.60	0.32	5/31/2017 15:03	J
Chromium	<b>6.9</b>		<b>ug/L</b>	<b>1</b>	1.0	0.50	5/31/2017 15:03	J
Cobalt	<b>0.60</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	0.60	5/31/2017 15:03	J
Copper	<b>2.5</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	4.0	2.5	5/31/2017 15:03	J
Iron	<b>400</b>		<b>ug/L</b>	<b>1</b>	200	30	5/31/2017 15:03	J
Lead	<b>1.3</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	7.0	1.3	5/31/2017 15:03	J
Nickel	<b>4.6</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	6.5	1.1	5/31/2017 15:03	J
Selenium	<b>6.8</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	20	6.8	5/31/2017 15:03	J
Silver	<b>1.8</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	4.0	0.44	5/31/2017 15:03	J
Sodium	<b>130</b>		<b>mg/L</b>	<b>1</b>	0.20	0.16	5/31/2017 15:03	J
Vanadium	<b>21</b>	<b>V</b>	<b>ug/L</b>	<b>1</b>	1.5	0.18	5/31/2017 15:03	J
Zinc	<b>11</b>		<b>ug/L</b>	<b>1</b>	10	2.0	5/31/2017 15:03	J

Analysis Desc: SW846 6020B  
Analysis, Total

Preparation Method: SW-846 3010A  
Analytical Method: SW-846 6020

Antimony	<b>0.54</b>	<b>I</b>	<b>ug/L</b>	<b>1</b>	0.70	0.046	6/6/2017 13:45	J
Thallium	<b>0.057</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.20	0.057	6/6/2017 13:45	J

Analysis Desc: SW846 7470A  
Analysis, Water

Preparation Method: SW-846 7470A  
Analytical Method: SW-846 7470A

Mercury	<b>0.011</b>	<b>U</b>	<b>ug/L</b>	<b>1</b>	0.10	0.011	5/31/2017 13:11	J
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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283004** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-CW-2A** Date Collected: 05/24/17 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 17:01	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 17:01	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:01	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 17:01	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 17:01	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:01	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 17:01	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:01	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:01	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:01	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 17:01	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 17:01	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 17:01	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 17:01	J
Acetone	9.1		ug/L	1	5.0	2.1	5/30/2017 17:01	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 17:01	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:01	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 17:01	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 17:01	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 17:01	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:01	J
Carbon Disulfide	1.4		ug/L	1	1.0	0.21	5/30/2017 17:01	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:01	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:01	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:01	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:01	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:01	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:01	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 17:01	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:01	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:01	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 17:01	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:01	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:01	J
Toluene	7.0		ug/L	1	1.0	0.23	5/30/2017 17:01	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 17:01	J

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283004** Date Received: 05/25/17 08:30 Matrix: Water  
Sample ID: **17144-CW-2A** Date Collected: 05/24/17 09:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 17:01	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 17:01	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:01	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 17:01	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:01	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:01	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:01	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:01	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 17:01	J
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		5/30/2017 17:01	
Toluene-d8 (S)	103		%	1	77-119		5/30/2017 17:01	
Bromofluorobenzene (S)	100		%	1	86-123		5/30/2017 17:01	

Analysis Desc: 8260B SIM Analysis, Water Preparation Method: SW-846 5030B  
Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.11	U	ug/L	1	0.20	0.11	5/30/2017 17:01	J
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.10	0.020	5/30/2017 17:01	J
1,2-Dichloroethane-d4 (S)	101		%	1	77-125		5/30/2017 17:01	
Toluene-d8 (S)	87		%	1	80-121		5/30/2017 17:01	
Bromofluorobenzene (S)	93		%	1	80-129		5/30/2017 17:01	

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water Analytical Method: EPA 300.0

Chloride	710		mg/L	10	50	5.0	6/5/2017 14:41	J
Nitrate	0.50	U	mg/L	10	5.0	0.50	6/5/2017 14:41	J

Analysis Desc: Ammonia,E350.1,Water Analytical Method: EPA 350.1

Ammonia (N)	12		mg/L	20	0.20	0.16	6/6/2017 13:18	G
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Analysis Desc: Tot Dissolved Solids,SM2540C Analytical Method: SM 2540 C

