

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522 900(2)

Form Title Ground Water Monitoring Report

Effective Date _____

DEP Application No. _____

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

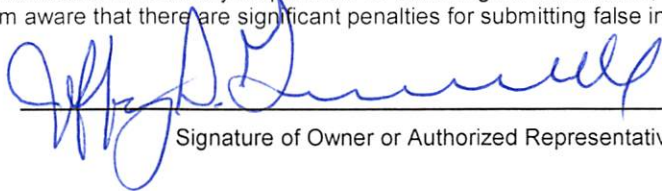
PART I GENERAL INFORMATION

- (1) Facility Name Southeast County Landfill
Address 15960 C. R. 672
City Lithia, FL Zip 33503
Telephone Number (813) 671-7707
- (2) The GMS Identification Number 4029C30075
- (3) DEP Permit Number 35435-022-SO/01
- (4) Authorized Representative Name Jeffry Greenwell, P.E., Manager, Public Utilities Department.
Address 332 North Falkenburg Road
City Tampa, Florida Zip 33619
Telephone Number (813) 612-7757
- (5) Type of Discharge Groundwater – Potential Only
- (6) Method of Discharge Landfill

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 submitting false information, including the possibility of fine and imprisonment.

Date: 11/22/19



Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization Comp QAP # _____

Analytical Lab Comp QAP # /HRS Certification # _____

*Comp QAP # /HRS Certification # _____

Lab Name Advanced Environmental Laboratories, Inc.

Address 9610 Princess Palm Avenue, Tampa, FL 33619

Phone Number (813) 630-9616



**Hillsborough
County Florida**

PUBLIC UTILITIES

PO Box 1110
Tampa, FL 33601-1110

November 22, 2019

Mr. Steve Morgan
Florida Department of Environmental Protection
Waste Permitting Section
13051 Telecom Parkway
Temple Terrace, FL 33637

**SUBJECT: Southeast County Landfill
Solid Waste Operations Permit No. 35435-022-SO/01
Water Quality Monitoring Report – August 2019**

Dear Mr. Morgan:

In accordance with Solid Waste Operation Permit No. 35435-022-SO/01, the Hillsborough County Public Utilities Department (County) has prepared the August 2019 water quality monitoring report for the Southeast County Landfill (SCLF). In accordance with the permit, the monitoring plan included the collection of representative groundwater and surface water samples from sixteen (16) surficial aquifer monitoring wells, four (4) upper Floridan aquifer monitoring wells, and four (4) surface water sampling locations. All groundwater and surface water samples were collected during the week of August 12-16, 2019. Parameter analysis was completed by our contracted laboratory, Advanced Environmental Laboratories, Inc. (AEL). A site map of each monitoring location is depicted in **Figure 1**.

Surficial Aquifer Monitoring Wells

The following paragraphs provide a brief discussion of the parameter-specific water quality observations across the site. Groundwater analytical data for the August 2019 semi-annual monitoring event is included in **Table 1** and **Table 2**.

pH

Each surficial aquifer monitoring well continues to exhibit pH values below the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5 to 8.5 pH units from 4.77 to 6.41 pH

**BOARD OF COUNTY
COMMISSIONERS**

Ken Hagan
Pat Kemp
Lesley "Les" Miller, Jr.
Sandra L. Murman
Kimberly Overman
Mariella Smith
Stacy R. White

COUNTY ADMINISTRATOR

Michael S. Merrill

COUNTY ATTORNEY

Christine M. Beck

INTERNAL AUDITOR

Peggy Caskey

**CHIEF DEVELOPMENT &
INFRASTRUCTURE SERVICES
ADMINISTRATOR**

Lucia E. Garsys

units. Background water quality recorded prior to landfill construction and operation established pH below the acceptable range within the surficial aquifer and remains consistent with the historical data set.

Total Dissolved Solids (TDS)

Surficial aquifer detection well TH-69A exceeded the SDWS of 500 mg/l at a concentration of 540 mg/l. Over the period of record, TDS has periodically exceeded the standard due to the anaerobic environment where low D.O. and iron producing microbial processes are ongoing in the groundwater. The breakdown of the organic material and iron rich soils create iron bacteria and ferrous hydroxide, elevating the TDS in the groundwater. The County believes the organic process shall continue and periodic exceedances of TDS west of the section 9 waste area shall be exhibited.

Surficial aquifer detection monitoring well, TH-71A, located down gradient northwest of Section 9, exhibited TDS at a concentration of 920 mg/l and is consistent with water quality results since 2014.

Gradient improvements to the storm water system for Section 9 were completed in 2014 and again in August 2019 to allow proper drainage away from the landfill footprint and monitoring locations. The County will continue to closely monitor water quality in TH-71A to analyze the effectiveness of the storm water improvements. A historical groundwater table and data charts for TH-71A are included in **Appendix A**.

Chloride

Chloride was detected above the SDWS in TH-71A at 310 mg/l and has been consistently elevated since August 2016. Impacts to groundwater are directly related to storm water control on the northwest corner of Section 9; however, the County has implemented gradient improvements to the area allowing for storm water runoff to effectively discharge away from the landfill footprint and monitoring locations.

Total Ammonia

Total ammonia continues to be very low across the entire network of surficial aquifer monitoring wells. The County is closely observing TDS, chloride, and sodium values in detection well TH-71A; however, total ammonia was 1.7 mg/l. Total ammonia is a good indicator of leachate from buried solid waste and the current water quality is not exhibiting a trend at this time.

Arsenic

Arsenic was detected above the Primary Drinking Water Standard (PDWS) of 0.01 mg/l in surficial aquifer detection monitoring well TH-58 at 0.016 mg/l and detection monitoring well TH-65 at 0.013 mg/l. Each monitoring location has historically been above the standard over the period of record. Arsenic in the groundwater continues to be directly attributable to the liberation from sediments in an anaerobic environment ongoing under the lined landfill. There are no other exceedances of arsenic at the landfill and the detections present are stable and not migrating off site.

Iron

Iron was detected above the SDWS of 0.3 mg/l in a majority of the surficial aquifer detection and background water quality monitoring wells across the site. Concentrations exceeding the standard ranged from 0.31 to 62 mg/l with the highest concentrations in surficial aquifer detection wells TH-69A, TH-70A, and TH-71A along the west side of Section 9. Iron in the surficial aquifer monitoring wells has historically been elevated and documented to be present across the site prior to construction and operation of the landfill. The County maintains the position elevated iron within the surficial aquifer is naturally occurring and not attributable to landfill activities. The laboratory report from AEL is included in **Appendix B**.

Upper Floridan Aquifer (UFA) Monitoring Wells

A brief and detailed description of the groundwater data for the four (4) UFA monitoring wells is provided in the paragraphs below and included in **Table 2** and the laboratory report provided by AEL is included in **Appendix B**.

Total Dissolved Solids (TDS)

Upper Floridan aquifer (UFA) monitoring well TH-72 exhibited TDS at 1,000 mg/l and is consistent with the data presented over the period of record. Elevated TDS in TH-72 is attributable to the waste from the former sinkhole in Phase VI of the landfill and the injected grout materials utilized for subsurface stabilization and remediation. Downgradient compliance point for the monitoring of Phase VI, identified as TH-78, continues to exhibit water quality within respective standards and clearly demonstrates there are no impacts to downgradient receptors.

Iron

Iron was observed above the SDWS of 0.3 mg/l in UFA monitoring well TH-72 at a concentration of 0.54 mg/l and are consistent since sinkhole stabilization activities were completed in 2015. The current semi-annual monitoring of TH-72 and the downgradient water quality in UFA

monitoring well TH-78 continues to demonstrate iron above the SDWS is not laterally migrating off site.

Surface Water Sampling Locations

A brief and detailed description of the surface water data is provided in the paragraphs below. The data is included in **Table 3** of the report and the laboratory report from AEL is provided in **Appendix B**.

Dissolved Oxygen

Surface water sampling locations Mine Cut 1D, Stream-3A, SW-3B2B, and Stream 3C2 exhibited dissolved oxygen at 0.76 mg/l, 0.07 mg/l, 3.28 mg/l, and 2.67 mg/l. Sample location Stream-3A is the upstream tributary to Long Flat Creek and representative of surface water entering the Southeast County Landfill property. Surface water sampling location Stream-3C2 is the discharge monitoring point for the site in the tributary to Long Flat Creek. The compiled data exhibits improving water quality across the tributary and is consistent with the historical data set.

Fecal Coliform

Surface water sample location SW-3B2B exhibited a fecal coliform detection at the surface water standard of 800 colonies/100 ml. Over the period of record, various surface water sampling locations have exhibited fecal coliform due to the large amount of biological waste generated from the many birds and other wildlife that migrate across the site.

Private Supply Wells

Representative samples from the three (3) private supply wells were discontinued as part of the semi-annual monitoring of groundwater at the SCLF. Although not required by the groundwater monitoring plan as part of the permit requirements, the County has monitored offsite supply wells for over 20 years with no adverse effects in water quality. Based upon flow direction, the supply wells are up gradient of the landfill and are not regarded as downgradient receptors. A thorough review of the historical data concludes there is no association between water quality at the supply wells and water quality observed at the landfill.

Groundwater Elevation and Flow

Groundwater and surface water elevations were recorded on August 12, 2019 and the data is presented in **Table 4**. Elevation data is collected and utilized to prepare a representative

surficial aquifer groundwater contour diagram. A diagram was prepared with a 2 ft. contour interval and is utilized to evaluate the direction of flow across the site. **Figure 2** depicts general flow direction across the landfill remains to the west/northwest with an easterly component controlled by nearby Mine Cut #1 and Mine Cut #2. Elevation data continues to be consistent with the historical evaluations of flow within the surficial aquifer at the Southeast County Landfill.

Results from Quarterly Supplemental Monitoring (August 2019)

Surficial aquifer monitoring well TH-67 is located downgradient of the Phase II waste area of the landfill and associated with the supplemental quarterly monitoring of groundwater in accordance with the Consent Agreement, OGC File No. 17-0058. TH-67 indicated a TDS value of 90 mg/l and continues to improve since implementation of corrective actions related to water quality changes exhibited in February 2016.

In accordance with the monitoring requirements dated in the August 28, 2019 Florida Department of Environmental Protection (Department) correspondence and Chapter 62-701.510(8)(a), the County collected groundwater samples from four (4) surficial aquifer detection wells on August 7, 2019. Representative samples were collected from wells TH-66A, TH-67, TH-79, and TH-83 for TDS, chloride, ammonia, and sodium. Results of the data indicated TDS exceeding the SDWS in detection well TH-83 with a result of 650 mg/l and chloride exceeding the SDWS with a result of 280 mg/l. Field pH continues below the SDWS; however, the conditions have been naturally occurring prior to operation of the landfill. All remaining constituents at the monitoring locations were within compliance standards. The County submitted the required laboratory and ADaPT files and a groundwater elevation contour diagram to the Department on October 11, 2019. The County will continue with the quarterly evaluation as outlined in the Department's August 28, 2019 letter.

Conclusions

Water quality observations at the Southeast County Landfill remain consistent with the historical data set. Surficial aquifer groundwater monitoring wells continue to exhibit pH, iron, TDS, chloride, and arsenic outside their applicable primary and secondary standards. Background water quality recorded prior to landfill construction and operation established pH and iron below the acceptable range within the surficial aquifer.

Over the period of record, TDS has periodically exceeded the SDWS of 500 mg/l at detection well TH-69A and is due to the anaerobic environment where low D.O. and iron producing microbial processes are ongoing in the groundwater creating iron bacteria, increasing the TDS

in the groundwater. Monitoring well TH-71A exhibited TDS concentrations above the SDWS during the semi-annual water quality monitoring event and is attributable to storm water runoff from Section 9. The County implemented corrective actions to the storm water conveyance system in 2014 and again in 2019 to alleviate the influence and reduce the TDS values. The County will continue to closely observe the water quality for TH-71A.

Arsenic was detected in surficial aquifer monitoring well TH-58 and in TH-65 exceeding the PDWS of 0.01 mg/l. Over the period of record, each monitoring location has consistently exhibited the liberation of arsenic due to the anaerobic conditions present under the lined landfill. No downgradient receptors or migration off site of the arsenic are observed.

Water quality in surficial aquifer monitoring well TH-83, southeast of Phase II waste area of the landfill, continued to exhibit indicator parameters of TDS and chloride exceeding their respective drinking water standards. As ongoing implementation of corrective actions continue, water quality improvement is anticipated as constituent levels continue to return to background conditions over the upcoming period of record.

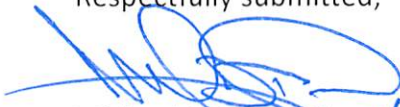
Upper Floridan Aquifer (UFA) monitoring well TH-72 continues to exhibit water quality impacts that are attributable to the former sinkhole within Phase VI of the landfill. TDS and iron continue to exceed their respective standards; however, the water quality remains stable and consistent. The downgradient compliance point for the monitoring of Phase VI, identified as TH-78, continues to exhibit water quality within their respective standards and clearly demonstrates there are no impacts to downgradient receptors.

The current configuration of groundwater monitoring wells continues to be adequate to address any potential water quality issues and remains consistent with the historical data set. The next semi-annual monitoring event is scheduled for February 2020. Supplemental information for the November 2019 quarterly monitoring event shall be included within the submittal.

Mr. Steve Morgan
November 22, 2019
Page 7 of 7

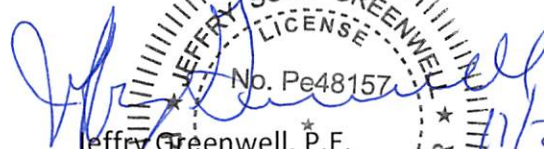
Should you have any questions, require any additional information, or would like to discuss information provided within the submittal, please feel free to contact us at (813) 663-3222 or (813) 612-7757.

Respectfully submitted,

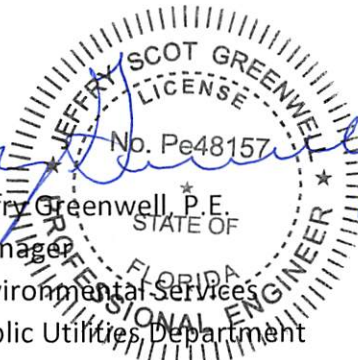


11/22/2019

Michael D. Townsel
Senior Hydrologist
Environmental Services
Public Utilities Department



11/22/19



Jeffrey Greenwell, P.E.
Manager
Environmental Services
Public Utilities Department

Enclosures

xc: Justin Chamberlain, P.G., FDEP
Kim Byer, P.G., Director, Solid Waste Management Division
Larry Ruiz, Landfill Manager, Solid Waste Management Division
Joe O'Neill, P.E., Solid Waste Management Division
Ernest Ely, Manager, WMI, Southeast County Landfill
Irene Barnes, Southeast Hillsborough Civic Association
Kollan Spradlin, P.E., SCS Engineers



SOUTHEAST COUNTY LANDFILL
MONITORING WELLS LOCATION
MAP

2019 AERIAL PHOTO



Hillsborough
County Florida

Legend

Well Designation

- ◆ Surface Water Sites
- Piezometer
- ⊕ Active Monitor Wells
- ⊕ Inactive Monitor Wells
(Used For Water Levels)



NOTE: Every reasonable effort has been made to assure the accuracy of this map. Hillsborough County does not assume any liability arising from use of this map. THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

SOURCE: This map has been prepared for the inventory of real property found within Hillsborough County and is compiled from recorded deeds, plats, and other public records; it has been based on BEST AVAILABLE data.

Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map.

BS OC
332 N. Falkenburg Rd
Tampa, FL 33619

0 0.06 0.12
Miles

**Table 1 - Southeast County Landfill
Laboratory Analytical Data
Groundwater Monitoring Wells
August 12-16, 2019**

General Parameters	Surficial Aquifer Wells								MCL Standard
	TH-36A	TH-61	TH-61A	TH-64	TH-68	TH-69A	TH-70A	TH-71A	
well type	Background	Detection	Detection	Detection	Detection	Detection	Detection	Detection	
conductivity (umhos/cm) (field)	210.2	228.5	285.1	178.9	194.9	729	688	1476	NS
dissolved oxygen (mg/l) (field)	0.51	0.18	0.5	0.27	0.65	0.27	0.08	0.13	NS
ORP (mV)	135.5	165.6	107.1	157.7	-24.4	8.7	-73.6	-40.4	NS
temperature (°C) (field)	25.3	25.7	26.7	26.9	28.4	26.1	25.8	24.9	NS
turbidity (NTU) (field)	4.48	1.76	2.23	14.6	19.7	3.18	154.8	6.51	NS
pH (SU) (field)	5.74	5.78	5.90	5.45	5.63	6.10	6.26	6.16	(6.5 - 8.5)**
total dissolved solids (mg/l)	130	160	180	120	250	540	410	920	500**
chloride (mg/l)	8.9	8.4	7.5	7.3	8.5	130 J4	40	310	250**
ammonia nitrogen (mg/l as N)	0.029 u	0.04 i	0.029 u	0.029 u	0.17	0.38	1.5	1.7	NS
nitrate (mg/l as N)	0.096 i	4.30	9.30	0.079 u	0.079 u	0.079 u	0.079 u	0.11	10*
Metals Detected (mg/l)									MCL Standard
antimony	0.00033 i	0.003	0.0027	0.00054 i	0.00011 u	0.00011 u	0.00011 u	0.00060 i	0.006*
arsenic	0.00044 i	0.001	0.00037 i	0.00046 i	0.0014	0.00015 i	0.0059	0.0037	0.01*
barium	0.0083	0.0074	0.0048	0.035	0.0057	0.0035	0.022	0.018	2*
cadmium	0.000064 u	0.00037 i	0.00079	0.00026 i	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.005*
chromium	0.00060 i	0.00067 i	0.00065 i	0.0021	0.0029	0.00039 i	0.00065 i	0.00081 i	0.1*
cobalt	0.00019 u	0.00032 i	0.00019 u	0.00019 u	0.00019 u	0.00019 u	0.00019 u	0.00025 i	140***
copper	0.00035 u	0.00075	0.0018	0.00084	0.00036 i	0.00035 u	0.00035 u	0.00035 u	1**
iron	0.049 i	0.036 i	0.036 i	0.36	0.35	3	62	40	0.3**
lead	0.00024 u	0.00024 u	0.0024 u	0.001	0.00026 i	0.00024 u	0.00024 u	0.00024 u	0.015*
mercury	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.002*
nickel	0.00098 u	0.00098 u	0.0011 i	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.1*
selenium	0.00058 u	0.00073 i	0.0022 i	0.00090 i	0.00058 u	0.00058 u	0.00058 u	0.00058 u	0.05*
silver	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.1**
sodium	4.2	3.9	4.6	5.6	6.9	28	11	52	160*
thallium	0.000057 u	0.00014 i	0.00010 i	0.000057 u	0.000057 u	0.000057 u	0.000057 u	0.000057 u	0.002*
vanadium	0.014	0.0088	0.13	0.016	0.0023	0.00071 u	0.004	0.0096	0.049***
zinc	0.0082 i	0.011	0.033	0.0097 i	0.0077 i	0.0074 u	0.029	0.0074 u	5**

Notes: Reference Groundwater Guidance Concentrations, FDEP 2012

NS=No Standard

MCL=Maximum Contaminant Level

*= Primary Drinking Water Standards as per Chapter 62-550.310, F.A.C.

**=Secondary Drinking Water Standards as per Chapter 62-550.320, F.A.C.

***=Groundwater Cleanup Target Levels as per Chapter 62-777, FAC

5.74 - Exceeds Standards

NTU=Nephelometric Turbidity Units

mV = millivolts

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

ug/l=micrograms per liter

mg/l=milligrams per liter

**Table 2 -Southeast County Landfill
Laboratory Analytical Data
Groundwater Monitoring Wells
August 12-16, 2019**

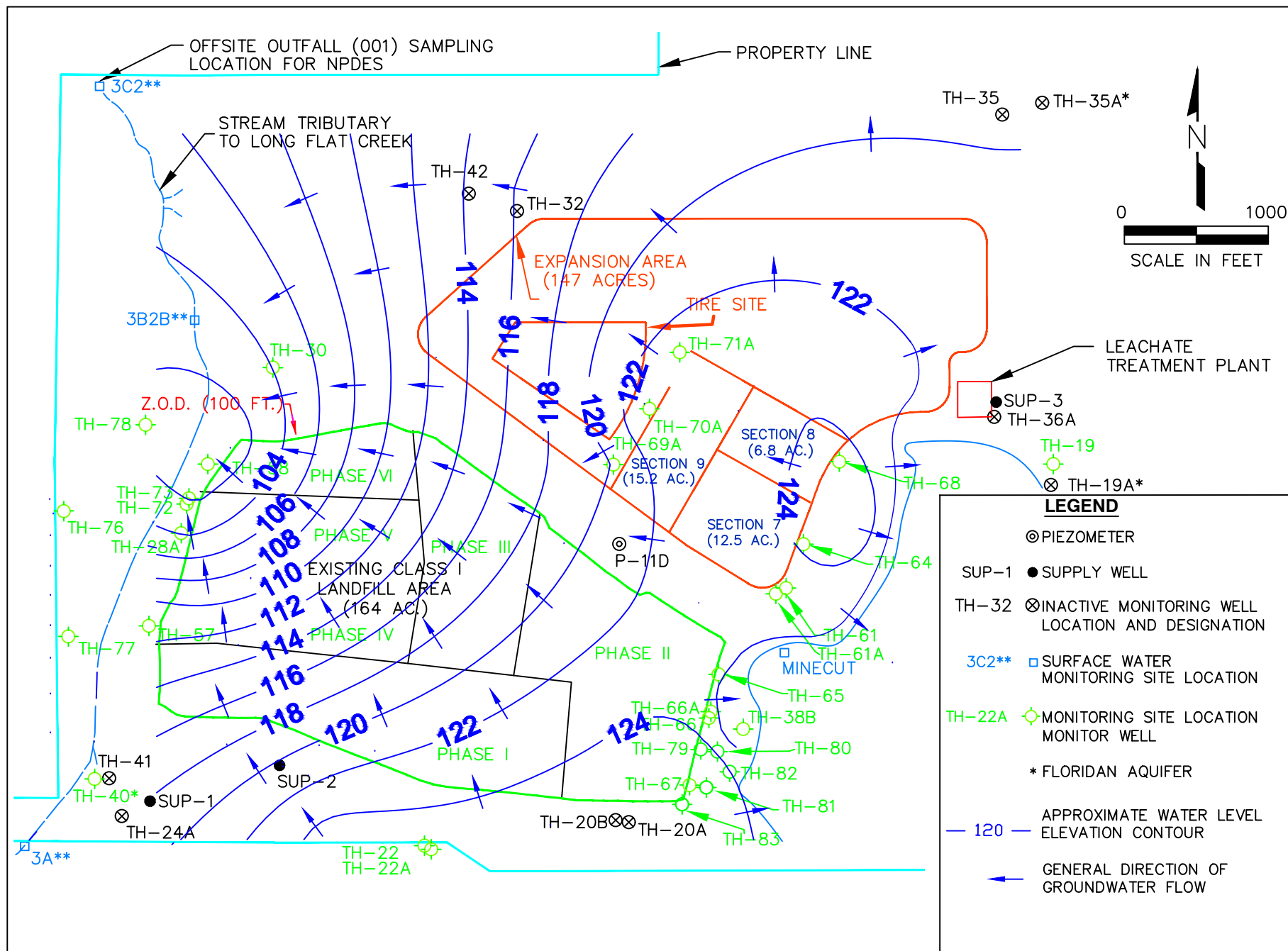
General Parameters	Floridan Aquifer				Surficial Aquifer Wells								MCL Standard
	TH-19	TH-40	TH-72	TH-78	TH-22A	TH-28A	TH-57	TH-58	TH-65	TH-66	TH-66A	TH-67	
well type	Background	Detection	Detection	Detection	Background	Detection	Detection	Detection	Detection	Background	Background	Detection	NS NS NS NS (6.5 - 8.5)** 500** 250** NS(1) 10*
conductivity (umhos/cm) (field)	411	362.8	1547	522	161.6	301.5	361.6	349.4	239.3	327.8	272.3	187.4	
dissolved oxygen (mg/l) (field)	0.11	0.26	0.14	0.09	0.12	0.33	0.64	0.56	0.16	0.1	0.28	0.26	
ORP (mV)	-75.5	-93.8	-75.9	-222.3	20.8	-45.6	-93.4	53.9	-14.8	-21.6	3.5	8.6	
temperature (°C) (field)	23.5	23.7	24.2	23.4	25.0	28.4	28.4	26.9	25.5	26.1	26.8	26.4	
turbidity (NTU) (field)	0.87	0.57	0.82	2.28	5.9	2.24	0.88	1.63	4.11	0.54	1.28	3.02	
pH (SU) (field)	7.40	7.61	6.67	8.24	4.77	5.24	5.37	5.87	5.77	6.02	6.24	6.41	
total dissolved solids (mg/l)	250	240	1000	320	70	390	260	240	170	170	140	90	
chloride (mg/l)	8.2	14	240 j4	32	7.3	71	80	17	13	15	9.9	6.5	
ammonia nitrogen (mg/l as N)	0.24	0.3	11	0.25	0.21	1.8	1.3	0.95	0.73	0.71	0.19	0.18	
nitrate (mg/l as N)	0.079 u	0.079 u	0.079 u	0.086 i	0.079 u	0.079 u	0.33	1.4	0.079 u	0.079 u	0.079 u	0.079 u	
Metals Detected (mg/l)													MCL Standard
antimony	0.00012 i	0.00019 i	0.00011 u	0.00011 u	0.00038 i	0.00011 u	0.00028 i	0.00049 i	0.00011 u	0.00011 i	0.0012	0.0026	0.006*
arsenic	0.000077 u	0.000077 u	0.00012 i	0.00011 i	0.00021 i	0.0012	0.00040 i	0.016	0.013	0.0025	0.0019	0.0031	0.01*
barium	0.0051	0.0057	0.028	0.038	0.033	0.0017	0.01	0.011	0.0008	0.0012	0.003	0.0056	2*
cadmium	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.00025 i	0.005*
chromium	0.00011 u	0.00012 i	0.00032 i	0.00011 u	0.0013 i	0.0014 i	0.00076 i	0.0018 i	0.0013 i	0.00046 i	0.00039 i	0.00061 i	0.1*
cobalt	0.00019 u	0.00019 u	0.00019 u	0.00019 u	0.00019 u	0.00047 i	0.00019 u	0.00019 u	0.00035 i	0.00033 i	0.0005	0.0021	140***
copper	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00035 u	0.00097	0.0038	1**
iron	0.026 u	0.043 i	0.54	0.2	0.37	4.8	0.61	1.5	1.9	2.5	0.31	0.91	0.3**
lead	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00026 i	0.015*
mercury	0.00005 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.000050 u	0.002*
nickel	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.00098 u	0.002 i	0.0052	0.1*
selenium	0.00058 u	0.00058 u	0.00058 u	0.00058 u	0.00058 u	0.00058 u	0.0011 i	0.0049 i	0.0010 i	0.00058 u	0.00058 u	0.00058 u	0.05*
silver	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.1**
sodium	13	19	110	30	2.8	24	23	18	9.4	7.6	5.2	2	160*
thallium	0.000057 u	0.000057 u	0.000057 u	0.000057 u	0.000057 u	0.000073 i	0.000057 u	0.00039	0.000076 i	0.000057 u	0.00024	0.00039	0.002 *
vanadium	0.00071 u	0.00071 u	0.00078 i	0.00071 u	0.0015 i	0.0014 i	0.0039	0.021	0.0021	0.0013 i	0.015	0.0072	0.049***
zinc	0.0074 U	0.0086 i	0.0074 u	0.0074 u	0.0092 i	0.0093 i	0.0098 i	0.0088 i	0.0080 i	0.0074 u	0.0091 i	0.041	5**
Organic Parameters Detected (ug/l)													MCL Standard
carbon disulfide	1.1 u	1.1 u	1.1 u	1.1 u	1.1 u	1.1 u	1.1 u	1.1 u	1.2 i	1.1 u	1.1 u	1.1 u	
Notes: Reference Groundwater Guidance Concentrations, FDEP 2012													
NS=No Standard													
NS(1)=GCTL of 2.8 is no longer suitable toxilogical reference for evaluating the significance of ammonia concentrations in groundwater.													
MCL=Maximum Contaminant Level													
*= Primary Drinking Water Standards as per Chapter 62-550.310, F.A.C.													
**=Secondary Drinking Water Standards as per Chapter 62-550.320, F.A.C.													
***=Groundwater Cleanup Target Levels as per Chapter 62-777, FAC													
1000 - Exceeds Standards													
NTU=Nephelometric Turbidity Units													
mV = millivolts													
i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.													
u = parameter was analyzed but not detected.													
ug/l=micrograms per liter													
mg/l=milligrams per liter													

Table 3 -Southeast County Landfill
Laboratory Analytical Data
Surface Water Samples
August 13, 2019

General Parameters	Mine Cut 1D	Stream-3A	SW-3B2B	Stream-3C2	MCL Standard
conductivity (umhos/cm) (field)	491.9	276.2	231	285.6	1275
dissolved oxygen (mg/l) (field)	0.76	0.07	3.28	2.67	***
ORP (mV)	52.2	-58.4	82.2	69.0	NS
temperature (°C) in field	28.4	27.2	26.1	27.7	NS
turbidity (field) (NTU)	3.72	2.50	6.8	5.15	29
pH (field)	6.83	6.39	6.39	6.58	(6.0 - 8.5)
total dissolved solids (mg/l)	310	180	160	160	NS
total suspended solids (mg/l)	8.4	3.2	11	9.4	NS
total nitrogen (mg/l)	1.9	2.40	1.40	1.4	NS
nitrate (as N) (mg/l)	0.079 U	0.079 U	0.18	0.079 U	NS
total phosphorous (mg/l)	2.1	0.23 U	1.0	0.92	NS
biochem. oxygen demand (mg/l)	3.6	2.5	2	2.1	NS
chemical oxygen demand (mg/l)	45 I	24 U	55	44 I	NS
total organic carbon (mg/l as C)	15	10.0	18	16	NS
chlorophyll-A (mg/m3)	34	7.2	2.5 U	3.2 I	NS
total hardness (mg/l as CaCO)	110	96	68	80	NS
unionized ammonia (mg/l)	0.00022 I	0.00068 I	0.000053 U	0.000091 U	≤ 0.02
fecal coliform (Col/100ml)	60 B	40 B	800 B	320	800
Metals Detected (mg/l)					MCL Standard
antimony	0.00033 I	0.00011 U	0.00013 I	0.00049 I	≤ 4.3
arsenic	0.00055 I	0.00032	0.00089 I	0.0013	≤ 0.05
barium	0.0037	0.020	0.0130	0.0068	2
chromium	0.00041 I	0.00081 I	0.0015 I	0.0014 I	11
cobalt	0.00019 U	0.00019 U	0.00028 I	0.00042 I	NS
copper	0.00038 I	0.00061 I	0.00	0.00041 I	**
iron	0.34	0.52	1.40	1.20	1
vanadium	0.00098 I	0.00088 I	0.00	0.0021	NS
zinc	0.0083 I	0.043	0.012	0.0099 I	*
Organic Parameters Detected (ug/l)					MCL Standard
acetone	1.0 U	1.0 U	1.0 U	1.0 U	1700
NOTE: Referenced, Surface Water Quality Standards Chapter 62-302 and Freshwater Surface Water Cleanup Criteria in Chapter 62-550, Table I, F.A.C. NS = No Standard MCL = Maximum Contaminant Level * = $Zn < or = e[0.8473[lnH]+0.7614]$, note H = Hardness for 3A standard is 105.99 ** = $Cu < or = e[0.8545[lnH] - 1.702]$ *** = Criteria set forth in accordance with Chapter 62-302.533 NTU = Nephelometric Turbidity Units mV = millivolts i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. u = parameter was analyzed but not detected. B = results based upon colony counts outside the acceptable range. µg/l = micrograms per liter mg/l = milligrams per liter					

**Table 4 -Southeast County Landfill
Groundwater and Surface Water Elevations
August 12, 2019**

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)	Time
P-11D	138.02	15.36	122.66	15:09
TH-19*	130.27	89.15	41.12	14:23
TH-20A	131.86	8.20	123.66	13:59
TH-20B	132.57	8.95	123.62	13:57
TH-22	128.82	3.72	125.10	10:29
TH-22A	129.27	4.29	124.98	9:58
TH-24A	128.23	2.42	125.81	9:44
TH-28A	131.10	27.08	104.02	12:22
TH-30	128.88	23.27	105.61	13:09
TH-32	129.90	13.97	115.93	14:42
TH-35	145.98	26.12	119.86	14:29
TH-36A	152.70	31.58	121.12	14:52
TH-38A	130.68	8.86	121.82	14:04
TH-38B	131.81	12.55	119.26	14:05
TH-40*	124.99	83.38	41.61	10:46
TH-41*	125.00	88.49	36.51	10:42
TH-42*	116.74	62.88	53.86	14:37
TH-57	128.36	18.01	110.35	11:46
TH-58	127.88	26.95	100.93	13:06
TH-61	138.73	15.71	123.02	15:06
TH-61A	139.45	13.88	125.57	15:05
TH-64	139.64	14.95	124.69	15:02
TH-65	135.40	13.29	122.11	15:11
TH-66	130.58	7.89	122.69	15:15
TH-66A	130.66	7.21	123.45	15:14
TH-67	129.51	2.95	126.56	15:22
TH-68	140.01	11.52	128.49	14:56
TH-69A	144.97	24.92	120.05	14:09
TH-70A	146.63	23.18	123.45	14:12
TH-71A	146.95	23.60	123.35	14:16
TH-72*	130.96	85.63	45.33	13:03
TH-73	131.07	29.15	101.92	12:59
TH-76*	111.21	65.91	45.30	13:42
TH-77*	119.88	74.41	45.47	13:47
TH-78*	120.75	70.30	50.45	13:26
TH-79	129.60	6.40	123.20	15:18
TH-80	129.52	7.08	122.44	15:17
TH-81	130.26	5.63	124.63	15:21
TH-82	131.24	10.96	120.28	14:02
TH-83	130.23	7.81	122.42	15:24
SW-3A	3.0'=125.53'	2.10	124.63	9:34
SW-3B2B	3.0'=97.97'	ND	ND	ND
SW-3C2	6.0'=92.33'	2.15	88.48	13:17
Mine Cut #1	4.0'=122.14'	3.15	121.29	14:59
NGVD = National Geodetic Vertical Datum T.O.C. = Top of Casing B.T.O.C. = Below Top of Casing * = Floridan Well ND = No Data (3B2B - Gage no longer in stream) W.L. = Water Level				



Southeast County Landfill
 Surficial Aquifer Groundwater Elevation Contour Diagram – August 12, 2019

Attachment A

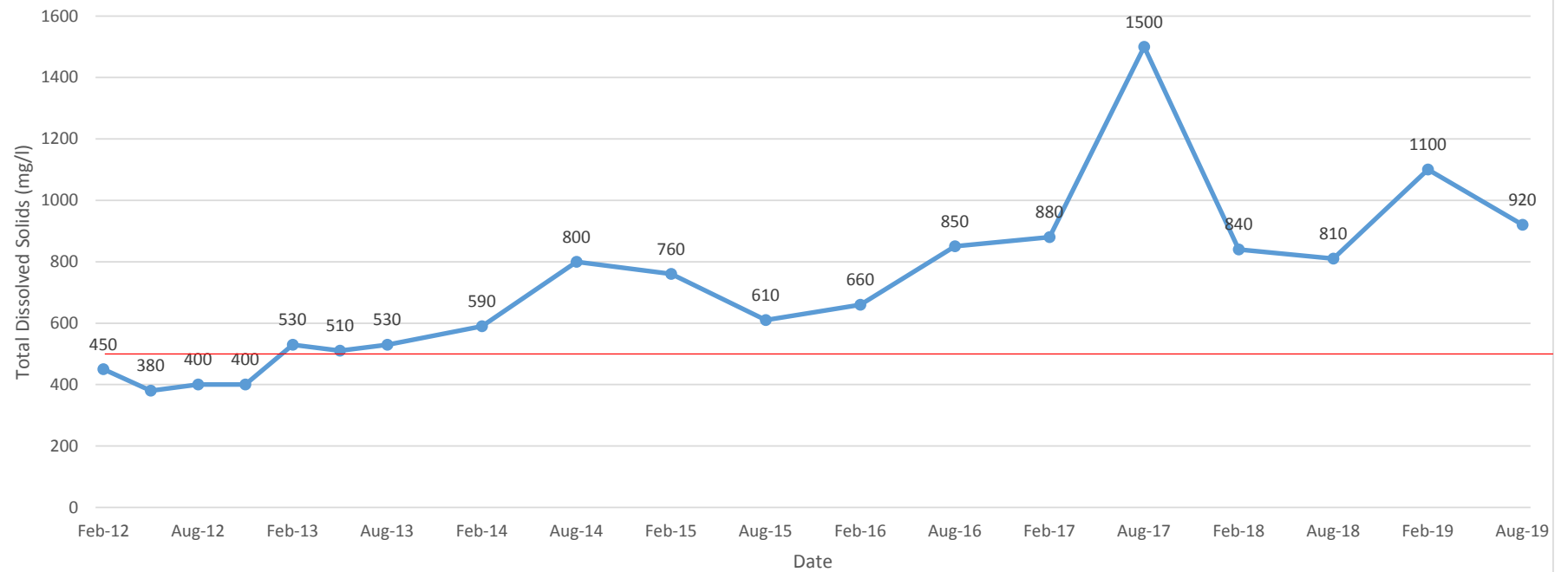
Monitoring Well TH-71A

Historical Water Quality Data Table
and Chart

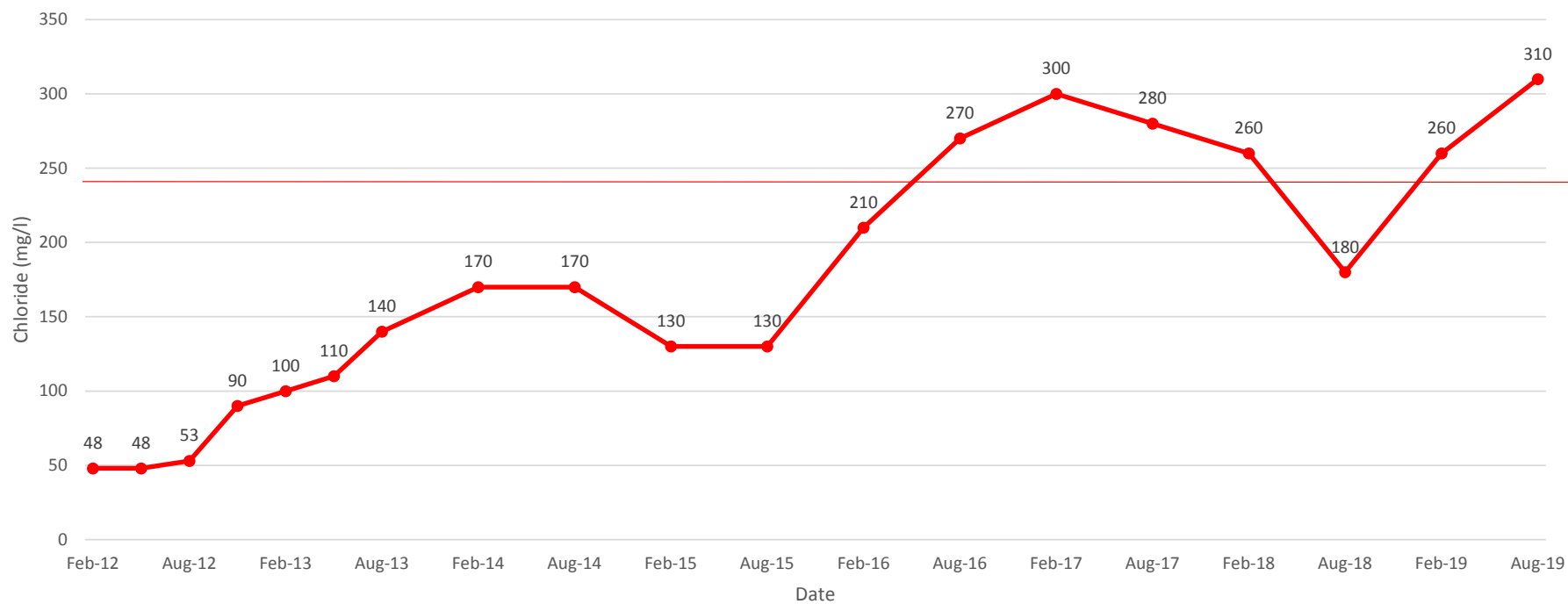
Historical Water Quality - Southeast Landfill Surficial Aquifer Detection Well TH-71A