Total Dissolved Solids	950		mg/L	1	10	10	5/31/2017 13:11	J
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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283005** Date Received: 05/25/17 08:30 Matrix: Water  
 Sample ID: **17144-CW-3A** Date Collected: 05/24/17 10:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Arsenic	8.5	U	ug/L	1	10	8.5	5/31/2017 15:06	J
Barium	82		ug/L	1	2.0	0.28	5/31/2017 15:06	J
Beryllium	1.5		ug/L	1	0.30	0.13	5/31/2017 15:06	J
Cadmium	0.34	I	ug/L	1	0.60	0.32	5/31/2017 15:06	J
Chromium	7.0		ug/L	1	1.0	0.50	5/31/2017 15:06	J
Cobalt	1.7	I	ug/L	1	4.0	0.60	5/31/2017 15:06	J
Copper	2.5	U	ug/L	1	4.0	2.5	5/31/2017 15:06	J
Iron	17000		ug/L	1	200	30	5/31/2017 15:06	J
Lead	1.3	U	ug/L	1	7.0	1.3	5/31/2017 15:06	J
Nickel	2.7	I	ug/L	1	6.5	1.1	5/31/2017 15:06	J
Selenium	6.8	U	ug/L	1	20	6.8	5/31/2017 15:06	J
Silver	1.2	I	ug/L	1	4.0	0.44	5/31/2017 15:06	J
Sodium	200		mg/L	1	0.20	0.16	5/31/2017 15:06	J
Vanadium	13	V	ug/L	1	1.5	0.18	5/31/2017 15:06	J
Zinc	2.0	U	ug/L	1	10	2.0	5/31/2017 15:06	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.070	I	ug/L	1	0.70	0.046	6/6/2017 13:49	J
Thallium	0.057	U	ug/L	1	0.20	0.057	6/6/2017 13:49	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.011	U	ug/L	1	0.10	0.011	5/31/2017 13:14	J
<b>VOLATILES</b>								
Analysis Desc: 8260B Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 17:28	J
1,1,1-Trichloroethane	0.22	U	ug/L	1	1.0	0.22	5/30/2017 17:28	J
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:28	J
1,1,2-Trichloroethane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 17:28	J
1,1-Dichloroethane	0.14	U	ug/L	1	1.0	0.14	5/30/2017 17:28	J
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:28	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 17:28	J

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283005**  
Sample ID: **17144-CW-3A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 10:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:28	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:28	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:28	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 17:28	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 17:28	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 17:28	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 17:28	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 17:28	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 17:28	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:28	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 17:28	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 17:28	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 17:28	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:28	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:28	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:28	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:28	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:28	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:28	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:28	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:28	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 17:28	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:28	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:28	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 17:28	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:28	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:28	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:28	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 17:28	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 17:28	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 17:28	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:28	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 17:28	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:28	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:28	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:28	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:28	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 17:28	J
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		5/30/2017 17:28	
Toluene-d8 (S)	83		%	1	77-119		5/30/2017 17:28	

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283005**  
Sample ID: **17144-CW-3A**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 10:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	<b>101</b>		%	1	86-123		5/30/2017 17:28	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/30/2017 17:28	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/30/2017 17:28	J
1,2-Dichloroethane-d4 (S)	<b>103</b>		%	1	77-125		5/30/2017 17:28	
Toluene-d8 (S)	<b>88</b>		%	1	80-121		5/30/2017 17:28	
Bromofluorobenzene (S)	<b>95</b>		%	1	80-129		5/30/2017 17:28	

#### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	<b>33</b>		mg/L	1	5.0	0.50	5/25/2017 14:59	J
Nitrate	<b>0.050</b>	<b>U</b>	mg/L	1	0.50	0.050	5/25/2017 14:59	J

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	<b>11</b>		mg/L	20	0.20	0.16	6/6/2017 13:18	G
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	<b>1300</b>		mg/L	1	10	10	5/31/2017 13:11	J
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Lab ID: **J1705283006**

Date Received: 05/25/17 08:30 Matrix: Water

Sample ID: **17144-Trip Blank**

Date Collected: 05/24/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B Analysis, Water		Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	<b>0.26</b>	<b>U</b>	ug/L	1	1.0	0.26	5/30/2017 17:54	J
1,1,1-Trichloroethane	<b>0.22</b>	<b>U</b>	ug/L	1	1.0	0.22	5/30/2017 17:54	J
1,1,2,2-Tetrachloroethane	<b>0.20</b>	<b>U</b>	ug/L	1	1.0	0.20	5/30/2017 17:54	J
1,1,2-Trichloroethane	<b>0.30</b>	<b>U</b>	ug/L	1	1.0	0.30	5/30/2017 17:54	J
1,1-Dichloroethane	<b>0.14</b>	<b>U</b>	ug/L	1	1.0	0.14	5/30/2017 17:54	J

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## ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283006**  
Sample ID: **17144-Trip Blank**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted	Adjusted	Analyzed	Lab
					PQL	MDL		
1,1-Dichloroethylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:54	J
1,2,3-Trichloropropane	0.30	U	ug/L	1	1.0	0.30	5/30/2017 17:54	J
1,2-Dichlorobenzene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:54	J
1,2-Dichloroethane	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:54	J
1,2-Dichloropropane	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:54	J
1,4-Dichlorobenzene	0.22	U	ug/L	1	1.0	0.22	5/30/2017 17:54	J
2-Butanone (MEK)	0.43	U	ug/L	1	5.0	0.43	5/30/2017 17:54	J
2-Hexanone	0.44	U	ug/L	1	5.0	0.44	5/30/2017 17:54	J
4-Methyl-2-pentanone (MIBK)	0.47	U	ug/L	1	1.0	0.47	5/30/2017 17:54	J
Acetone	2.1	U	ug/L	1	5.0	2.1	5/30/2017 17:54	J
Acrylonitrile	1.1	U	ug/L	1	10	1.1	5/30/2017 17:54	J
Benzene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:54	J
Bromochloromethane	0.17	U	ug/L	1	1.0	0.17	5/30/2017 17:54	J
Bromodichloromethane	0.25	U	ug/L	1	1.0	0.25	5/30/2017 17:54	J
Bromoform	0.43	U	ug/L	1	1.0	0.43	5/30/2017 17:54	J
Bromomethane	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:54	J
Carbon Disulfide	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:54	J
Carbon Tetrachloride	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:54	J
Chlorobenzene	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:54	J
Chloroethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:54	J
Chloroform	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:54	J
Chloromethane	0.21	U	ug/L	1	1.0	0.21	5/30/2017 17:54	J
Dibromochloromethane	0.33	U	ug/L	1	1.0	0.33	5/30/2017 17:54	J
Dibromomethane	0.26	U	ug/L	1	1.0	0.26	5/30/2017 17:54	J
Ethylbenzene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:54	J
Iodomethane (Methyl Iodide)	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:54	J
Methylene Chloride	2.5	U	ug/L	1	5.0	2.5	5/30/2017 17:54	J
Styrene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:54	J
Tetrachloroethylene (PCE)	0.36	U	ug/L	1	1.0	0.36	5/30/2017 17:54	J
Toluene	0.23	U	ug/L	1	1.0	0.23	5/30/2017 17:54	J
Trichloroethene	0.29	U	ug/L	1	1.0	0.29	5/30/2017 17:54	J
Trichlorofluoromethane	0.32	U	ug/L	1	1.0	0.32	5/30/2017 17:54	J
Vinyl Acetate	0.19	U	ug/L	1	1.0	0.19	5/30/2017 17:54	J
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:54	J
Xylene (Total)	0.53	U	ug/L	1	2.0	0.53	5/30/2017 17:54	J
cis-1,2-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	5/30/2017 17:54	J
cis-1,3-Dichloropropene	0.16	U	ug/L	1	1.0	0.16	5/30/2017 17:54	J
trans-1,2-Dichloroethylene	0.20	U	ug/L	1	1.0	0.20	5/30/2017 17:54	J
trans-1,3-Dichloropropylene	0.18	U	ug/L	1	1.0	0.18	5/30/2017 17:54	J
trans-1,4-Dichloro-2-butene	1.8	U	ug/L	1	10	1.8	5/30/2017 17:54	J

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### ANALYTICAL RESULTS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID: **J1705283006**  
Sample ID: **17144-Trip Blank**

Date Received: 05/25/17 08:30 Matrix: Water  
Date Collected: 05/24/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	<b>105</b>		%	1	70-128		5/30/2017 17:54	
Toluene-d8 (S)	<b>103</b>		%	1	77-119		5/30/2017 17:54	
Bromofluorobenzene (S)	<b>101</b>		%	1	86-123		5/30/2017 17:54	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	<b>0.11</b>	<b>U</b>	ug/L	1	0.20	0.11	5/30/2017 17:54	J
Ethylene Dibromide (EDB)	<b>0.020</b>	<b>U</b>	ug/L	1	0.10	0.020	5/30/2017 17:54	J
1,2-Dichloroethane-d4 (S)	<b>102</b>		%	1	77-125		5/30/2017 17:54	
Toluene-d8 (S)	<b>87</b>		%	1	80-121		5/30/2017 17:54	
Bromofluorobenzene (S)	<b>95</b>		%	1	80-129		5/30/2017 17:54	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