General Parameters	Feb-12	May-12	Aug-12	Nov-12	Feb-13	May-13	Aug-13	Feb-14	Aug-14	Feb-15	Aug-15	Feb-16	Aug-16	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19	Aug-19	MCL Standard
conductivity (umhos/cm) (field)	741	734	731	922	815	782	880	1167	1351	1423	1191	1335	1574	1578	1524	1435	1267	1408	1476	NS
dissolved oxygen (mg/l) (field)	0.24	0.39	0.12	0.16	0.22	0.15	0.19	0.52	0.21	0.59	0.43	0.15	0.08	0.2	0.08	0.34	0.06	0.15	0.13	NS
ORP (mV)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-54.6	-42.8	-54.7	-58.6	-75.6	-20.6	-40.4	NS
temperature (°C) (field)	24.10	23.50	25.10	25.90	24.50	23.80	24.80	24.42	24.65	23.11	24.55	24.64	24.65	24.73	25.04	24.9	25.1	24.7	24.9	NS
turbidity (NTU) (field)	12.7	9.43	4.8	3.14	7.9	5.11	5.3	3.29	3.36	2.6	6.6	2.87	18.9	5.65	8.47	9.12	37.7	4.67	6.51	NS
pH (field)	6.03	5.84	5.85	6.11	6.09	6.42	6.20	6.40	6.14	6.19	6.23	6.10	6.05	6.22	6.13	6.14	6.16	6.03	6.16	(6.5 - 8.5)**
total dissolved solids (mg/l)	450	380	400	400	530	510	530	590	800	760	610	660	850	880	1500	840	810	1100	920	500***
chloride (mg/l)	48	48	53	90	100	110	140	170	170	130	130	210	270	300	280	260	180	260	310	250***
ammonia nitrogen (mg/l as N)	1.5	1.6	1.6	1.4	2.3	1.6	1.2	1.3	2.2	1.8	1.8	2.1	2	1.8	1.9	1.8	1.7	1.7	1.7	NS(1)
nitrate (mg/l as N)	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	0.1 u	0.18 u	0.18 u	0.18 u	0.18 u	0.18 u	0.18 u	0.18 u	0.3	0.18 u	0.11	10*
Metals (mg/l)																				MCL Standard
antimony	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0023 u	0.0086 u	0.0002 i	0.000087 i	0.00022 i	0.00019 i	0.0001 i	0.00016 i	0.0015	0.00015 i	0.0006 i	0.006*
arsenic	0.0078	0.0042	0.0037	0.0068	0.0034	0.0031	0.0034	0.0023 i	0.0026	0.0016 u	0.0035	0.0026	0.0011 i	0.0034	0.0034	0.0028	0.0069	0.0014	0.0037	0.01*
barium	0.018	0.014	0.0096	0.013	0.023	0.012	0.016	0.014	0.013	0.012	0.012	0.013	0.013	0.017	0.017	0.014	0.023	0.0098	0.018	2*
beryllium	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00011 u	0.00013 u	0.00013 u	0.00019 i	0.00011 u	0.00011 u	0.00029 u	0.00029 u	0.00029 u	0.00029 u	0.004*
cadmium	0.000095 u	0.000097 i	0.000095 u	0.000095 u	0.00022 i	0.0001 i	0.000095 u	0.000095 u	0.0001	0.000056 u	0.000028 u	0.000056 u	0.000028 u	0.000031 i	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.000064 u	0.005*
chromium	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.0025 u	0.00038 i	0.00059 i	0.00056 i	0.00021 u	0.00071 i	0.00065 i	0.00068 i	0.013 i	0.00036 i	0.00081 i	0.2
cobalt	0.0014	0.00083	0.00048 i	0.0023	0.0014	0.00069	0.00037 i	0.00069	0.00034 i	0.00038 u	0.00029 i	0.00038 u	0.00021 i	0.00019 u	0.00023 i	0.00032 i	0.00019 i	0.00025 i	0.00025 i	140***
copper	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0011 u	0.0059 i	0.00022 u	0.00011 u	0.00029 i	0.00011 u	0.00022 i	0.00035 u	0.00035 u	0.00035 u	0.00035 u	1***
iron	39	29	20	28	23	24	32	29	32	27	24	27	27	36	40	37	60	22	40	0.3**
lead	0.0002 u	0.00021 u	0.00020 u	0.00034 i	0.00020	0.00020 u	0.00024 i	0.00020 u	0.00020 u	0.0032 u	0.00048 u	0.00024 u	0.00048 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.00024 u	0.015*
mercury	0.000091 u	0.000091 u	0.00014 i	0.000072 u	0.000091 u	0.000091 u	0.000091 u	0.000091 u	0.000091 u	0.000064 u	0.000084 u	0.000084 u	0.000084 u	0.000050 u	0.00005 u	0.00005 u	0.00005 u	0.000050 i	0.00005 u	0.002*
nickel	0.006	0.004 i	0.0033 i	0.0075	0.0045 i	0.0035 i	0.0037 i	0.0036 i	0.0024 i	0.0012 u	0.0022 u	0.0016	0.0014 i	0.0014	0.0018	0.0015 i	0.0015 i	0.0012 i	0.00098 u	0.1*
selenium	0.001 u	0.0010 u	0.0010 u	0.0010 u	0.0010 u	0.0010 u	0.0010 u	0.0010 u	0.0010 u	0.0041 u	0.0012 u	0.003 i	0.0012 u	0.00058 u	0.00058 u	0.00059 i	0.00058 u	0.00058 u	0.00058 u	0.05*
silver	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00025 u	0.00063 u	0.000054 u	0.000027 u	0.000054 u	0.000031 i	0.000027 u	0.000068 u	0.000068 u	0.000068 u	0.000068 u	0.10**
sodium	6.3	6.2	5.5	9.4	7.9	8.8	13	16	20	26	27	31	36	40	42	44	43	46	52	160*
thallium	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.00050 u	0.0024 u	0.00011 u	0.000057 u	0.00011 u	0.00057 u	0.00057 u	0.000057 u	0.000057 u	0.000057 u	0.000057 u	0.002*
vanadium	0.012	0.0051 i	0.0038 u	0.0038 u	0.0053 i	0.0038 u	0.0076 i	0.0038 u	0.0034	0.0021 i	0.0024	0.0014 u	0.0057	0.0049	0.011	0.023	0.0031	0.0096	0.0096	0.045***
zinc	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.0083 u	0.011	0.0020 u	0.012	0.0020 u	0.006 i	0.017	0.00079 i	0.0094 i	0.0074 u	0.0074 u	5**
Organic Parameters Detected (ug/l)																				MCL Standard
acetone	9.9 u	9.9 u	9.9 u	9.9 u	9.9 u	9.9 u	9.9 u	9.9 u	9.9 u	1 u	1 u	1 u	1 u	1 u	1 u	1.5 i	1 u	1 u	2 u	6300***
NOTE: Reference FDEP Groundwater Guidance Concentrations																				
NS= No Standard																				
NS(1)= GCTL of 2.8 is no longer suitable toxicological reference for evaluating the significance of ammonia concentrations in groundwater.																				
MCL= Maximum Containment Level																				
BDL= Below Detection Limit																				
ND= No Data (ORP was not being collected during sampling event)																				
* = Primary Drinking Water Standard																				
** = Secondary Drinking Water Standard																				
*** = Florida Guidance Concentration MCL																				
6.03 = Exceeds Standards																				
NTU= Nephelometric Turbidity Units																				
ug/l= Micrograms Per Liter																				
mg/l= Milligrams Per Liter																				
NGVD= National Geodetic Vertical Datum																				

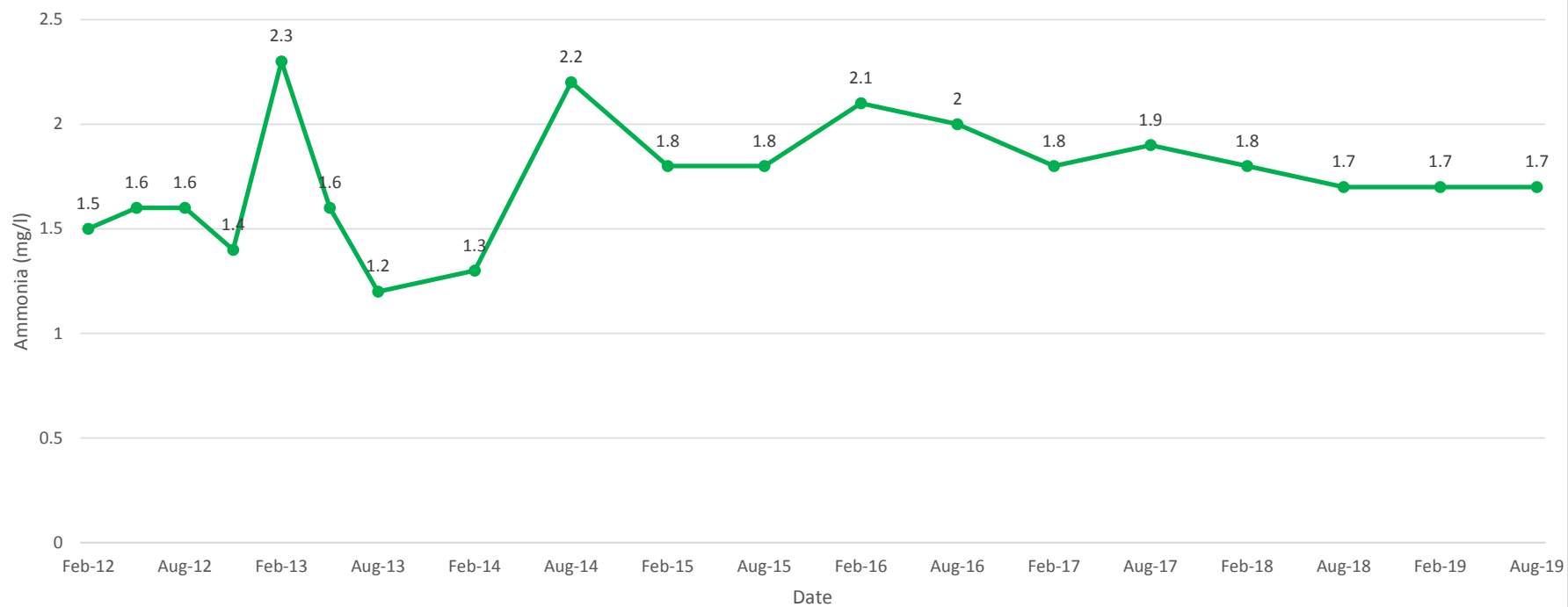
Southeast County Landfill - Monitoing Well TH-71A
Total Dissolved Solids



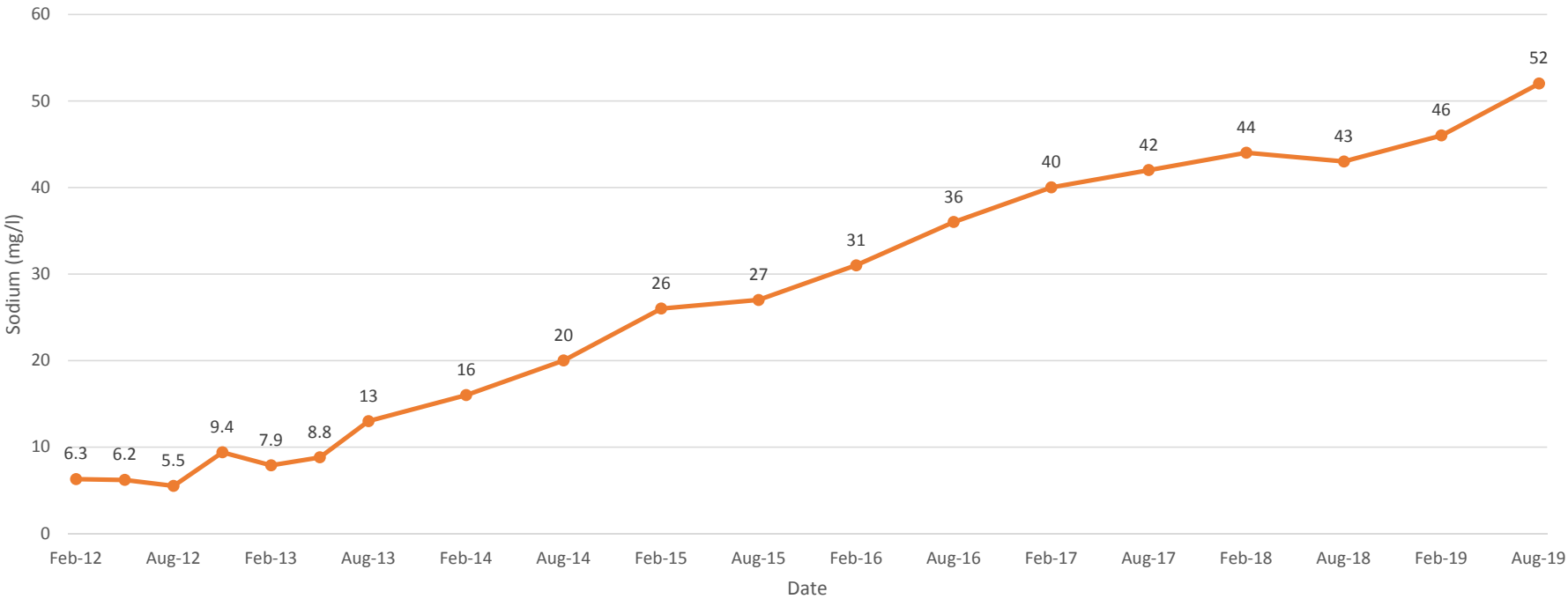
Southeast County Landfill - Monitoring Well TH-71A Chloride



Southeast County Landfill - Monitoring Well TH-71A Ammonia



Southeast County Landfill -Monitoring Well TH-71A
Sodium



Attachment B
August 2019 Laboratory Data
Report

September 30, 2019

Michael Townsel
Hillsborough Co Public Utilities
332 North Falkenburg Rd
Tampa, FL 33619

RE: Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory between Monday, August 12, 2019 and Friday, August 16, 2019. 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,



Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

Report ID: 897450

Page 1 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



SAMPLE SUMMARY

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1914151001	Field Blank	Water	8/13/2019 11:20	8/13/2019 15:00
T1914151002	TH-72	Water	8/13/2019 12:04	8/13/2019 15:00
T1914151003	TH-58	Water	8/13/2019 12:36	8/13/2019 15:00
T1914151004	Trip Blank	Water	8/13/2019 00:00	8/13/2019 15:00
T1914151005	TH-22A	Water	8/12/2019 10:22	8/12/2019 16:12
T1914151006	TH-40	Water	8/12/2019 11:20	8/12/2019 16:12
T1914151007	TH-57	Water	8/12/2019 11:57	8/12/2019 16:12
T1914151008	TH-28A	Water	8/12/2019 12:38	8/12/2019 16:12
T1914151009	Trip Blank	Water	8/12/2019 00:00	8/12/2019 16:12
T1914151010	Equipment Blank	Water	8/13/2019 09:15	8/13/2019 15:00
T1914151011	Stream 3A	Water	8/13/2019 09:32	8/13/2019 15:00
T1914151012	Mine Cut 1D	Water	8/13/2019 09:58	8/13/2019 15:00
T1914151013	Stream 3C2	Water	8/13/2019 13:25	8/13/2019 15:00
T1914151014	3B2B	Water	8/13/2019 13:50	8/13/2019 15:00
T1914151015	Duplicate	Water	8/13/2019 00:00	8/13/2019 15:00
T1914151016	TH-78	Water	8/14/2019 11:11	8/14/2019 16:35
T1914151017	TH-19	Water	8/14/2019 11:59	8/14/2019 16:35
T1914151018	TH-36A	Water	8/14/2019 12:27	8/14/2019 16:35
T1914151019	TH-71A	Water	8/14/2019 13:03	8/14/2019 16:35
T1914151020	TH-68	Water	8/14/2019 15:25	8/14/2019 16:35
T1914151021	Trip Blank	Water	8/14/2019 00:00	8/14/2019 16:35
T1914151022	TH-64	Water	8/15/2019 09:16	8/15/2019 15:07
T1914151023	TH-61	Water	8/15/2019 09:48	8/15/2019 15:07
T1914151024	TH-61A	Water	8/15/2019 10:14	8/15/2019 15:07
T1914151025	TH-70A	Water	8/15/2019 11:01	8/15/2019 15:07
T1914151026	TH-69A	Water	8/15/2019 11:48	8/15/2019 15:07
T1914151027	TH-65	Water	8/15/2019 12:24	8/15/2019 15:07
T1914151028	TH-66A	Water	8/15/2019 13:30	8/15/2019 15:07
T1914151029	TH-66	Water	8/15/2019 14:04	8/15/2019 15:07
T1914151030	Trip Blank	Water	8/15/2019 00:00	8/15/2019 15:07
T1914151031	TH-67	Water	8/16/2019 09:35	8/16/2019 11:10
T1914151032	Duplicate	Water	8/16/2019 00:00	8/16/2019 11:10
T1914151033	Trip Blank	Water	8/16/2019 00:00	8/16/2019 11:10

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151001**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 08/13/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis, Water			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:34	T
Iron	0.026	U	mg/L	1	0.10	0.026	8/14/2019 20:34	T
Sodium	0.17	U	mg/L	1	0.20	0.17	8/14/2019 20:34	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/14/2019 20:34	T
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis, Total			Analytical Method: SW-846 6020					
Antimony	0.00013	I	mg/L	1	0.00070	0.00011	8/25/2019 14:04	J
Arsenic	0.000077	U	mg/L	1	0.0010	0.000077	8/25/2019 14:04	J
Barium	0.00024	U	mg/L	1	0.00060	0.00024	8/25/2019 14:04	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:04	J
Chromium	0.00011	U	mg/L	1	0.0020	0.00011	8/25/2019 14:04	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:04	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:04	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:04	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:04	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:04	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:04	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:04	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/25/2019 14:04	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis, Water			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:08	T
VOLATILES								
Analysis Desc: Tot Dissolved Solids, SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	10	U	mg/L	1	10	10	8/15/2019 13:00	T
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:15	T
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					