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### PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

### LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)

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### QUALITY CONTROL DATA

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

QC Batch: WCAj/4249 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

METHOD BLANK: 2364143

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>WET CHEMISTRY</b>			
Chloride	mg/L	0.50	0.50 U
Nitrate	mg/L	0.050	0.050 U

QC Batch: DGMj/3040 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/30/2017 09:15  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

METHOD BLANK: 2364433

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Silver	ug/L	0.44	0.44 U
Arsenic	ug/L	8.5	8.5 U
Barium	ug/L	0.28	0.28 U
Beryllium	ug/L	0.13	0.13 U
Cadmium	ug/L	0.32	0.32 U
Cobalt	ug/L	0.60	0.60 U
Chromium	ug/L	0.50	0.50 U
Copper	ug/L	2.5	2.5 U
Iron	ug/L	30	30 U
Sodium	mg/L	0.16	0.16 U
Nickel	ug/L	1.1	1.1 U
Lead	ug/L	1.3	1.3 U
Selenium	ug/L	6.8	6.8 U
Vanadium	ug/L	0.26	0.18 I
Zinc	ug/L	2.0	2.0 U

QC Batch: DGMj/3042 Analysis Method: SW-846 6020  
QC Batch Method: SW-846 3010A Prepared: 05/30/2017 09:15  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

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### QUALITY CONTROL DATA

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2364447

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U

QC Batch: DGMj/3048 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/31/2017 09:11  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

METHOD BLANK: 2366540

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>METALS</b>			
Mercury	ug/L	0.011	0.011 U

QC Batch: MSVj/4073 Analysis Method: SW-846 8260B (SIM)  
QC Batch Method: SW-846 5030B Prepared: 05/30/2017 09:37  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005, J1705283006

METHOD BLANK: 2366565

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			
Ethylene Dibromide (EDB)	ug/L	0.020	0.020 U
1,2-Dibromo-3-Chloropropane	ug/L	0.11	0.11 U
1,2-Dichloroethane-d4 (S)	%	112	77-125
Toluene-d8 (S)	%	100	80-121
Bromofluorobenzene (S)	%	104	80-129

QC Batch: MSVj/4075 Analysis Method: SW-846 8260B  
QC Batch Method: SW-846 5030B Prepared: 05/30/2017 09:37  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005, J1705283006

METHOD BLANK: 2366569

Parameter	Units	Blank Result	Reporting Limit Qualifiers
<b>VOLATILES</b>			

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### QUALITY CONTROL DATA

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2366569

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloromethane	ug/L	0.21	0.21	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.24	0.24	U
Chloroethane	ug/L	0.33	0.33	U
Trichlorofluoromethane	ug/L	0.32	0.32	U
Acetone	ug/L	2.1	2.1	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Iodomethane (Methyl Iodide)	ug/L	0.16	0.16	U
Acrylonitrile	ug/L	1.1	1.1	U
Methylene Chloride	ug/L	2.5	2.5	U
Carbon Disulfide	ug/L	0.21	0.21	U
trans-1,2-Dichloroethylene	ug/L	0.20	0.20	U
1,1-Dichloroethane	ug/L	0.14	0.14	U
Vinyl Acetate	ug/L	0.19	0.19	U
2-Butanone (MEK)	ug/L	0.43	0.43	U
cis-1,2-Dichloroethylene	ug/L	0.24	0.24	U
Bromochloromethane	ug/L	0.17	0.17	U
Chloroform	ug/L	0.18	0.18	U
1,2-Dichloroethane	ug/L	0.23	0.23	U
1,1,1-Trichloroethane	ug/L	0.22	0.22	U
Carbon Tetrachloride	ug/L	0.36	0.36	U
Benzene	ug/L	0.16	0.16	U
Dibromomethane	ug/L	0.26	0.26	U
1,2-Dichloropropane	ug/L	0.20	0.20	U
Trichloroethene	ug/L	0.29	0.29	U
Bromodichloromethane	ug/L	0.25	0.25	U
cis-1,3-Dichloropropene	ug/L	0.16	0.16	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.47	0.47	U
trans-1,3-Dichloropropylene	ug/L	0.18	0.18	U
1,1,2-Trichloroethane	ug/L	0.30	0.30	U
Toluene	ug/L	0.23	0.23	U
2-Hexanone	ug/L	0.44	0.44	U
Dibromochloromethane	ug/L	0.33	0.33	U
Tetrachloroethylene (PCE)	ug/L	0.36	0.36	U
1,1,1,2-Tetrachloroethane	ug/L	0.26	0.26	U
Chlorobenzene	ug/L	0.21	0.21	U
Ethylbenzene	ug/L	0.24	0.24	U
Bromoform	ug/L	0.43	0.43	U
Styrene	ug/L	0.23	0.23	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.30	0.30	U
1,4-Dichlorobenzene	ug/L	0.22	0.22	U
1,2-Dichlorobenzene	ug/L	0.18	0.18	U
trans-1,4-Dichloro-2-butene	ug/L	1.8	1.8	U
Xylene (Total)	ug/L	0.53	0.53	U

Report ID: 489284 - 695725

Page 22 of 27

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### QUALITY CONTROL DATA

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

METHOD BLANK: 2366569

Parameter	Units	Blank Result	Reporting Limit Qualifiers
1,2-Dichloroethane-d4 (S)	%	112	70-128
Toluene-d8 (S)	%	100	77-119
Bromofluorobenzene (S)	%	104	86-123

QC Batch: WCAj/4277 Analysis Method: SM 2540 C  
QC Batch Method: SM 2540 C Prepared:  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

METHOD BLANK: 2366878

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

QC Batch: WCAg/5084 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: J1705283001, J1705283002, J1705283003, J1705283004, J1705283005

METHOD BLANK: 2372084

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Ammonia (N)	mg/L	0.01	0.01 U

### QUALITY CONTROL DATA QUALIFIERS

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

#### QUALITY CONTROL PARAMETER QUALIFIERS

- U 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.
- V Method Blank Contamination

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705283001	17144-MW-23A			EPA 300.0	WCAj/4249
J1705283002	17144-MW-23B			EPA 300.0	WCAj/4249
J1705283003	17144-CW-1A			EPA 300.0	WCAj/4249
J1705283004	17144-CW-2A			EPA 300.0	WCAj/4249
J1705283005	17144-CW-3A			EPA 300.0	WCAj/4249
J1705283001	17144-MW-23A	SW-846 3010A	DGMj/3040	SW-846 6010	ICPj/2029
J1705283002	17144-MW-23B	SW-846 3010A	DGMj/3040	SW-846 6010	ICPj/2029
J1705283003	17144-CW-1A	SW-846 3010A	DGMj/3040	SW-846 6010	ICPj/2029
J1705283004	17144-CW-2A	SW-846 3010A	DGMj/3040	SW-846 6010	ICPj/2029
J1705283005	17144-CW-3A	SW-846 3010A	DGMj/3040	SW-846 6010	ICPj/2029
J1705283001	17144-MW-23A	SW-846 3010A	DGMj/3042	SW-846 6020	ICMj/1556
J1705283002	17144-MW-23B	SW-846 3010A	DGMj/3042	SW-846 6020	ICMj/1556
J1705283003	17144-CW-1A	SW-846 3010A	DGMj/3042	SW-846 6020	ICMj/1556
J1705283004	17144-CW-2A	SW-846 3010A	DGMj/3042	SW-846 6020	ICMj/1556
J1705283005	17144-CW-3A	SW-846 3010A	DGMj/3042	SW-846 6020	ICMj/1556
J1705283001	17144-MW-23A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705283002	17144-MW-23B	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705283003	17144-CW-1A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705283004	17144-CW-2A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705283005	17144-CW-3A	SW-846 7470A	DGMj/3048	SW-846 7470A	CVAj/1458
J1705283001	17144-MW-23A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283002	17144-MW-23B	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283003	17144-CW-1A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283004	17144-CW-2A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283005	17144-CW-3A	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283006	17144-Trip Blank	SW-846 5030B	MSVj/4073	SW-846 8260B (SIM)	MSVj/4074
J1705283001	17144-MW-23A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705283002	17144-MW-23B	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Workorder: J1705283 J.E.D LANDFILL (F/K/A OAK HAMM)

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
J1705283003	17144-CW-1A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705283004	17144-CW-2A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705283005	17144-CW-3A	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705283006	17144-Trip Blank	SW-846 5030B	MSVj/4075	SW-846 8260B	MSVj/4076
J1705283001	17144-MW-23A			SM 2540 C	WCAj/4277
J1705283002	17144-MW-23B			SM 2540 C	WCAj/4277
J1705283003	17144-CW-1A			SM 2540 C	WCAj/4277
J1705283004	17144-CW-2A			SM 2540 C	WCAj/4277
J1705283005	17144-CW-3A			SM 2540 C	WCAj/4277
J1705283001	17144-MW-23A			EPA 350.1	WCAg/5084
J1705283002	17144-MW-23B			EPA 350.1	WCAg/5084
J1705283003	17144-CW-1A			EPA 350.1	WCAg/5084
J1705283004	17144-CW-2A			EPA 350.1	WCAg/5084
J1705283005	17144-CW-3A			EPA 350.1	WCAg/5084