Report ID: 897450

Page 3 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151001**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 08/13/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 16:17	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 16:17	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:17	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 16:17	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 16:17	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 16:17	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 16:17	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 16:17	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:17	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 16:17	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 16:17	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 16:17	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 16:17	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 16:17	T
Acetone	11		ug/L	1	2.0	1.0	8/22/2019 16:17	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 16:17	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:17	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 16:17	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:17	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 16:17	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 16:17	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 16:17	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:17	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 16:17	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 16:17	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 16:17	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 16:17	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 16:17	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 16:17	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 16:17	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 16:17	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 16:17	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 16:17	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:17	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 16:17	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:17	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 16:17	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 16:17	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:17	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 16:17	T

Report ID: 897450

Page 4 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151001**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 08/13/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 16:17	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:17	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 16:17	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:17	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 16:17	T
1,2-Dichloroethane-d4 (S)	100		%	1	70-128		8/22/2019 16:17	
Toluene-d8 (S)	98		%	1	77-119		8/22/2019 16:17	
Bromofluorobenzene (S)	93		%	1	86-123		8/22/2019 16:17	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 16:17	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 16:17	T
1,2-Dichloroethane-d4 (S)	99		%	1	70-130		8/22/2019 16:17	
Toluene-d8 (S)	98		%	1	70-130		8/22/2019 16:17	
Bromofluorobenzene (S)	96		%	1	70-130		8/22/2019 16:17	

VOLATILES

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.029	U	mg/L	1	0.10	0.029	8/19/2019 13:58	T
-------------	-------	---	------	---	------	-------	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	2.6	U	mg/L	1	5.0	2.6	8/14/2019 14:35	T
----------	-----	---	------	---	-----	-----	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151002**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-72**

Date Collected: 08/13/19 12:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	1547		umhos/cm	1			8/13/2019 12:04	....
Dissolved Oxygen	0.14		mg/L	1			8/13/2019 12:04	....
ORP-2580BW	-75.9		mV	1			8/13/2019 12:04	....
Temperature	24.2		°C	1			8/13/2019 12:04	....
Turbidity	0.82		NTU	1			8/13/2019 12:04	....
pH	6.67		SU	1			8/13/2019 12:04	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:37	T
Iron	0.54		mg/L	1	0.10	0.026	8/14/2019 20:37	T
Sodium	110		mg/L	1	0.20	0.17	8/14/2019 20:37	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/14/2019 20:37	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 14:12	J
Arsenic	0.00012	I	mg/L	1	0.0010	0.000077	8/25/2019 14:12	J
Barium	0.028		mg/L	1	0.00060	0.00024	8/25/2019 14:12	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:12	J
Chromium	0.00032	I	mg/L	1	0.0020	0.00011	8/25/2019 14:12	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:12	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:12	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:12	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:12	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:12	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:12	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:12	J
Vanadium	0.00078	I	mg/L	1	0.0020	0.00071	8/25/2019 14:12	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:11	T

VOLATILES

Report ID: 897450

Page 6 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151002**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-72**

Date Collected: 08/13/19 12:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorides, SM4500-Cl-E, Water		Analytical Method: SM 4500-Cl-E						
Chloride	240	J4	mg/L	5	25	13	8/14/2019 15:03	T
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 18:02	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 18:02	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:02	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 18:02	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 18:02	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 18:02	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 18:02	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 18:02	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:02	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:02	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:02	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 18:02	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 18:02	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 18:02	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 18:02	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 18:02	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:02	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 18:02	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:02	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 18:02	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:02	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 18:02	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:02	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 18:02	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 18:02	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 18:02	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 18:02	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:02	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:02	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 18:02	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 18:02	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 18:02	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:02	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:02	T

Report ID: 897450

Page 7 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151002**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-72**

Date Collected: 08/13/19 12:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 18:02	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:02	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:02	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:02	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:02	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 18:02	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 18:02	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:02	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 18:02	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:02	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 18:02	T
1,2-Dichloroethane-d4 (S)	97		%	1	70-128		8/22/2019 18:02	
Toluene-d8 (S)	99		%	1	77-119		8/22/2019 18:02	
Bromofluorobenzene (S)	92		%	1	86-123		8/22/2019 18:02	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:02	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:02	T
1,2-Dichloroethane-d4 (S)	98		%	1	70-130		8/22/2019 18:02	
Toluene-d8 (S)	98		%	1	70-130		8/22/2019 18:02	
Bromofluorobenzene (S)	95		%	1	70-130		8/22/2019 18:02	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	11		mg/L	5	0.50	0.14	8/19/2019 14:39	T
-------------	----	--	------	---	------	------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	1000		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	------	--	------	---	----	----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:33	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151003**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-58**

Date Collected: 08/13/19 12:36

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	349.4		umhos/cm	1			8/13/2019 12:36	....
Dissolved Oxygen	0.56		mg/L	1			8/13/2019 12:36	....
ORP-2580BW	53.9		mV	1			8/13/2019 12:36	....
Temperature	26.9		°C	1			8/13/2019 12:36	....
Turbidity	1.63		NTU	1			8/13/2019 12:36	....
pH	5.87		SU	1			8/13/2019 12:36	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:41	T
Iron	1.5		mg/L	1	0.10	0.026	8/14/2019 20:41	T
Sodium	18		mg/L	1	0.20	0.17	8/14/2019 20:41	T
Zinc	0.0088	I	mg/L	1	0.010	0.0074	8/14/2019 20:41	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00049	I	mg/L	1	0.00070	0.00011	8/25/2019 14:16	J
Arsenic	0.016		mg/L	1	0.0010	0.000077	8/25/2019 14:16	J
Barium	0.011		mg/L	1	0.00060	0.00024	8/25/2019 14:16	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:16	J
Chromium	0.0018	I	mg/L	1	0.0020	0.00011	8/25/2019 14:16	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:16	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:16	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:16	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:16	J
Selenium	0.0049	I	mg/L	1	0.0050	0.00058	8/25/2019 14:16	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:16	J
Thallium	0.00039		mg/L	1	0.00020	0.000057	8/25/2019 14:16	J
Vanadium	0.021		mg/L	1	0.0020	0.00071	8/25/2019 14:16	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:22	T

VOLATILES

Report ID: 897450

Page 9 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151003**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-58**

Date Collected: 08/13/19 12:36

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 18:28	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 18:28	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:28	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 18:28	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 18:28	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 18:28	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 18:28	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 18:28	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:28	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:28	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:28	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 18:28	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 18:28	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 18:28	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 18:28	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 18:28	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:28	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 18:28	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:28	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 18:28	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:28	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 18:28	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:28	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 18:28	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 18:28	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 18:28	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 18:28	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:28	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:28	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 18:28	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 18:28	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 18:28	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:28	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:28	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 18:28	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:28	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:28	T

Report ID: 897450

Page 10 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151003**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **TH-58**

Date Collected: 08/13/19 12:36

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:28	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:28	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 18:28	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 18:28	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:28	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 18:28	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:28	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 18:28	T
1,2-Dichloroethane-d4 (S)	99		%	1	70-128		8/22/2019 18:28	
Toluene-d8 (S)	98		%	1	77-119		8/22/2019 18:28	
Bromofluorobenzene (S)	90		%	1	86-123		8/22/2019 18:28	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:28	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:28	T
1,2-Dichloroethane-d4 (S)	99		%	1	70-130		8/22/2019 18:28	
Toluene-d8 (S)	97		%	1	70-130		8/22/2019 18:28	
Bromofluorobenzene (S)	91		%	1	70-130		8/22/2019 18:28	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.95		mg/L	1	0.10	0.029	8/19/2019 13:59	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	240		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	17		mg/L	1	5.0	2.6	8/14/2019 14:36	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	1.4		mg/L	1	0.10	0.079	8/14/2019 14:30	T
----------------	-----	--	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151004**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 16:43	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 16:43	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:43	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 16:43	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 16:43	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 16:43	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 16:43	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 16:43	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:43	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 16:43	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 16:43	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 16:43	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 16:43	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 16:43	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 16:43	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 16:43	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:43	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 16:43	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:43	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 16:43	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 16:43	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 16:43	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:43	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 16:43	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 16:43	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 16:43	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 16:43	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 16:43	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 16:43	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 16:43	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 16:43	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 16:43	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 16:43	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:43	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 16:43	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 16:43	T

Report ID: 897450

Page 12 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151004**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 16:43	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 16:43	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:43	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 16:43	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 16:43	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:43	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 16:43	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 16:43	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 16:43	T
1,2-Dichloroethane-d4 (S)	97		%	1	70-128		8/22/2019 16:43	
Toluene-d8 (S)	100		%	1	77-119		8/22/2019 16:43	
Bromofluorobenzene (S)	91		%	1	86-123		8/22/2019 16:43	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 16:43	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 16:43	T
1,2-Dichloroethane-d4 (S)	96		%	1	70-130		8/22/2019 16:43	
Toluene-d8 (S)	100		%	1	70-130		8/22/2019 16:43	
Bromofluorobenzene (S)	95		%	1	70-130		8/22/2019 16:43	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151005**
Sample ID: **TH-22A**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 10:22

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	161.6		umhos/cm	1			8/12/2019 10:22	....
Dissolved Oxygen	0.12		mg/L	1			8/12/2019 10:22	....
ORP-2580BW	20.8		mV	1			8/12/2019 10:22	....
Temperature	25		°C	1			8/12/2019 10:22	....
Turbidity	5.9		NTU	1			8/12/2019 10:22	....
pH	4.77		SU	1			8/12/2019 10:22	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:45	T
Iron	0.37		mg/L	1	0.10	0.026	8/14/2019 20:45	T
Sodium	2.8		mg/L	1	0.20	0.17	8/14/2019 20:45	T
Zinc	0.0092	I	mg/L	1	0.010	0.0074	8/14/2019 20:45	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00038	I	mg/L	1	0.00070	0.00011	8/25/2019 12:55	J
Arsenic	0.00021	I	mg/L	1	0.0010	0.000077	8/25/2019 12:55	J
Barium	0.033		mg/L	1	0.00060	0.00024	8/25/2019 12:55	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 12:55	J
Chromium	0.0013	I	mg/L	1	0.0020	0.00011	8/25/2019 12:55	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 12:55	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 12:55	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 12:55	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 12:55	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 12:55	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 12:55	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 12:55	J
Vanadium	0.0015	I	mg/L	1	0.0020	0.00071	8/25/2019 12:55	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:31	T

VOLATILES

Report ID: 897450

Page 14 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151005**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-22A**

Date Collected: 08/12/19 10:22

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorides, SM4500-Cl-E, Water		Analytical Method: SM 4500-Cl-E						
Chloride	7.3		mg/L	1	5.0	2.6	8/14/2019 14:43	T
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 18:54	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 18:54	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:54	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 18:54	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 18:54	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 18:54	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 18:54	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 18:54	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:54	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:54	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:54	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 18:54	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 18:54	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 18:54	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 18:54	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 18:54	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:54	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 18:54	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:54	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 18:54	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 18:54	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 18:54	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:54	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 18:54	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 18:54	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 18:54	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 18:54	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:54	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 18:54	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 18:54	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 18:54	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 18:54	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:54	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:54	T

Report ID: 897450

Page 15 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151005**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-22A**

Date Collected: 08/12/19 10:22

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 18:54	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 18:54	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 18:54	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 18:54	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:54	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 18:54	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 18:54	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:54	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 18:54	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 18:54	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 18:54	T
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/22/2019 18:54	
Toluene-d8 (S)	97		%	1	77-119		8/22/2019 18:54	
Bromofluorobenzene (S)	94		%	1	86-123		8/22/2019 18:54	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:54	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 18:54	T
1,2-Dichloroethane-d4 (S)	102		%	1	70-130		8/22/2019 18:54	
Toluene-d8 (S)	96		%	1	70-130		8/22/2019 18:54	
Bromofluorobenzene (S)	96		%	1	70-130		8/22/2019 18:54	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.21		mg/L	1	0.10	0.029	8/19/2019 13:44	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	70		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	----	--	------	---	----	----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/13/2019 15:05	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151006**
Sample ID: **TH-40**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	362.8		umhos/cm	1			8/12/2019 11:20	....
Dissolved Oxygen	0.26		mg/L	1			8/12/2019 11:20	....
ORP-2580BW	-93.8		mV	1			8/12/2019 11:20	....
Temperature	23.7		°C	1			8/12/2019 11:20	....
Turbidity	0.57		NTU	1			8/12/2019 11:20	....
pH	7.61		SU	1			8/12/2019 11:20	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:49	T
Iron	0.043	I	mg/L	1	0.10	0.026	8/14/2019 20:49	T
Sodium	19		mg/L	1	0.20	0.17	8/14/2019 20:49	T
Zinc	0.0086	I	mg/L	1	0.010	0.0074	8/14/2019 20:49	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00019	I	mg/L	1	0.00070	0.00011	8/25/2019 13:33	J
Arsenic	0.000077	U	mg/L	1	0.0010	0.000077	8/25/2019 13:33	J
Barium	0.0057		mg/L	1	0.00060	0.00024	8/25/2019 13:33	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 13:33	J
Chromium	0.00012	I	mg/L	1	0.0020	0.00011	8/25/2019 13:33	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 13:33	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 13:33	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 13:33	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 13:33	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 13:33	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 13:33	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 13:33	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/25/2019 13:33	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:34	T

VOLATILES

Report ID: 897450

Page 17 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151006**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-40**

Date Collected: 08/12/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 19:21	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 19:21	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:21	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 19:21	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 19:21	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 19:21	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 19:21	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 19:21	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:21	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 19:21	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 19:21	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 19:21	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 19:21	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 19:21	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 19:21	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 19:21	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:21	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 19:21	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:21	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 19:21	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 19:21	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 19:21	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:21	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 19:21	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 19:21	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 19:21	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 19:21	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 19:21	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 19:21	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 19:21	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 19:21	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 19:21	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 19:21	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:21	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 19:21	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:21	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 19:21	T

Report ID: 897450

Page 18 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151006**
Sample ID: **TH-40**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 11:20

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 19:21	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:21	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 19:21	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 19:21	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:21	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 19:21	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:21	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 19:21	T
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/22/2019 19:21	
Toluene-d8 (S)	99		%	1	77-119		8/22/2019 19:21	
Bromofluorobenzene (S)	92		%	1	86-123		8/22/2019 19:21	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 19:21	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 19:21	T
1,2-Dichloroethane-d4 (S)	100		%	1	70-130		8/22/2019 19:21	
Toluene-d8 (S)	98		%	1	70-130		8/22/2019 19:21	
Bromofluorobenzene (S)	93		%	1	70-130		8/22/2019 19:21	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.30		mg/L	1	0.10	0.029	8/19/2019 13:45	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	240		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	14		mg/L	1	5.0	2.6	8/14/2019 14:45	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/13/2019 15:05	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151007**
Sample ID: **TH-57**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 11:57

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	361.6		umhos/cm	1			8/12/2019 11:57	....
Dissolved Oxygen	0.64		mg/L	1			8/12/2019 11:57	....
ORP-2580BW	-93.4		mV	1			8/12/2019 11:57	....
Temperature	28.4		°C	1			8/12/2019 11:57	....
Turbidity	0.88		NTU	1			8/12/2019 11:57	....
pH	5.37		SU	1			8/12/2019 11:57	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:52	T
Iron	0.61		mg/L	1	0.10	0.026	8/14/2019 20:52	T
Sodium	23		mg/L	1	0.20	0.17	8/14/2019 20:52	T
Zinc	0.0098	I	mg/L	1	0.010	0.0074	8/14/2019 20:52	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00028	I	mg/L	1	0.00070	0.00011	8/25/2019 13:40	J
Arsenic	0.00040	I	mg/L	1	0.0010	0.000077	8/25/2019 13:40	J
Barium	0.010		mg/L	1	0.00060	0.00024	8/25/2019 13:40	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 13:40	J
Chromium	0.00076	I	mg/L	1	0.0020	0.00011	8/25/2019 13:40	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 13:40	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 13:40	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 13:40	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 13:40	J
Selenium	0.0011	I	mg/L	1	0.0050	0.00058	8/25/2019 13:40	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 13:40	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 13:40	J
Vanadium	0.0039		mg/L	1	0.0020	0.00071	8/25/2019 13:40	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:37	T

VOLATILES

Report ID: 897450

Page 20 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151007**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-57**

Date Collected: 08/12/19 11:57

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 19:47	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 19:47	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:47	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 19:47	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 19:47	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 19:47	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 19:47	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 19:47	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:47	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 19:47	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 19:47	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 19:47	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 19:47	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 19:47	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 19:47	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 19:47	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:47	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 19:47	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:47	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 19:47	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 19:47	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 19:47	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:47	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 19:47	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 19:47	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 19:47	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 19:47	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 19:47	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 19:47	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 19:47	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 19:47	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 19:47	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 19:47	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:47	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 19:47	T
Trichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 19:47	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 19:47	T

Report ID: 897450

Page 21 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151007**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-57**

Date Collected: 08/12/19 11:57

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 19:47	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:47	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 19:47	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 19:47	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:47	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 19:47	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 19:47	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 19:47	T
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/22/2019 19:47	
Toluene-d8 (S)	97		%	1	77-119		8/22/2019 19:47	
Bromofluorobenzene (S)	88		%	1	86-123		8/22/2019 19:47	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 19:47	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 19:47	T
1,2-Dichloroethane-d4 (S)	100		%	1	70-130		8/22/2019 19:47	
Toluene-d8 (S)	96		%	1	70-130		8/22/2019 19:47	
Bromofluorobenzene (S)	91		%	1	70-130		8/22/2019 19:47	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.3		mg/L	1	0.10	0.029	8/19/2019 13:46	T
-------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	260		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	80		mg/L	1	5.0	2.6	8/14/2019 14:46	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.33		mg/L	1	0.10	0.079	8/13/2019 15:04	T
----------------	------	--	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151008**
Sample ID: **TH-28A**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 12:38

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	301.5		umhos/cm	1			8/12/2019 12:38	....
Dissolved Oxygen	0.33		mg/L	1			8/12/2019 12:38	....
ORP-2580BW	-45.6		mV	1			8/12/2019 12:38	....
Temperature	28.4		°C	1			8/12/2019 12:38	....
Turbidity	2.24		NTU	1			8/12/2019 12:38	....
pH	5.24		SU	1			8/12/2019 12:38	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 20:56	T
Iron	4.8		mg/L	1	0.10	0.026	8/14/2019 20:56	T
Sodium	24		mg/L	1	0.20	0.17	8/14/2019 20:56	T
Zinc	0.0093	I	mg/L	1	0.010	0.0074	8/14/2019 20:56	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 13:45	J
Arsenic	0.0012		mg/L	1	0.0010	0.000077	8/25/2019 13:45	J
Barium	0.0017		mg/L	1	0.00060	0.00024	8/25/2019 13:45	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 13:45	J
Chromium	0.0014	I	mg/L	1	0.0020	0.00011	8/25/2019 13:45	J
Cobalt	0.00047	I	mg/L	1	0.00050	0.00019	8/25/2019 13:45	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 13:45	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 13:45	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 13:45	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 13:45	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 13:45	J
Thallium	0.000073	I	mg/L	1	0.00020	0.000057	8/25/2019 13:45	J
Vanadium	0.0014	I	mg/L	1	0.0020	0.00071	8/25/2019 13:45	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/16/2019 12:39	T

VOLATILES

Report ID: 897450

Page 23 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151008**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **TH-28A**

Date Collected: 08/12/19 12:38

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 20:14	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 20:14	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:14	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 20:14	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 20:14	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 20:14	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 20:14	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 20:14	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:14	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 20:14	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 20:14	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 20:14	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 20:14	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 20:14	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 20:14	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 20:14	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:14	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 20:14	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:14	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 20:14	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 20:14	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 20:14	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:14	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 20:14	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 20:14	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 20:14	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 20:14	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 20:14	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 20:14	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 20:14	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 20:14	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 20:14	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 20:14	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:14	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 20:14	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:14	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 20:14	T