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- Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954.
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- Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.0010 • Fax 813.630.4327

# J1705283

597

Client Name: <b>Waste Connections, Inc.</b>		Project Name: <b>J.E.D LANDFILL (FIK/A OAK HAMMOCK DISPOSAL)</b>		BOTTLE SIZE & TYPE														LABORATORY I.D. NUMBER
Address: <b>5135 Madison Avenue</b>		P.O. Number/Project Number:		40 mL Vials		500 mL Plastic		500 mL Plastic		250 mL Plastic								
<b>Tampa, Florida 33619</b>		Project Location: <u>St. Cloud</u>		ANALYSIS REQUIRED		App I VOAs+EDB/DBCP		App I Metals+Fe,Hg,Na		C/NO3/TDS		NH3						
Phone: <u>813-388-1026</u>		FDEP Facility No: <b>89544</b>																
FAX:		Project Name and Address:																
Contact: <b>Kirk Wills</b>		Special Instructions: <b>Jax Profile: 31172</b>																
Sampled By: <u>Joe Terry/EPs</u>				<input checked="" type="checkbox"/> ADaPT <input type="checkbox"/> EQUiS														
Turn Around Time: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> RUSH																		
Page <u>1</u> of <u>1</u>																		

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESER-VATION											
			DATE	TIME				HCL	HNO3	Ice	H2SO4							
17144-MW-23A		G	5-24-17	0700	GW	6		X	X	X	X							001
17144-MW-23B				0630														002
17144-CW-1A				0805														003
17144-CW-2A				0915														004
17144-CW-3A				1000	GW	6		X	X	X	X							005
17144-Trip Blank		G	5-24-17	0000	H <sub>2</sub> O	2		X										006

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice  Yes  No  Temp taken from sample  Temp from blank  Where required, pH checked Temperature when received 4 (in degrees celcius)

DCN: AD-051 Form last revised 08/18/2014 Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A / G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

Relinquished by:			Received by:		
1	Date	Time	Date	Time	
1	<u>Joe Terry</u>	<u>5-24-17</u>	<u>1230</u>	<u>F. Clark</u>	
2	<u>F. Clark</u>	<u>5-25-17</u>	<u>0830</u>	<u>By Job</u>	<u>5-25-17</u>
3					
4					

**FOR DRINKING WATER USE:**

(When PWS Information not otherwise supplied) PWS ID: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Supplier of Water: \_\_\_\_\_

Site-Address: \_\_\_\_\_





Client: Waste Connections

Project name: J.E.D. Landfill

Date/Time Rcvd: 5-25-17 0830

Log-In request number: JH05283

Received by: By

Completed by: By

**Cooler/Shipping Information:**

Courier:  AEL  Client  UPS  Blue Streak  FedEx  AES  ASAP  Other (describe): \_\_\_\_\_

Type:  Cooler  Box  Other (describe) \_\_\_\_\_

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID					
Temp (°C)	<u>4</u>				
Temp taken from	<input type="checkbox"/> Sample Bottle <input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler	<input type="checkbox"/> Sample Bottle <input type="checkbox"/> Cooler
Temp measured with	<input checked="" type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):	<input type="checkbox"/> IR gun S/N 9333779 <input type="checkbox"/> Thermometer (enter ID):

**Other Information:**

Any discrepancies should be explained in the "Comments" section below.

CHECKLIST		YES	NO	NA
1.	Were custody seals on shipping container(s) intact?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2.	Were custody papers properly included with samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Were custody papers properly filled out (ink, signed, match labels)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Did all bottles arrive in good condition (unbroken)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Did the sample labels agree with the chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Were correct bottles used for the tests indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Were proper sample preservation techniques indicated on the label?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Were samples received within holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Were all VOA vials free of the presence of air bubbles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Was the cooler temperature less than 6°C?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Where pH preservation is required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Was sufficient sample volume provided to perform all tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Were all sample containers provided by AEL? (Other than Bacteriological)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Were samples accepted into the laboratory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	When necessary to split samples into other bottles, is it noted in the comments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:** (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)