Report ID: 897450

Page 24 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151008**
Sample ID: **TH-28A**

Date Received: 08/12/19 16:12 Matrix: Water
Date Collected: 08/12/19 12:38

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 20:14	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:14	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 20:14	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 20:14	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:14	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 20:14	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:14	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 20:14	T
1,2-Dichloroethane-d4 (S)	102		%	1	70-128		8/22/2019 20:14	
Toluene-d8 (S)	96		%	1	77-119		8/22/2019 20:14	
Bromofluorobenzene (S)	91		%	1	86-123		8/22/2019 20:14	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 20:14	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 20:14	T
1,2-Dichloroethane-d4 (S)	100		%	1	70-130		8/22/2019 20:14	
Toluene-d8 (S)	95		%	1	70-130		8/22/2019 20:14	
Bromofluorobenzene (S)	94		%	1	70-130		8/22/2019 20:14	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.8		mg/L	1	0.10	0.029	8/19/2019 13:47	T
-------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	390		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	71		mg/L	1	5.0	2.6	8/14/2019 14:46	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/13/2019 15:06	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151009**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/12/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 17:09	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 17:09	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:09	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 17:09	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 17:09	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 17:09	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 17:09	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 17:09	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:09	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 17:09	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 17:09	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 17:09	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 17:09	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 17:09	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 17:09	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 17:09	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:09	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 17:09	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:09	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 17:09	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 17:09	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 17:09	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:09	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 17:09	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 17:09	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 17:09	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 17:09	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 17:09	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 17:09	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 17:09	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 17:09	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 17:09	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 17:09	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:09	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 17:09	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:09	T

Report ID: 897450

Page 26 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151009**

Date Received: 08/12/19 16:12 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/12/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 17:09	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 17:09	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:09	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 17:09	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 17:09	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:09	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 17:09	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:09	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 17:09	T
1,2-Dichloroethane-d4 (S)	98		%	1	70-128		8/22/2019 17:09	
Toluene-d8 (S)	100		%	1	77-119		8/22/2019 17:09	
Bromofluorobenzene (S)	91		%	1	86-123		8/22/2019 17:09	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 17:09	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 17:09	T
1,2-Dichloroethane-d4 (S)	98		%	1	70-130		8/22/2019 17:09	
Toluene-d8 (S)	100		%	1	70-130		8/22/2019 17:09	
Bromofluorobenzene (S)	92		%	1	70-130		8/22/2019 17:09	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151010**
Sample ID: **Equipment Blank**

Date Received: 08/13/19 15:00 Matrix: Water
Date Collected: 08/13/19 09:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:00	T
Iron	0.026	U	mg/L	1	0.10	0.026	8/14/2019 21:00	T
Zinc	0.0087	I	mg/L	1	0.010	0.0074	8/14/2019 21:00	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 14:21	J
Arsenic	0.000077	U	mg/L	1	0.0010	0.000077	8/25/2019 14:21	J
Barium	0.00024	U	mg/L	1	0.00060	0.00024	8/25/2019 14:21	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:21	J
Chromium	0.00011	U	mg/L	1	0.0020	0.00011	8/25/2019 14:21	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:21	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:21	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:21	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:21	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:21	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:21	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:21	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/25/2019 14:21	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 13:54	T
Microbiology								
Analysis Desc: Fecal Coliform MF, SM9222D, Water			Analytical Method: SM 9222D					
Coliform Fecal	1	U	#/100 mL	1	1	1	8/13/2019 16:06	T
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 17:36	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 17:36	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:36	T

Report ID: 897450

Page 28 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151010**
Sample ID: **Equipment Blank**

Date Received: 08/13/19 15:00 Matrix: Water
Date Collected: 08/13/19 09:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 17:36	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 17:36	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 17:36	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 17:36	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 17:36	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:36	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 17:36	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 17:36	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 17:36	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 17:36	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 17:36	T
Acetone	11		ug/L	1	2.0	1.0	8/22/2019 17:36	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 17:36	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:36	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 17:36	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:36	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 17:36	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 17:36	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 17:36	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:36	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 17:36	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 17:36	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 17:36	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 17:36	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 17:36	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 17:36	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 17:36	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 17:36	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 17:36	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 17:36	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:36	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 17:36	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 17:36	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 17:36	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 17:36	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:36	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 17:36	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 17:36	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:36	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 17:36	T

Report ID: 897450

Page 29 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151010**
Sample ID: **Equipment Blank**

Date Received: 08/13/19 15:00 Matrix: Water
Date Collected: 08/13/19 09:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 17:36	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 17:36	T
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		8/22/2019 17:36	
Toluene-d8 (S)	97		%	1	77-119		8/22/2019 17:36	
Bromofluorobenzene (S)	90		%	1	86-123		8/22/2019 17:36	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 17:36	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 17:36	T
1,2-Dichloroethane-d4 (S)	103		%	1	70-130		8/22/2019 17:36	
Toluene-d8 (S)	96		%	1	70-130		8/22/2019 17:36	
Bromofluorobenzene (S)	93		%	1	70-130		8/22/2019 17:36	

WET CHEMISTRY

Analysis Desc: Total
Nitrogen, Calculated, Water

Analytical Method: Calculation

Total Nitrogen	0.22	I	mg/L	1	0.40	0.18	9/25/2019 13:15	T
----------------	-------------	----------	-------------	----------	------	------	-----------------	---

Analysis Desc: Unionized
Ammonia, DEP SOP, Water

Analytical Method: DEP SOP 10/03/83

Unionized Ammonia	0.00017	U	mg/L	1	0.10	0.00017	8/19/2019 11:59	T
-------------------	----------------	----------	-------------	----------	------	---------	-----------------	---

Analysis Desc: Total
Phosphorus, E365.4, Analysis

Preparation Method: Copper Sulfate Digestion

Analytical Method: EPA 365.4

Total Phosphorus (as P)	0.046	U	mg/L	1	0.10	0.046	8/16/2019 10:02	T
-------------------------	--------------	----------	-------------	----------	------	-------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Chemical Oxygen Demand	24	U	mg/L	1	50	24	8/15/2019 11:45	T
------------------------	-----------	----------	-------------	----------	----	----	-----------------	---

Analysis Desc: Chlorophyll
A, SM10200H, Water

Analytical Method: SM 10200 H

Corrected Chlorophyll A	2.5	U,1	mg/m3	1	5.0	2.5	8/27/2019 16:55	G
-------------------------	------------	------------	--------------	----------	-----	-----	-----------------	---

Analysis Desc:
Hardness, SM2340C, Water

Analytical Method: SM 2340C

Hardness (as CaCO3)	2.6	U	mg/L	1	10	2.6	8/28/2019 10:15	T
---------------------	------------	----------	-------------	----------	----	-----	-----------------	---

Analysis Desc: Tot Dissolved
Solids, SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	10	U	mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----------	----------	-------------	----------	----	----	-----------------	---

Report ID: 897450

Page 30 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151010**
Sample ID: **Equipment Blank**

Date Received: 08/13/19 15:00 Matrix: Water
Date Collected: 08/13/19 09:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TSS,SM2540D,Water		Analytical Method: SM 2540D						
Total Suspended Solids	1.0	U	mg/L	1	1.0	1.0	8/15/2019 11:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD,SM5210B,Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	3.9		mg/L	1	2.0	2.0	8/14/2019 13:19	T
Analysis Desc: TOC,SM5310B,Water		Analytical Method: SM 5310B						
Total Organic Carbon	0.79	I	mg/L	1	1.0	0.65	8/15/2019 10:31	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151011**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3A**

Date Collected: 08/13/19 09:32

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	276.2		umhos/cm	1			8/13/2019 09:32	....
Dissolved Oxygen	0.07		mg/L	1			8/13/2019 09:32	....
ORP-2580BW	-58.4		mV	1			8/13/2019 09:32	....
Temperature	27.2		°C	1			8/13/2019 09:32	....
Turbidity	2.5		NTU	1			8/13/2019 09:32	....
pH	6.39		SU	1			8/13/2019 09:32	....
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	3.2		mg/L	1	1.0	1.0	8/15/2019 11:30	T
METALS								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis,Water			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:04	T
Iron	0.52		mg/L	1	0.10	0.026	8/14/2019 21:04	T
Zinc	0.043		mg/L	1	0.010	0.0074	8/14/2019 21:04	T
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis,Total			Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 14:25	J
Arsenic	0.00032	I	mg/L	1	0.0010	0.00077	8/25/2019 14:25	J
Barium	0.020		mg/L	1	0.00060	0.00024	8/25/2019 14:25	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:25	J
Chromium	0.00081	I	mg/L	1	0.0020	0.00011	8/25/2019 14:25	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:25	J
Copper	0.00061	I	mg/L	1	0.00070	0.00035	8/25/2019 14:25	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:25	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:25	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:25	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:25	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:25	J
Vanadium	0.00088	I	mg/L	1	0.0020	0.00071	8/25/2019 14:25	J
Analysis Desc: SW846 7470A			Preparation Method: SW-846 7470A					
Analysis,Water			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 13:57	T

Report ID: 897450

Page 32 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151011**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3A**

Date Collected: 08/13/19 09:32

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Microbiology								
Analysis Desc: Fecal Coliform MF,SM9222D,Water			Analytical Method: SM 9222D					
Coliform Fecal	40	B	#/100 mL	10	10	10	8/13/2019 16:06	T
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 20:40	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 20:40	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:40	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 20:40	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 20:40	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 20:40	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 20:40	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 20:40	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:40	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 20:40	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 20:40	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 20:40	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 20:40	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 20:40	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 20:40	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 20:40	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:40	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 20:40	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:40	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 20:40	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 20:40	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 20:40	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:40	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 20:40	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 20:40	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 20:40	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 20:40	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 20:40	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 20:40	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 20:40	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 20:40	T

Report ID: 897450

Page 33 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151011**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3A**

Date Collected: 08/13/19 09:32

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 20:40	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 20:40	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:40	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 20:40	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 20:40	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 20:40	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 20:40	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:40	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 20:40	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 20:40	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:40	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 20:40	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 20:40	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 20:40	T
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/22/2019 20:40	
Toluene-d8 (S)	96		%	1	77-119		8/22/2019 20:40	
Bromofluorobenzene (S)	100		%	1	86-123		8/22/2019 20:40	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 20:40	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 20:40	T
1,2-Dichloroethane-d4 (S)	101		%	1	70-130		8/22/2019 20:40	
Toluene-d8 (S)	96		%	1	70-130		8/22/2019 20:40	
Bromofluorobenzene (S)	99		%	1	70-130		8/22/2019 20:40	

WET CHEMISTRY

Analysis Desc: Total
Nitrogen, Calculated, Water

Analytical Method: Calculation

Total Nitrogen	2.4		mg/L	1	0.40	0.18	9/25/2019 12:45	T
----------------	-----	--	------	---	------	------	-----------------	---

Analysis Desc: Unionized
Ammonia, DEP SOP, Water

Analytical Method: DEP SOP 10/03/83

Unionized Ammonia	0.00068	I	mg/L	1	0.10	0.000057	8/19/2019 11:59	T
-------------------	---------	---	------	---	------	----------	-----------------	---

Analysis Desc: Total
Phosphorus, E365.4, Analysis

Preparation Method: Copper Sulfate Digestion

Analytical Method: EPA 365.4

Total Phosphorus (as P)	0.23	U	mg/L	5	0.50	0.23	8/16/2019 10:02	T
-------------------------	------	---	------	---	------	------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Report ID: 897450

Page 34 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151011**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3A**

Date Collected: 08/13/19 09:32

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chemical Oxygen Demand	24	U	mg/L	1	50	24	8/15/2019 11:45	T
Analysis Desc: Chlorophyll A, SM10200H, Water		Analytical Method: SM 10200 H						
Corrected Chlorophyll A	7.2		mg/m3	1	5.0	2.5	8/27/2019 16:55	G
Analysis Desc: Hardness, SM2340C, Water		Analytical Method: SM 2340C						
Hardness (as CaCO3)	96		mg/L	1	10	2.6	8/28/2019 10:15	T
Analysis Desc: Tot Dissolved Solids, SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	180		mg/L	1	10	10	8/15/2019 13:00	T
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD, SM5210B, Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	2.5		mg/L	1	2.0	2.0	8/14/2019 13:22	T
Analysis Desc: TOC, SM5310B, Water		Analytical Method: SM 5310B						
Total Organic Carbon	10		mg/L	1	1.0	0.65	8/15/2019 10:31	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151012**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Mine Cut 1D**

Date Collected: 08/13/19 09:58

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	491.9		umhos/cm	1			8/13/2019 09:58	....
Dissolved Oxygen	0.76		mg/L	1			8/13/2019 09:58	....
ORP-2580BW	52.2		mV	1			8/13/2019 09:58	....
Temperature	28.4		°C	1			8/13/2019 09:58	....
Turbidity	3.72		NTU	1			8/13/2019 09:58	....
pH	6.83		SU	1			8/13/2019 09:58	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:22	T
Iron	0.34		mg/L	1	0.10	0.026	8/14/2019 21:22	T
Zinc	0.0083	I	mg/L	1	0.010	0.0074	8/14/2019 21:22	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00033	I	mg/L	1	0.00070	0.00011	8/25/2019 14:30	J
Arsenic	0.00055	I	mg/L	1	0.0010	0.000077	8/25/2019 14:30	J
Barium	0.0037		mg/L	1	0.00060	0.00024	8/25/2019 14:30	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:30	J
Chromium	0.00041	I	mg/L	1	0.0020	0.00011	8/25/2019 14:30	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:30	J
Copper	0.00038	I	mg/L	1	0.00070	0.00035	8/25/2019 14:30	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:30	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:30	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:30	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:30	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:30	J
Vanadium	0.00098	I	mg/L	1	0.0020	0.00071	8/25/2019 14:30	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 13:59	T

Microbiology

Report ID: 897450

Page 36 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151012**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Mine Cut 1D**

Date Collected: 08/13/19 09:58

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Fecal Coliform MF,SM9222D,Water Analytical Method: SM 9222D								
Coliform Fecal	60	B	#/100 mL	10	10	10	8/13/2019 16:06	T

VOLATILES

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

Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 21:06	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 21:06	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:06	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 21:06	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 21:06	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 21:06	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 21:06	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 21:06	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:06	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:06	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:06	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 21:06	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 21:06	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 21:06	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 21:06	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 21:06	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:06	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 21:06	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:06	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 21:06	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:06	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 21:06	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:06	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 21:06	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 21:06	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 21:06	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 21:06	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:06	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:06	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 21:06	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 21:06	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 21:06	T

Report ID: 897450

Page 37 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151012**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Mine Cut 1D**

Date Collected: 08/13/19 09:58

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:06	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:06	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 21:06	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:06	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:06	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:06	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:06	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 21:06	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 21:06	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:06	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 21:06	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:06	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 21:06	T
1,2-Dichloroethane-d4 (S)	99		%	1	70-128		8/22/2019 21:06	
Toluene-d8 (S)	94		%	1	77-119		8/22/2019 21:06	
Bromofluorobenzene (S)	91		%	1	86-123		8/22/2019 21:06	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:06	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:06	T
1,2-Dichloroethane-d4 (S)	99		%	1	70-130		8/22/2019 21:06	
Toluene-d8 (S)	94		%	1	70-130		8/22/2019 21:06	
Bromofluorobenzene (S)	97		%	1	70-130		8/22/2019 21:06	

WET CHEMISTRY

Analysis Desc: Total

Analytical Method: Calculation

Nitrogen, Calculated, Water

Total Nitrogen	1.9		mg/L	1	0.40	0.18	9/25/2019 12:50	T
----------------	-----	--	------	---	------	------	-----------------	---

Analysis Desc: Unionized

Analytical Method: DEP SOP 10/03/83

Ammonia, DEP SOP, Water

Unionized Ammonia	0.00022	I	mg/L	1	0.10	0.00017	8/19/2019 11:59	T
-------------------	---------	---	------	---	------	---------	-----------------	---

Analysis Desc: Total

Preparation Method: Copper Sulfate Digestion

Phosphorus, E365.4, Analysis

Analytical Method: EPA 365.4

Total Phosphorus (as P)	2.1		mg/L	1	0.10	0.046	8/16/2019 10:02	T
-------------------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Chemical Oxygen Demand	45	I	mg/L	1	50	24	8/15/2019 11:45	T
------------------------	----	---	------	---	----	----	-----------------	---

Report ID: 897450

Page 38 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151012**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Mine Cut 1D**

Date Collected: 08/13/19 09:58

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorophyll A, SM10200H, Water Analytical Method: SM 10200 H								
Corrected Chlorophyll A	34		mg/m3	1	5.0	2.5	8/27/2019 16:55	G
Analysis Desc: Hardness, SM2340C, Water Analytical Method: SM 2340C								
Hardness (as CaCO3)	110		mg/L	1	10	2.6	8/28/2019 10:15	T
Analysis Desc: Tot Dissolved Solids, SM2540C Analytical Method: SM 2540 C								
Total Dissolved Solids	310		mg/L	1	10	10	8/15/2019 13:00	T
Analysis Desc: TSS, SM2540D, Water Analytical Method: SM 2540D								
Total Suspended Solids	8.4		mg/L	1	1.0	1.0	8/15/2019 11:30	T
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water Analytical Method: SM 4500NO3-F								
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD, SM5210B, Water Analytical Method: SM 5210B								
Biochemical Oxygen Demand	3.6		mg/L	1	2.0	2.0	8/14/2019 13:25	T
Analysis Desc: TOC, SM5310B, Water Analytical Method: SM 5310B								
Total Organic Carbon	15		mg/L	1	1.0	0.65	8/15/2019 10:31	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151013**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3C2**

Date Collected: 08/13/19 13:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	285.6		umhos/cm	1			8/13/2019 13:25	....
Dissolved Oxygen	2.67		mg/L	1			8/13/2019 13:25	....
ORP-2580BW	69		mV	1			8/13/2019 13:25	....
Temperature	27.7		°C	1			8/13/2019 13:25	....
Turbidity	5.15		NTU	1			8/13/2019 13:25	....
pH	6.58		SU	1			8/13/2019 13:25	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:26	T
Iron	1.2		mg/L	1	0.10	0.026	8/14/2019 21:26	T
Zinc	0.0099	I	mg/L	1	0.010	0.0074	8/14/2019 21:26	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00049	I	mg/L	1	0.00070	0.00011	8/25/2019 14:35	J
Arsenic	0.0013		mg/L	1	0.0010	0.000077	8/25/2019 14:35	J
Barium	0.0068		mg/L	1	0.00060	0.00024	8/25/2019 14:35	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:35	J
Chromium	0.0014	I	mg/L	1	0.0020	0.00011	8/25/2019 14:35	J
Cobalt	0.00042	I	mg/L	1	0.00050	0.00019	8/25/2019 14:35	J
Copper	0.00041	I	mg/L	1	0.00070	0.00035	8/25/2019 14:35	J
Lead	0.00027	I	mg/L	1	0.00070	0.00024	8/25/2019 14:35	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:35	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:35	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:35	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:35	J
Vanadium	0.0021		mg/L	1	0.0020	0.00071	8/25/2019 14:35	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:02	T

Microbiology

Report ID: 897450

Page 40 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151013**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3C2**

Date Collected: 08/13/19 13:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Fecal Coliform MF,SM9222D,Water Analytical Method: SM 9222D								
Coliform Fecal	320		#/100 mL	10	10	10	8/13/2019 16:06	T

VOLATILES

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

Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 21:32	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 21:32	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:32	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 21:32	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 21:32	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 21:32	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 21:32	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 21:32	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:32	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:32	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:32	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 21:32	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 21:32	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 21:32	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 21:32	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 21:32	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:32	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 21:32	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:32	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 21:32	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:32	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 21:32	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:32	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 21:32	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 21:32	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 21:32	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 21:32	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:32	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:32	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 21:32	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 21:32	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 21:32	T

Report ID: 897450

Page 41 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151013**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3C2**

Date Collected: 08/13/19 13:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:32	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:32	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 21:32	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:32	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:32	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:32	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:32	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 21:32	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 21:32	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:32	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 21:32	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:32	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 21:32	T
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/22/2019 21:32	
Toluene-d8 (S)	98		%	1	77-119		8/22/2019 21:32	
Bromofluorobenzene (S)	92		%	1	86-123		8/22/2019 21:32	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:32	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:32	T
1,2-Dichloroethane-d4 (S)	102		%	1	70-130		8/22/2019 21:32	
Toluene-d8 (S)	97		%	1	70-130		8/22/2019 21:32	
Bromofluorobenzene (S)	94		%	1	70-130		8/22/2019 21:32	

WET CHEMISTRY

Analysis Desc: Total
Nitrogen, Calculated, Water

Analytical Method: Calculation

Total Nitrogen	1.4		mg/L	1	0.40	0.18	9/25/2019 12:50	T
----------------	-----	--	------	---	------	------	-----------------	---

Analysis Desc: Unionized
Ammonia, DEP SOP, Water

Analytical Method: DEP SOP 10/03/83

Unionized Ammonia	0.000091	U	mg/L	1	0.10	0.000091	8/19/2019 11:59	T
-------------------	----------	---	------	---	------	----------	-----------------	---

Analysis Desc: Total
Phosphorus, E365.4, Analysis

Preparation Method: Copper Sulfate Digestion

Analytical Method: EPA 365.4

Total Phosphorus (as P)	0.92		mg/L	1	0.10	0.046	8/16/2019 10:02	T
-------------------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Chemical Oxygen Demand	44	I	mg/L	1	50	24	8/15/2019 11:45	T
------------------------	----	---	------	---	----	----	-----------------	---

Report ID: 897450

Page 42 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151013**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Stream 3C2**

Date Collected: 08/13/19 13:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorophyll A, SM10200H, Water		Analytical Method: SM 10200 H						
Corrected Chlorophyll A	3.2	I	mg/m3	1	5.0	2.5	8/27/2019 16:55	G
Analysis Desc: Hardness, SM2340C, Water		Analytical Method: SM 2340C						
Hardness (as CaCO3)	80		mg/L	1	10	2.6	8/28/2019 10:15	T
Analysis Desc: Tot Dissolved Solids, SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	160		mg/L	1	10	10	8/15/2019 13:00	T
Analysis Desc: TSS, SM2540D, Water		Analytical Method: SM 2540D						
Total Suspended Solids	9.4		mg/L	1	1.0	1.0	8/15/2019 11:30	T
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD, SM5210B, Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	2.1		mg/L	1	2.0	2.0	8/14/2019 13:28	T
Analysis Desc: TOC, SM5310B, Water		Analytical Method: SM 5310B						
Total Organic Carbon	16		mg/L	1	1.0	0.65	8/15/2019 10:31	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151014** Date Received: 08/13/19 15:00 Matrix: Water
Sample ID: **3B2B** Date Collected: 08/13/19 13:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	231		umhos/cm	1			8/13/2019 13:50	....
Dissolved Oxygen	3.28		mg/L	1			8/13/2019 13:50	....
ORP-2580BW	82.2		mV	1			8/13/2019 13:50	....
Temperature	26.1		°C	1			8/13/2019 13:50	....
Turbidity	6.76		NTU	1			8/13/2019 13:50	....
pH	6.39		SU	1			8/13/2019 13:50	....
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:30	T
Iron	1.4		mg/L	1	0.10	0.026	8/14/2019 21:30	T
Zinc	0.012		mg/L	1	0.010	0.0074	8/14/2019 21:30	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00013	I	mg/L	1	0.00070	0.00011	8/25/2019 14:40	J
Arsenic	0.00089	I	mg/L	1	0.0010	0.000077	8/25/2019 14:40	J
Barium	0.013		mg/L	1	0.00060	0.00024	8/25/2019 14:40	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:40	J
Chromium	0.0015	I	mg/L	1	0.0020	0.00011	8/25/2019 14:40	J
Cobalt	0.00028	I	mg/L	1	0.00050	0.00019	8/25/2019 14:40	J
Copper	0.00070		mg/L	1	0.00070	0.00035	8/25/2019 14:40	J
Lead	0.00033	I	mg/L	1	0.00070	0.00024	8/25/2019 14:40	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:40	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:40	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:40	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:40	J
Vanadium	0.0022		mg/L	1	0.0020	0.00071	8/25/2019 14:40	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 13:46	T

Microbiology

Report ID: 897450

Page 44 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151014**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **3B2B**

Date Collected: 08/13/19 13:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Fecal Coliform MF,SM9222D,Water Analytical Method: SM 9222D								
Coliform Fecal	800	B	#/100 mL	10	10	10	8/13/2019 16:06	T

VOLATILES

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

Analytical Method: SW-846 8260B

1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 21:58	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 21:58	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:58	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 21:58	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 21:58	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 21:58	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 21:58	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 21:58	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:58	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:58	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:58	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 21:58	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 21:58	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 21:58	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 21:58	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 21:58	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:58	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 21:58	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:58	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 21:58	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 21:58	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 21:58	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:58	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 21:58	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 21:58	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 21:58	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 21:58	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:58	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 21:58	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 21:58	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 21:58	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 21:58	T

Report ID: 897450

Page 45 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151014**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **3B2B**

Date Collected: 08/13/19 13:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:58	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:58	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 21:58	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 21:58	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 21:58	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 21:58	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:58	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 21:58	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 21:58	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:58	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 21:58	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 21:58	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 21:58	T
1,2-Dichloroethane-d4 (S)	98		%	1	70-128		8/22/2019 21:58	
Toluene-d8 (S)	97		%	1	77-119		8/22/2019 21:58	
Bromofluorobenzene (S)	98		%	1	86-123		8/22/2019 21:58	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:58	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 21:58	T
1,2-Dichloroethane-d4 (S)	96		%	1	70-130		8/22/2019 21:58	
Toluene-d8 (S)	97		%	1	70-130		8/22/2019 21:58	
Bromofluorobenzene (S)	98		%	1	70-130		8/22/2019 21:58	

WET CHEMISTRY

Analysis Desc: Total

Analytical Method: Calculation

Nitrogen, Calculated, Water

Total Nitrogen	1.4		mg/L	1	0.40	0.18	9/25/2019 12:55	T
----------------	-----	--	------	---	------	------	-----------------	---

Analysis Desc: Unionized

Analytical Method: DEP SOP 10/03/83

Ammonia, DEP SOP, Water

Unionized Ammonia	0.000053	U	mg/L	1	0.10	0.000053	8/19/2019 11:59	T
-------------------	----------	---	------	---	------	----------	-----------------	---

Analysis Desc: Total

Preparation Method: Copper Sulfate Digestion

Phosphorus, E365.4, Analysis

Analytical Method: EPA 365.4

Total Phosphorus (as P)	1.0		mg/L	1	0.10	0.046	8/16/2019 10:02	T
-------------------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Chemical Oxygen Demand	55		mg/L	1	50	24	8/15/2019 11:45	T
------------------------	----	--	------	---	----	----	-----------------	---

Report ID: 897450

Page 46 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151014**
Sample ID: **3B2B**

Date Received: 08/13/19 15:00 Matrix: Water
Date Collected: 08/13/19 13:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorophyll A, SM10200H, Water		Analytical Method: SM 10200 H						
Corrected Chlorophyll A	2.5	U	mg/m3	1	5.0	2.5	8/27/2019 16:55	G
Analysis Desc: Hardness, SM2340C, Water		Analytical Method: SM 2340C						
Hardness (as CaCO3)	68		mg/L	1	10	2.6	8/28/2019 10:15	T
Analysis Desc: Tot Dissolved Solids, SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	160		mg/L	1	10	10	8/15/2019 13:00	T
Analysis Desc: TSS, SM2540D, Water		Analytical Method: SM 2540D						
Total Suspended Solids	11		mg/L	1	1.0	1.0	8/15/2019 11:30	T
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.18		mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD, SM5210B, Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	2.0		mg/L	1	2.0	2.0	8/14/2019 13:31	T
Analysis Desc: TOC, SM5310B, Water		Analytical Method: SM 5310B						
Total Organic Carbon	18		mg/L	1	1.0	0.65	8/26/2019 09:10	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151015**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/14/2019 21:34	T
Iron	0.35		mg/L	1	0.10	0.026	8/14/2019 21:34	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/14/2019 21:34	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00030	I	mg/L	1	0.00070	0.00011	8/25/2019 14:45	J
Arsenic	0.00055	I	mg/L	1	0.0010	0.000077	8/25/2019 14:45	J
Barium	0.0038		mg/L	1	0.00060	0.00024	8/25/2019 14:45	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:45	J
Chromium	0.00043	I	mg/L	1	0.0020	0.00011	8/25/2019 14:45	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:45	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:45	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:45	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:45	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:45	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:45	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:45	J
Vanadium	0.0010	I	mg/L	1	0.0020	0.00071	8/25/2019 14:45	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:05	T
Microbiology								
Analysis Desc: Fecal Coliform MF, SM9222D, Water			Analytical Method: SM 9222D					
Coliform Fecal	80		#/100 mL	10	10	10	8/13/2019 16:06	T
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.64	U	ug/L	1	1.0	0.64	8/22/2019 22:24	T
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	8/22/2019 22:24	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	8/22/2019 22:24	T

Report ID: 897450

Page 48 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151015**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/22/2019 22:24	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	8/22/2019 22:24	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	8/22/2019 22:24	T
1,2,3-Trichloropropane	0.58	U	ug/L	1	1.0	0.58	8/22/2019 22:24	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	8/22/2019 22:24	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 22:24	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 22:24	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	8/22/2019 22:24	T
2-Butanone (MEK)	0.59	U	ug/L	1	1.0	0.59	8/22/2019 22:24	T
2-Hexanone	0.99	U	ug/L	1	1.0	0.99	8/22/2019 22:24	T
4-Methyl-2-pentanone (MIBK)	0.93	U	ug/L	1	1.0	0.93	8/22/2019 22:24	T
Acetone	1.0	U	ug/L	1	2.0	1.0	8/22/2019 22:24	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	8/22/2019 22:24	T
Benzene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 22:24	T
Bromochloromethane	0.33	U	ug/L	1	1.0	0.33	8/22/2019 22:24	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	8/22/2019 22:24	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	8/22/2019 22:24	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	8/22/2019 22:24	T
Carbon Disulfide	0.49	U	ug/L	1	1.0	0.49	8/22/2019 22:24	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	8/22/2019 22:24	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	8/22/2019 22:24	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	8/22/2019 22:24	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	8/22/2019 22:24	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	8/22/2019 22:24	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	8/22/2019 22:24	T
Dibromomethane	0.76	U	ug/L	1	1.0	0.76	8/22/2019 22:24	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	8/22/2019 22:24	T
Iodomethane (Methyl Iodide)	0.65	U	ug/L	1	1.0	0.65	8/22/2019 22:24	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	8/22/2019 22:24	T
Styrene	0.84	U	ug/L	1	1.0	0.84	8/22/2019 22:24	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	8/22/2019 22:24	T
Toluene	0.45	U	ug/L	1	1.0	0.45	8/22/2019 22:24	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	8/22/2019 22:24	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	8/22/2019 22:24	T
Vinyl Acetate	0.40	U	ug/L	1	1.0	0.40	8/22/2019 22:24	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	8/22/2019 22:24	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	8/22/2019 22:24	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	8/22/2019 22:24	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 22:24	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	8/22/2019 22:24	T

Report ID: 897450

Page 49 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151015**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	8/22/2019 22:24	T
trans-1,4-Dichloro-2-butene	0.39	U	ug/L	1	1.0	0.39	8/22/2019 22:24	T
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/22/2019 22:24	
Toluene-d8 (S)	98		%	1	77-119		8/22/2019 22:24	
Bromofluorobenzene (S)	94		%	1	86-123		8/22/2019 22:24	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.020	U	ug/L	1	0.020	0.020	8/22/2019 22:24	T
Ethylene Dibromide (EDB)	0.020	U	ug/L	1	0.020	0.020	8/22/2019 22:24	T
1,2-Dichloroethane-d4 (S)	102		%	1	70-130		8/22/2019 22:24	
Toluene-d8 (S)	98		%	1	70-130		8/22/2019 22:24	
Bromofluorobenzene (S)	96		%	1	70-130		8/22/2019 22:24	

WET CHEMISTRY

Analysis Desc: Total
Nitrogen, Calculated, Water

Analytical Method: Calculation

Total Nitrogen	2.1		mg/L	1	0.40	0.18	9/25/2019 13:15	T
----------------	------------	--	-------------	----------	------	------	-----------------	---

Analysis Desc: Unionized
Ammonia, DEP SOP, Water

Analytical Method: DEP SOP 10/03/83

Unionized Ammonia	0.00017	U	mg/L	1	0.10	0.00017	8/19/2019 11:59	T
-------------------	----------------	----------	-------------	----------	------	---------	-----------------	---

Analysis Desc: Total
Phosphorus, E365.4, Analysis

Preparation Method: Copper Sulfate Digestion

Analytical Method: EPA 365.4

Total Phosphorus (as P)	2.1		mg/L	1	0.10	0.046	8/16/2019 10:02	T
-------------------------	------------	--	-------------	----------	------	-------	-----------------	---

Analysis Desc: COD, E410.4, Water

Analytical Method: EPA 410.4

Chemical Oxygen Demand	45	I	mg/L	1	50	24	8/15/2019 11:45	T
------------------------	-----------	----------	-------------	----------	----	----	-----------------	---

Analysis Desc: Chlorophyll
A, SM10200H, Water

Analytical Method: SM 10200 H

Corrected Chlorophyll A	34		mg/m3	1	5.0	2.5	8/27/2019 16:55	G
-------------------------	-----------	--	--------------	----------	-----	-----	-----------------	---

Analysis Desc:
Hardness, SM2340C, Water

Analytical Method: SM 2340C

Hardness (as CaCO3)	110		mg/L	1	10	2.6	8/28/2019 10:15	T
---------------------	------------	--	-------------	----------	----	-----	-----------------	---

Analysis Desc: Tot Dissolved
Solids, SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	280		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	------------	--	-------------	----------	----	----	-----------------	---

Report ID: 897450

Page 50 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151015**

Date Received: 08/13/19 15:00 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/13/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: TSS,SM2540D,Water		Analytical Method: SM 2540D						
Total Suspended Solids	4.2		mg/L	1	1.0	1.0	8/15/2019 11:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/14/2019 14:02	T
Analysis Desc: BOD,SM5210B,Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	4.3		mg/L	1	2.0	2.0	8/14/2019 14:00	T
Analysis Desc: TOC,SM5310B,Water		Analytical Method: SM 5310B						
Total Organic Carbon	15		mg/L	1	1.0	0.65	8/27/2019 09:41	G

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151016**
Sample ID: **TH-78**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 11:11

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	522		umhos/cm	1			8/14/2019 11:11	....
Dissolved Oxygen	0.09		mg/L	1			8/14/2019 11:11	....
ORP-2580BW	-222.3		mV	1			8/14/2019 11:11	....
Temperature	23.4		°C	1			8/14/2019 11:11	....
Turbidity	2.28		NTU	1			8/14/2019 11:11	....
pH	8.24		SU	1			8/14/2019 11:11	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/16/2019 17:40	T
Iron	0.20		mg/L	1	0.10	0.026	8/16/2019 17:40	T
Sodium	30		mg/L	1	0.20	0.17	8/16/2019 17:40	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/16/2019 17:40	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 14:50	J
Arsenic	0.00011	I	mg/L	1	0.0010	0.000077	8/25/2019 14:50	J
Barium	0.038		mg/L	1	0.00060	0.00024	8/25/2019 14:50	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 14:50	J
Chromium	0.00011	U	mg/L	1	0.0020	0.00011	8/25/2019 14:50	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 14:50	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 14:50	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 14:50	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 14:50	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 14:50	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 14:50	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 14:50	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/25/2019 14:50	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:07	T

VOLATILES

Report ID: 897450

Page 52 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151016**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-78**

Date Collected: 08/14/19 11:11

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Chlorides, SM4500-Cl-E, Water		Analytical Method: SM 4500-Cl-E						
Chloride	32		mg/L	1	5.0	2.6	8/20/2019 09:08	T
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 02:43	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 02:43	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 02:43	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 02:43	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 02:43	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 02:43	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 02:43	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 02:43	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:43	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 02:43	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:43	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 02:43	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 02:43	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 02:43	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 02:43	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 02:43	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 02:43	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:43	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 02:43	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 02:43	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 02:43	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 02:43	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 02:43	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 02:43	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 02:43	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 02:43	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 02:43	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 02:43	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 02:43	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 02:43	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 02:43	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 02:43	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 02:43	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:43	M

Report ID: 897450

Page 53 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151016**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-78**

Date Collected: 08/14/19 11:11

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:43	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 02:43	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 02:43	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 02:43	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 02:43	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 02:43	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:43	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 02:43	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 02:43	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 02:43	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 02:43	M
1,2-Dichloroethane-d4 (S)	99		%	1	70-128		8/28/2019 02:43	
Toluene-d8 (S)	95		%	1	77-119		8/28/2019 02:43	
Bromofluorobenzene (S)	104		%	1	86-123		8/28/2019 02:43	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 02:43	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 02:43	M
1,2-Dichloroethane-d4 (S)	112		%	1	77-125		8/28/2019 02:43	
Toluene-d8 (S)	97		%	1	80-121		8/28/2019 02:43	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 02:43	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.25		mg/L	1	0.10	0.029	8/19/2019 14:14	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	320		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.086	I	mg/L	1	0.10	0.079	8/15/2019 14:09	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151017**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-19**

Date Collected: 08/14/19 11:59

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	411		umhos/cm	1			8/14/2019 11:59	....
Dissolved Oxygen	0.11		mg/L	1			8/14/2019 11:59	....
ORP-2580BW	-75.5		mV	1			8/14/2019 11:59	....
Temperature	23.5		°C	1			8/14/2019 11:59	....
Turbidity	0.87		NTU	1			8/14/2019 11:59	....
pH	7.4		SU	1			8/14/2019 11:59	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/16/2019 17:59	T
Iron	0.026	U	mg/L	1	0.10	0.026	8/16/2019 17:59	T
Sodium	13		mg/L	1	0.20	0.17	8/16/2019 17:59	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/16/2019 17:59	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A					
			Analytical Method: SW-846 6020					
Antimony	0.00012	I	mg/L	1	0.00070	0.00011	8/25/2019 15:09	J
Arsenic	0.000077	U	mg/L	1	0.0010	0.000077	8/25/2019 15:09	J
Barium	0.0051		mg/L	1	0.00060	0.00024	8/25/2019 15:09	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 15:09	J
Chromium	0.00011	U	mg/L	1	0.0020	0.00011	8/25/2019 15:09	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 15:09	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 15:09	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 15:09	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 15:09	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 15:09	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 15:09	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 15:09	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/25/2019 15:09	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A					
			Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:10	T

VOLATILES

Report ID: 897450

Page 55 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151017**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-19**

Date Collected: 08/14/19 11:59

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 02:13	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 02:13	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 02:13	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 02:13	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 02:13	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 02:13	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 02:13	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 02:13	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:13	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 02:13	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:13	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 02:13	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 02:13	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 02:13	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 02:13	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 02:13	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 02:13	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:13	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 02:13	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 02:13	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 02:13	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 02:13	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 02:13	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 02:13	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 02:13	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 02:13	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 02:13	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 02:13	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 02:13	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 02:13	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 02:13	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 02:13	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 02:13	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:13	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 02:13	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 02:13	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 02:13	M

Report ID: 897450

Page 56 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151017**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-19**

Date Collected: 08/14/19 11:59

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 02:13	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 02:13	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 02:13	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 02:13	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 02:13	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 02:13	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 02:13	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 02:13	M
1,2-Dichloroethane-d4 (S)	98		%	1	70-128		8/28/2019 02:13	
Toluene-d8 (S)	98		%	1	77-119		8/28/2019 02:13	
Bromofluorobenzene (S)	104		%	1	86-123		8/28/2019 02:13	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 02:13	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 02:13	M
1,2-Dichloroethane-d4 (S)	111		%	1	77-125		8/28/2019 02:13	
Toluene-d8 (S)	101		%	1	80-121		8/28/2019 02:13	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 02:13	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.24		mg/L	1	0.10	0.029	8/19/2019 14:14	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	250		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	8.2		mg/L	1	5.0	2.6	8/20/2019 09:10	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/15/2019 14:07	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151018**
Sample ID: **TH-36A**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 12:27

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	210.2		umhos/cm	1			8/14/2019 12:27	....
Dissolved Oxygen	0.51		mg/L	1			8/14/2019 12:27	....
ORP-2580BW	135.5		mV	1			8/14/2019 12:27	....
Temperature	25.3		°C	1			8/14/2019 12:27	....
Turbidity	4.48		NTU	1			8/14/2019 12:27	....
pH	5.74		SU	1			8/14/2019 12:27	....
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/16/2019 18:03	T
Iron	0.049	I	mg/L	1	0.10	0.026	8/16/2019 18:03	T
Sodium	4.2		mg/L	1	0.20	0.17	8/16/2019 18:03	T
Zinc	0.0082	I	mg/L	1	0.010	0.0074	8/16/2019 18:03	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00033	I	mg/L	1	0.00070	0.00011	8/25/2019 15:14	J
Arsenic	0.00044	I	mg/L	1	0.0010	0.000077	8/25/2019 15:14	J
Barium	0.0083		mg/L	1	0.00060	0.00024	8/25/2019 15:14	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 15:14	J
Chromium	0.00060	I	mg/L	1	0.0020	0.00011	8/25/2019 15:14	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 15:14	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 15:14	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 15:14	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 15:14	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 15:14	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 15:14	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 15:14	J
Vanadium	0.014		mg/L	1	0.0020	0.00071	8/25/2019 15:14	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:17	T

VOLATILES

Report ID: 897450

Page 58 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151018**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-36A**

Date Collected: 08/14/19 12:27

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 03:12	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 03:12	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 03:12	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 03:12	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 03:12	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 03:12	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 03:12	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 03:12	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:12	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 03:12	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:12	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 03:12	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 03:12	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 03:12	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 03:12	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 03:12	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 03:12	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:12	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 03:12	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 03:12	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 03:12	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 03:12	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 03:12	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 03:12	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 03:12	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 03:12	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 03:12	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 03:12	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 03:12	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 03:12	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 03:12	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 03:12	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 03:12	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:12	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:12	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 03:12	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 03:12	M

Report ID: 897450

Page 59 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151018**
Sample ID: **TH-36A**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 12:27

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 03:12	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 03:12	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 03:12	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:12	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 03:12	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 03:12	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 03:12	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 03:12	M
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		8/28/2019 03:12	
Toluene-d8 (S)	95		%	1	77-119		8/28/2019 03:12	
Bromofluorobenzene (S)	103		%	1	86-123		8/28/2019 03:12	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 03:12	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 03:12	M
1,2-Dichloroethane-d4 (S)	120		%	1	77-125		8/28/2019 03:12	
Toluene-d8 (S)	98		%	1	80-121		8/28/2019 03:12	
Bromofluorobenzene (S)	106		%	1	80-129		8/28/2019 03:12	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.029	U	mg/L	1	0.10	0.029	8/19/2019 14:15	T
-------------	-------	---	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	130		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	8.9		mg/L	1	5.0	2.6	8/20/2019 09:11	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.096	I	mg/L	1	0.10	0.079	8/15/2019 14:10	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151019**
Sample ID: **TH-71A**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 13:03

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	1476		umhos/cm	1			8/14/2019 13:03	....
Dissolved Oxygen	0.13		mg/L	1			8/14/2019 13:03	....
ORP-2580BW	-40.4		mV	1			8/14/2019 13:03	....
Temperature	24.9		°C	1			8/14/2019 13:03	....
Turbidity	6.51		NTU	1			8/14/2019 13:03	....
pH	6.16		SU	1			8/14/2019 13:03	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/16/2019 18:07	T
Iron	40		mg/L	1	0.10	0.026	8/16/2019 18:07	T
Sodium	52		mg/L	1	0.20	0.17	8/16/2019 18:07	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/16/2019 18:07	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00060	I	mg/L	1	0.00070	0.00011	8/25/2019 15:19	J
Arsenic	0.0037		mg/L	1	0.0010	0.000077	8/25/2019 15:19	J
Barium	0.018		mg/L	1	0.00060	0.00024	8/25/2019 15:19	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 15:19	J
Chromium	0.00081	I	mg/L	1	0.0020	0.00011	8/25/2019 15:19	J
Cobalt	0.00025	I	mg/L	1	0.00050	0.00019	8/25/2019 15:19	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/25/2019 15:19	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/25/2019 15:19	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 15:19	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 15:19	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 15:19	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 15:19	J
Vanadium	0.0096		mg/L	1	0.0020	0.00071	8/25/2019 15:19	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:20	T

VOLATILES

Report ID: 897450

Page 61 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151019**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-71A**

Date Collected: 08/14/19 13:03

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 03:42	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 03:42	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 03:42	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 03:42	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 03:42	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 03:42	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 03:42	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 03:42	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:42	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 03:42	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:42	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 03:42	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 03:42	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 03:42	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 03:42	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 03:42	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 03:42	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:42	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 03:42	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 03:42	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 03:42	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 03:42	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 03:42	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 03:42	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 03:42	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 03:42	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 03:42	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 03:42	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 03:42	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 03:42	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 03:42	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 03:42	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 03:42	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:42	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 03:42	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 03:42	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 03:42	M

Report ID: 897450

Page 62 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151019**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-71A**

Date Collected: 08/14/19 13:03

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 03:42	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 03:42	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 03:42	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 03:42	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 03:42	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 03:42	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 03:42	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 03:42	M
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/28/2019 03:42	
Toluene-d8 (S)	94		%	1	77-119		8/28/2019 03:42	
Bromofluorobenzene (S)	106		%	1	86-123		8/28/2019 03:42	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 03:42	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 03:42	M
1,2-Dichloroethane-d4 (S)	114		%	1	77-125		8/28/2019 03:42	
Toluene-d8 (S)	98		%	1	80-121		8/28/2019 03:42	
Bromofluorobenzene (S)	108		%	1	80-129		8/28/2019 03:42	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.7		mg/L	1	0.10	0.029	8/19/2019 14:16	T
-------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	920		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	310		mg/L	5	25	13	8/20/2019 09:39	T
----------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.11		mg/L	1	0.10	0.079	8/15/2019 14:06	T
----------------	------	--	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151020**
Sample ID: **TH-68**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 15:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	194.9		umhos/cm	1			8/14/2019 15:25	....
Dissolved Oxygen	0.65		mg/L	1			8/14/2019 15:25	....
ORP-2580BW	-24.4		mV	1			8/14/2019 15:25	....
Temperature	28.4		°C	1			8/14/2019 15:25	....
Turbidity	19.7		NTU	1			8/14/2019 15:25	....
pH	5.63		SU	1			8/14/2019 15:25	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/16/2019 18:29	T
Iron	0.35		mg/L	1	0.10	0.026	8/16/2019 18:29	T
Sodium	6.9		mg/L	1	0.20	0.17	8/16/2019 18:29	T
Zinc	0.0077	I	mg/L	1	0.010	0.0074	8/16/2019 18:29	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/25/2019 15:24	J
Arsenic	0.0014		mg/L	1	0.0010	0.000077	8/25/2019 15:24	J
Barium	0.0057		mg/L	1	0.00060	0.00024	8/25/2019 15:24	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/25/2019 15:24	J
Chromium	0.0029		mg/L	1	0.0020	0.00011	8/25/2019 15:24	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/25/2019 15:24	J
Copper	0.00036	I	mg/L	1	0.00070	0.00035	8/25/2019 15:24	J
Lead	0.00026	I	mg/L	1	0.00070	0.00024	8/25/2019 15:24	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/25/2019 15:24	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/25/2019 15:24	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/25/2019 15:24	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/25/2019 15:24	J
Vanadium	0.0023		mg/L	1	0.0020	0.00071	8/25/2019 15:24	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:23	T

VOLATILES

Report ID: 897450

Page 64 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151020**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **TH-68**

Date Collected: 08/14/19 15:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 04:11	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 04:11	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 04:11	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 04:11	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 04:11	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 04:11	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 04:11	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 04:11	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:11	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 04:11	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:11	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 04:11	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 04:11	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 04:11	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 04:11	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 04:11	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 04:11	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:11	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 04:11	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 04:11	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 04:11	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 04:11	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 04:11	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 04:11	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 04:11	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 04:11	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 04:11	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 04:11	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 04:11	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 04:11	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 04:11	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 04:11	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 04:11	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:11	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:11	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 04:11	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 04:11	M

Report ID: 897450

Page 65 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151020**
Sample ID: **TH-68**

Date Received: 08/14/19 16:35 Matrix: Water
Date Collected: 08/14/19 15:25

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 04:11	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 04:11	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 04:11	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:11	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 04:11	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 04:11	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 04:11	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 04:11	M
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		8/28/2019 04:11	
Toluene-d8 (S)	96		%	1	77-119		8/28/2019 04:11	
Bromofluorobenzene (S)	105		%	1	86-123		8/28/2019 04:11	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 04:11	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 04:11	M
1,2-Dichloroethane-d4 (S)	118		%	1	77-125		8/28/2019 04:11	
Toluene-d8 (S)	99		%	1	80-121		8/28/2019 04:11	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 04:11	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.17		mg/L	1	0.10	0.029	8/19/2019 14:22	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	250		mg/L	1	10	10	8/15/2019 13:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	8.5		mg/L	1	5.0	2.6	8/20/2019 09:12	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/15/2019 14:10	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151021**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/14/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 01:44	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 01:44	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 01:44	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 01:44	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 01:44	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 01:44	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 01:44	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 01:44	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 01:44	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 01:44	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 01:44	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 01:44	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 01:44	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 01:44	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 01:44	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 01:44	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 01:44	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 01:44	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 01:44	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 01:44	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 01:44	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 01:44	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 01:44	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 01:44	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 01:44	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 01:44	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 01:44	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 01:44	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 01:44	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 01:44	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 01:44	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 01:44	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 01:44	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 01:44	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 01:44	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 01:44	M

Report ID: 897450

Page 67 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151021**

Date Received: 08/14/19 16:35 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/14/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 01:44	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 01:44	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 01:44	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 01:44	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 01:44	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 01:44	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 01:44	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 01:44	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 01:44	M
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/28/2019 01:44	
Toluene-d8 (S)	97		%	1	77-119		8/28/2019 01:44	
Bromofluorobenzene (S)	104		%	1	86-123		8/28/2019 01:44	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 01:44	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 01:44	M
1,2-Dichloroethane-d4 (S)	113		%	1	77-125		8/28/2019 01:44	
Toluene-d8 (S)	100		%	1	80-121		8/28/2019 01:44	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 01:44	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151022**
Sample ID: **TH-64**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 09:16

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	178.9		umhos/cm	1			8/15/2019 09:16	....
Dissolved Oxygen	0.27		mg/L	1			8/15/2019 09:16	....
ORP-2580BW	157.7		mV	1			8/15/2019 09:16	....
Temperature	26.9		°C	1			8/15/2019 09:16	....
Turbidity	14.6		NTU	1			8/15/2019 09:16	....
pH	5.45		SU	1			8/15/2019 09:16	....
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 16:25	T
Iron	0.36		mg/L	1	0.10	0.026	8/19/2019 16:25	T
Sodium	5.6		mg/L	1	0.20	0.17	8/19/2019 16:25	T
Zinc	0.0097	I	mg/L	1	0.010	0.0074	8/19/2019 16:25	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00054	I	mg/L	1	0.00070	0.00011	8/28/2019 18:33	J
Arsenic	0.00046	I	mg/L	1	0.0010	0.000077	8/28/2019 18:33	J
Barium	0.035		mg/L	1	0.00060	0.00024	8/28/2019 18:33	J
Cadmium	0.00026	I	mg/L	1	0.00050	0.000064	8/28/2019 18:33	J
Chromium	0.0021		mg/L	1	0.0020	0.00011	8/28/2019 18:33	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/28/2019 18:33	J
Copper	0.00084		mg/L	1	0.00070	0.00035	8/28/2019 18:33	J
Lead	0.0010		mg/L	1	0.00070	0.00024	8/28/2019 18:33	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 18:33	J
Selenium	0.00090	I	mg/L	1	0.0050	0.00058	8/28/2019 18:33	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 18:33	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/28/2019 18:33	J
Vanadium	0.016		mg/L	1	0.0020	0.00071	8/28/2019 18:33	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:25	T

VOLATILES

Report ID: 897450

Page 69 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151022**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-64**

Date Collected: 08/15/19 09:16

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Tot Dissolved Solids, SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	120		mg/L	1	10	10	8/20/2019 12:00	T
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 04:41	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 04:41	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 04:41	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 04:41	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 04:41	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 04:41	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 04:41	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 04:41	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:41	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 04:41	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:41	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 04:41	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 04:41	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 04:41	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 04:41	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 04:41	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 04:41	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:41	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 04:41	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 04:41	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 04:41	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 04:41	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 04:41	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 04:41	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 04:41	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 04:41	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 04:41	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 04:41	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 04:41	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 04:41	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 04:41	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 04:41	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 04:41	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:41	M

Report ID: 897450

Page 70 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151022**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-64**

Date Collected: 08/15/19 09:16

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 04:41	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 04:41	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 04:41	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 04:41	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 04:41	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 04:41	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 04:41	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 04:41	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 04:41	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 04:41	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 04:41	M
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/28/2019 04:41	
Toluene-d8 (S)	96		%	1	77-119		8/28/2019 04:41	
Bromofluorobenzene (S)	105		%	1	86-123		8/28/2019 04:41	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 04:41	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 04:41	M
1,2-Dichloroethane-d4 (S)	115		%	1	77-125		8/28/2019 04:41	
Toluene-d8 (S)	99		%	1	80-121		8/28/2019 04:41	
Bromofluorobenzene (S)	108		%	1	80-129		8/28/2019 04:41	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.029	U	mg/L	1	0.10	0.029	8/19/2019 14:27	T
-------------	-------	---	------	---	------	-------	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	7.3		mg/L	1	5.0	2.6	8/20/2019 09:13	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:50	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151023**
Sample ID: **TH-61**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 09:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	228.5		umhos/cm	1			8/15/2019 09:48	....
Dissolved Oxygen	0.18		mg/L	1			8/15/2019 09:48	....
ORP-2580BW	165.6		mV	1			8/15/2019 09:48	....
Temperature	25.7		°C	1			8/15/2019 09:48	....
Turbidity	1.76		NTU	1			8/15/2019 09:48	....
pH	5.78		SU	1			8/15/2019 09:48	....
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 16:28	T
Iron	0.036	I	mg/L	1	0.10	0.026	8/19/2019 16:28	T
Sodium	3.9		mg/L	1	0.20	0.17	8/19/2019 16:28	T
Zinc	0.011		mg/L	1	0.010	0.0074	8/19/2019 16:28	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.0030		mg/L	1	0.00070	0.00011	8/28/2019 18:38	J
Arsenic	0.0014		mg/L	1	0.0010	0.000077	8/28/2019 18:38	J
Barium	0.0074		mg/L	1	0.00060	0.00024	8/28/2019 18:38	J
Cadmium	0.00037	I	mg/L	1	0.00050	0.000064	8/28/2019 18:38	J
Chromium	0.00067	I	mg/L	1	0.0020	0.00011	8/28/2019 18:38	J
Cobalt	0.00032	I	mg/L	1	0.00050	0.00019	8/28/2019 18:38	J
Copper	0.00075		mg/L	1	0.00070	0.00035	8/28/2019 18:38	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 18:38	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 18:38	J
Selenium	0.00073	I	mg/L	1	0.0050	0.00058	8/28/2019 18:38	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 18:38	J
Thallium	0.00014	I	mg/L	1	0.00020	0.000057	8/28/2019 18:38	J
Vanadium	0.0088		mg/L	1	0.0020	0.00071	8/28/2019 18:38	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:28	T

VOLATILES

Report ID: 897450

Page 72 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151023**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-61**

Date Collected: 08/15/19 09:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 05:11	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 05:11	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 05:11	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 05:11	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 05:11	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 05:11	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 05:11	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 05:11	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:11	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 05:11	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:11	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 05:11	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 05:11	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 05:11	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 05:11	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 05:11	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 05:11	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:11	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 05:11	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 05:11	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 05:11	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 05:11	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 05:11	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 05:11	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 05:11	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 05:11	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 05:11	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 05:11	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 05:11	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 05:11	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 05:11	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 05:11	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 05:11	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:11	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:11	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 05:11	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 05:11	M

Report ID: 897450

Page 73 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151023**
Sample ID: **TH-61**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 09:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 05:11	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 05:11	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 05:11	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:11	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 05:11	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 05:11	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 05:11	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 05:11	M
1,2-Dichloroethane-d4 (S)	100		%	1	70-128		8/28/2019 05:11	
Toluene-d8 (S)	97		%	1	77-119		8/28/2019 05:11	
Bromofluorobenzene (S)	102		%	1	86-123		8/28/2019 05:11	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 05:11	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 05:11	M
1,2-Dichloroethane-d4 (S)	112		%	1	77-125		8/28/2019 05:11	
Toluene-d8 (S)	100		%	1	80-121		8/28/2019 05:11	
Bromofluorobenzene (S)	105		%	1	80-129		8/28/2019 05:11	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.04	I	mg/L	1	0.10	0.029	8/19/2019 14:28	T
-------------	------	---	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	160		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	8.4		mg/L	1	5.0	2.6	8/20/2019 09:14	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	4.3		mg/L	5	0.50	0.39	8/16/2019 14:29	T
----------------	-----	--	------	---	------	------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151024**
Sample ID: **TH-61A**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 10:14

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	285.1		umhos/cm	1			8/15/2019 10:14	....
Dissolved Oxygen	0.5		mg/L	1			8/15/2019 10:14	....
ORP-2580BW	107.1		mV	1			8/15/2019 10:14	....
Temperature	26.7		°C	1			8/15/2019 10:14	....
Turbidity	2.23		NTU	1			8/15/2019 10:14	....
pH	5.9		SU	1			8/15/2019 10:14	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 16:32	T
Iron	0.036	I	mg/L	1	0.10	0.026	8/19/2019 16:32	T
Sodium	4.6		mg/L	1	0.20	0.17	8/19/2019 16:32	T
Zinc	0.033		mg/L	1	0.010	0.0074	8/19/2019 16:32	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.0027		mg/L	1	0.00070	0.00011	8/28/2019 18:44	J
Arsenic	0.00037	I	mg/L	1	0.0010	0.000077	8/28/2019 18:44	J
Barium	0.0048		mg/L	1	0.00060	0.00024	8/28/2019 18:44	J
Cadmium	0.00079		mg/L	1	0.00050	0.000064	8/28/2019 18:44	J
Chromium	0.00065	I	mg/L	1	0.0020	0.00011	8/28/2019 18:44	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/28/2019 18:44	J
Copper	0.0018		mg/L	1	0.00070	0.00035	8/28/2019 18:44	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 18:44	J
Nickel	0.0011	I	mg/L	1	0.0020	0.00098	8/28/2019 18:44	J
Selenium	0.0022	I	mg/L	1	0.0050	0.00058	8/28/2019 18:44	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 18:44	J
Thallium	0.00010	I	mg/L	1	0.00020	0.000057	8/28/2019 18:44	J
Vanadium	0.13		mg/L	1	0.0020	0.00071	8/28/2019 18:44	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:30	T

VOLATILES

Report ID: 897450

Page 75 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151024**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-61A**

Date Collected: 08/15/19 10:14

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 05:40	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 05:40	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 05:40	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 05:40	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 05:40	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 05:40	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 05:40	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 05:40	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:40	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 05:40	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:40	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 05:40	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 05:40	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 05:40	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 05:40	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 05:40	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 05:40	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:40	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 05:40	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 05:40	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 05:40	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 05:40	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 05:40	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 05:40	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 05:40	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 05:40	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 05:40	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 05:40	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 05:40	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 05:40	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 05:40	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 05:40	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 05:40	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:40	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 05:40	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 05:40	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 05:40	M

Report ID: 897450

Page 76 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151024**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-61A**

Date Collected: 08/15/19 10:14

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 05:40	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 05:40	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 05:40	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 05:40	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 05:40	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 05:40	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 05:40	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 05:40	M
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/28/2019 05:40	
Toluene-d8 (S)	97		%	1	77-119		8/28/2019 05:40	
Bromofluorobenzene (S)	101		%	1	86-123		8/28/2019 05:40	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 05:40	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 05:40	M
1,2-Dichloroethane-d4 (S)	116		%	1	77-125		8/28/2019 05:40	
Toluene-d8 (S)	100		%	1	80-121		8/28/2019 05:40	
Bromofluorobenzene (S)	104		%	1	80-129		8/28/2019 05:40	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.029	U	mg/L	1	0.10	0.029	8/19/2019 14:29	T
-------------	-------	---	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	180		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	7.5		mg/L	1	5.0	2.6	8/20/2019 09:14	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	9.3		mg/L	10	1.0	0.79	8/16/2019 14:30	T
----------------	-----	--	------	----	-----	------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151025**
Sample ID: **TH-70A**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 11:01

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	688		umhos/cm	1			8/15/2019 11:01	....
Dissolved Oxygen	0.08		mg/L	1			8/15/2019 11:01	....
ORP-2580BW	-73.6		mV	1			8/15/2019 11:01	....
Temperature	25.8		°C	1			8/15/2019 11:01	....
Turbidity	154.8		NTU	1			8/15/2019 11:01	....
pH	6.26		SU	1			8/15/2019 11:01	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 16:36	T
Iron	62		mg/L	1	0.10	0.026	8/19/2019 16:36	T
Sodium	11		mg/L	1	0.20	0.17	8/19/2019 16:36	T
Zinc	0.029		mg/L	1	0.010	0.0074	8/19/2019 16:36	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/28/2019 18:49	J
Arsenic	0.0059		mg/L	1	0.0010	0.000077	8/28/2019 18:49	J
Barium	0.022		mg/L	1	0.00060	0.00024	8/28/2019 18:49	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/28/2019 18:49	J
Chromium	0.00065	I	mg/L	1	0.0020	0.00011	8/28/2019 18:49	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/28/2019 18:49	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/28/2019 18:49	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 18:49	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 18:49	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/28/2019 18:49	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 18:49	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/28/2019 18:49	J
Vanadium	0.0040		mg/L	1	0.0020	0.00071	8/28/2019 18:49	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:33	T

VOLATILES

Report ID: 897450

Page 78 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151025**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-70A**

Date Collected: 08/15/19 11:01

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 06:10	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 06:10	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 06:10	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 06:10	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 06:10	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 06:10	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 06:10	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 06:10	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 06:10	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 06:10	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 06:10	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 06:10	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 06:10	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 06:10	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 06:10	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 06:10	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 06:10	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 06:10	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 06:10	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 06:10	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 06:10	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 06:10	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 06:10	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 06:10	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 06:10	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 06:10	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 06:10	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 06:10	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 06:10	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 06:10	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 06:10	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 06:10	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 06:10	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 06:10	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 06:10	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 06:10	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 06:10	M

Report ID: 897450

Page 79 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151025**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-70A**

Date Collected: 08/15/19 11:01

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 06:10	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 06:10	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 06:10	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 06:10	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 06:10	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 06:10	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 06:10	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 06:10	M
1,2-Dichloroethane-d4 (S)	108		%	1	70-128		8/28/2019 06:10	
Toluene-d8 (S)	95		%	1	77-119		8/28/2019 06:10	
Bromofluorobenzene (S)	104		%	1	86-123		8/28/2019 06:10	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 06:10	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 06:10	M
1,2-Dichloroethane-d4 (S)	111		%	1	77-125		8/28/2019 06:10	
Toluene-d8 (S)	98		%	1	80-121		8/28/2019 06:10	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 06:10	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	1.5		mg/L	1	0.10	0.029	8/19/2019 14:29	T
-------------	-----	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	410		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	40		mg/L	1	5.0	2.6	8/20/2019 09:15	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:51	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151026**
Sample ID: **TH-69A**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 11:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	729		umhos/cm	1			8/15/2019 11:48	....
Dissolved Oxygen	0.27		mg/L	1			8/15/2019 11:48	....
ORP-2580BW	8.7		mV	1			8/15/2019 11:48	....
Temperature	26.1		°C	1			8/15/2019 11:48	....
Turbidity	3.18		NTU	1			8/15/2019 11:48	....
pH	6.1		SU	1			8/15/2019 11:48	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 16:57	T
Iron	3.0		mg/L	1	0.10	0.026	8/19/2019 16:57	T
Sodium	28		mg/L	1	0.20	0.17	8/19/2019 16:57	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/19/2019 16:57	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/28/2019 19:07	J
Arsenic	0.00015	I	mg/L	1	0.0010	0.000077	8/28/2019 19:07	J
Barium	0.0035		mg/L	1	0.00060	0.00024	8/28/2019 19:07	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/28/2019 19:07	J
Chromium	0.00039	I	mg/L	1	0.0020	0.00011	8/28/2019 19:07	J
Cobalt	0.00019	U	mg/L	1	0.00050	0.00019	8/28/2019 19:07	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/28/2019 19:07	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 19:07	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 19:07	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/28/2019 19:07	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 19:07	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/28/2019 19:07	J
Vanadium	0.00071	U	mg/L	1	0.0020	0.00071	8/28/2019 19:07	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/23/2019 14:36	T

VOLATILES

Report ID: 897450

Page 81 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151026**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-69A**

Date Collected: 08/15/19 11:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 07:09	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 07:09	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 07:09	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 07:09	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 07:09	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 07:09	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 07:09	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 07:09	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:09	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 07:09	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:09	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 07:09	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 07:09	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 07:09	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 07:09	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 07:09	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 07:09	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:09	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 07:09	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 07:09	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 07:09	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 07:09	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 07:09	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 07:09	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 07:09	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 07:09	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 07:09	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 07:09	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 07:09	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 07:09	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 07:09	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 07:09	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 07:09	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:09	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:09	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 07:09	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 07:09	M

Report ID: 897450

Page 82 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151026**
Sample ID: **TH-69A**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 11:48

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 07:09	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 07:09	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 07:09	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:09	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 07:09	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 07:09	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 07:09	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 07:09	M
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		8/28/2019 07:09	
Toluene-d8 (S)	99		%	1	77-119		8/28/2019 07:09	
Bromofluorobenzene (S)	105		%	1	86-123		8/28/2019 07:09	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 07:09	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 07:09	M
1,2-Dichloroethane-d4 (S)	119		%	1	77-125		8/28/2019 07:09	
Toluene-d8 (S)	102		%	1	80-121		8/28/2019 07:09	
Bromofluorobenzene (S)	107		%	1	80-129		8/28/2019 07:09	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.38		mg/L	1	0.10	0.029	8/26/2019 11:24	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	540		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	130	J4	mg/L	5	25	13	8/20/2019 09:40	T
----------	-----	----	------	---	----	----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:42	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151027**
Sample ID: **TH-65**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 12:24

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	239.3		umhos/cm	1			8/15/2019 12:24	....
Dissolved Oxygen	0.16		mg/L	1			8/15/2019 12:24	....
ORP-2580BW	-14.8		mV	1			8/15/2019 12:24	....
Temperature	25.5		°C	1			8/15/2019 12:24	....
Turbidity	4.11		NTU	1			8/15/2019 12:24	....
pH	5.77		SU	1			8/15/2019 12:24	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 17:01	T
Iron	1.9		mg/L	1	0.10	0.026	8/19/2019 17:01	T
Sodium	9.4		mg/L	1	0.20	0.17	8/19/2019 17:01	T
Zinc	0.0080	I	mg/L	1	0.010	0.0074	8/19/2019 17:01	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	U	mg/L	1	0.00070	0.00011	8/28/2019 19:12	J
Arsenic	0.013		mg/L	1	0.0010	0.000077	8/28/2019 19:12	J
Barium	0.00080		mg/L	1	0.00060	0.00024	8/28/2019 19:12	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/28/2019 19:12	J
Chromium	0.0013	I	mg/L	1	0.0020	0.00011	8/28/2019 19:12	J
Cobalt	0.00035	I	mg/L	1	0.00050	0.00019	8/28/2019 19:12	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/28/2019 19:12	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 19:12	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 19:12	J
Selenium	0.0010	I	mg/L	1	0.0050	0.00058	8/28/2019 19:12	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 19:12	J
Thallium	0.000076	I	mg/L	1	0.00020	0.000057	8/28/2019 19:12	J
Vanadium	0.0021		mg/L	1	0.0020	0.00071	8/28/2019 19:12	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/28/2019 10:14	T

VOLATILES

Report ID: 897450

Page 84 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151027**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-65**

Date Collected: 08/15/19 12:24

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 07:39	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 07:39	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 07:39	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 07:39	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 07:39	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 07:39	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 07:39	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 07:39	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:39	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 07:39	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:39	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 07:39	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 07:39	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 07:39	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 07:39	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 07:39	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 07:39	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:39	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 07:39	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 07:39	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 07:39	M
Carbon Disulfide	1.2	I	ug/L	1	5.0	1.1	8/28/2019 07:39	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 07:39	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 07:39	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 07:39	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 07:39	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 07:39	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 07:39	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 07:39	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 07:39	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 07:39	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 07:39	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 07:39	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:39	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 07:39	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 07:39	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 07:39	M

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151027**
Sample ID: **TH-65**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 12:24

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 07:39	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 07:39	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 07:39	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 07:39	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 07:39	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 07:39	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 07:39	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 07:39	M
1,2-Dichloroethane-d4 (S)	108		%	1	70-128		8/28/2019 07:39	
Toluene-d8 (S)	95		%	1	77-119		8/28/2019 07:39	
Bromofluorobenzene (S)	102		%	1	86-123		8/28/2019 07:39	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 07:39	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 07:39	M
1,2-Dichloroethane-d4 (S)	112		%	1	77-125		8/28/2019 07:39	
Toluene-d8 (S)	99		%	1	80-121		8/28/2019 07:39	
Bromofluorobenzene (S)	105		%	1	80-129		8/28/2019 07:39	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.73		mg/L	1	0.10	0.029	8/26/2019 11:24	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	170		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	13		mg/L	1	5.0	2.6	8/20/2019 09:21	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:40	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151028**
Sample ID: **TH-66A**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 13:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	272.3		umhos/cm	1			8/15/2019 13:30	....
Dissolved Oxygen	0.28		mg/L	1			8/15/2019 13:30	....
ORP-2580BW	3.5		mV	1			8/15/2019 13:30	....
Temperature	26.8		°C	1			8/15/2019 13:30	....
Turbidity	1.28		NTU	1			8/15/2019 13:30	....
pH	6.24		SU	1			8/15/2019 13:30	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 17:05	T
Iron	0.31		mg/L	1	0.10	0.026	8/19/2019 17:05	T
Sodium	5.2		mg/L	1	0.20	0.17	8/19/2019 17:05	T
Zinc	0.0091	I	mg/L	1	0.010	0.0074	8/19/2019 17:05	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.0012		mg/L	1	0.00070	0.00011	8/28/2019 19:17	J
Arsenic	0.0019		mg/L	1	0.0010	0.000077	8/28/2019 19:17	J
Barium	0.0030		mg/L	1	0.00060	0.00024	8/28/2019 19:17	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/28/2019 19:17	J
Chromium	0.00039	I	mg/L	1	0.0020	0.00011	8/28/2019 19:17	J
Cobalt	0.00050		mg/L	1	0.00050	0.00019	8/28/2019 19:17	J
Copper	0.00097		mg/L	1	0.00070	0.00035	8/28/2019 19:17	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 19:17	J
Nickel	0.0020	I	mg/L	1	0.0020	0.00098	8/28/2019 19:17	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/28/2019 19:17	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 19:17	J
Thallium	0.00024		mg/L	1	0.00020	0.000057	8/28/2019 19:17	J
Vanadium	0.015		mg/L	1	0.0020	0.00071	8/28/2019 19:17	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/28/2019 10:43	T

VOLATILES

Report ID: 897450

Page 87 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151028**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-66A**

Date Collected: 08/15/19 13:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 08:08	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 08:08	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 08:08	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 08:08	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 08:08	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 08:08	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 08:08	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 08:08	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:08	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 08:08	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:08	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 08:08	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 08:08	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 08:08	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 08:08	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 08:08	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 08:08	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:08	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 08:08	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 08:08	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 08:08	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 08:08	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 08:08	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 08:08	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 08:08	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 08:08	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 08:08	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 08:08	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 08:08	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 08:08	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 08:08	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 08:08	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 08:08	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:08	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:08	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 08:08	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 08:08	M

Report ID: 897450

Page 88 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151028**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-66A**

Date Collected: 08/15/19 13:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 08:08	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 08:08	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 08:08	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:08	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 08:08	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 08:08	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 08:08	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 08:08	M
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/28/2019 08:08	
Toluene-d8 (S)	94		%	1	77-119		8/28/2019 08:08	
Bromofluorobenzene (S)	105		%	1	86-123		8/28/2019 08:08	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 08:08	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 08:08	M
1,2-Dichloroethane-d4 (S)	117		%	1	77-125		8/28/2019 08:08	
Toluene-d8 (S)	97		%	1	80-121		8/28/2019 08:08	
Bromofluorobenzene (S)	108		%	1	80-129		8/28/2019 08:08	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.19		mg/L	1	0.10	0.029	8/26/2019 11:25	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	140		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	9.9		mg/L	1	5.0	2.6	8/20/2019 09:22	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:45	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151029**
Sample ID: **TH-66**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 14:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	327.8		umhos/cm	1			8/15/2019 14:04	....
Dissolved Oxygen	0.1		mg/L	1			8/15/2019 14:04	....
ORP-2580BW	-21.6		mV	1			8/15/2019 14:04	....
Temperature	26.1		°C	1			8/15/2019 14:04	....
Turbidity	0.54		NTU	1			8/15/2019 14:04	....
pH	6.02		SU	1			8/15/2019 14:04	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 17:08	T
Iron	2.5		mg/L	1	0.10	0.026	8/19/2019 17:08	T
Sodium	7.6		mg/L	1	0.20	0.17	8/19/2019 17:08	T
Zinc	0.0074	U	mg/L	1	0.010	0.0074	8/19/2019 17:08	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.00011	I	mg/L	1	0.00070	0.00011	8/28/2019 19:22	J
Arsenic	0.0025		mg/L	1	0.0010	0.000077	8/28/2019 19:22	J
Barium	0.0012		mg/L	1	0.00060	0.00024	8/28/2019 19:22	J
Cadmium	0.000064	U	mg/L	1	0.00050	0.000064	8/28/2019 19:22	J
Chromium	0.00046	I	mg/L	1	0.0020	0.00011	8/28/2019 19:22	J
Cobalt	0.00033	I	mg/L	1	0.00050	0.00019	8/28/2019 19:22	J
Copper	0.00035	U	mg/L	1	0.00070	0.00035	8/28/2019 19:22	J
Lead	0.00024	U	mg/L	1	0.00070	0.00024	8/28/2019 19:22	J
Nickel	0.00098	U	mg/L	1	0.0020	0.00098	8/28/2019 19:22	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/28/2019 19:22	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/28/2019 19:22	J
Thallium	0.000057	U	mg/L	1	0.00020	0.000057	8/28/2019 19:22	J
Vanadium	0.0013	I	mg/L	1	0.0020	0.00071	8/28/2019 19:22	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/28/2019 10:45	T

VOLATILES

Report ID: 897450

Page 90 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151029**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **TH-66**

Date Collected: 08/15/19 14:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 08:38	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 08:38	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 08:38	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 08:38	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 08:38	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 08:38	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 08:38	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 08:38	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:38	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 08:38	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:38	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 08:38	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 08:38	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 08:38	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 08:38	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 08:38	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 08:38	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:38	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 08:38	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 08:38	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 08:38	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 08:38	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 08:38	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 08:38	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 08:38	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 08:38	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 08:38	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 08:38	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 08:38	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 08:38	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 08:38	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 08:38	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 08:38	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:38	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 08:38	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 08:38	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 08:38	M

Report ID: 897450

Page 91 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151029**
Sample ID: **TH-66**

Date Received: 08/15/19 15:07 Matrix: Water
Date Collected: 08/15/19 14:04

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 08:38	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 08:38	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 08:38	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 08:38	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 08:38	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 08:38	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 08:38	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 08:38	M
1,2-Dichloroethane-d4 (S)	106		%	1	70-128		8/28/2019 08:38	
Toluene-d8 (S)	97		%	1	77-119		8/28/2019 08:38	
Bromofluorobenzene (S)	111		%	1	86-123		8/28/2019 08:38	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 08:38	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 08:38	M
1,2-Dichloroethane-d4 (S)	119		%	1	77-125		8/28/2019 08:38	
Toluene-d8 (S)	100		%	1	80-121		8/28/2019 08:38	
Bromofluorobenzene (S)	114		%	1	80-129		8/28/2019 08:38	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.71		mg/L	1	0.10	0.029	8/26/2019 11:26	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	170		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	-----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	15		mg/L	1	5.0	2.6	8/20/2019 09:23	T
----------	----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:39	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151030**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/15/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 09:08	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 09:08	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 09:08	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 09:08	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 09:08	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 09:08	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 09:08	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 09:08	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:08	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 09:08	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:08	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 09:08	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 09:08	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 09:08	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 09:08	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 09:08	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 09:08	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:08	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 09:08	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 09:08	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 09:08	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 09:08	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 09:08	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 09:08	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 09:08	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 09:08	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 09:08	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 09:08	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 09:08	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 09:08	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 09:08	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 09:08	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 09:08	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:08	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:08	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 09:08	M

Report ID: 897450

Page 93 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151030**

Date Received: 08/15/19 15:07 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/15/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 09:08	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 09:08	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 09:08	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 09:08	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:08	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 09:08	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 09:08	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 09:08	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 09:08	M
1,2-Dichloroethane-d4 (S)	105		%	1	70-128		8/28/2019 09:08	
Toluene-d8 (S)	96		%	1	77-119		8/28/2019 09:08	
Bromofluorobenzene (S)	109		%	1	86-123		8/28/2019 09:08	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 09:08	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 09:08	M
1,2-Dichloroethane-d4 (S)	119		%	1	77-125		8/28/2019 09:08	
Toluene-d8 (S)	99		%	1	80-121		8/28/2019 09:08	
Bromofluorobenzene (S)	111		%	1	80-129		8/28/2019 09:08	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151031**
Sample ID: **TH-67**

Date Received: 08/16/19 11:10 Matrix: Water
Date Collected: 08/16/19 09:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	187.4		umhos/cm	1			8/16/2019 09:35	....
Dissolved Oxygen	0.26		mg/L	1			8/16/2019 09:35	....
ORP-2580BW	8.6		mV	1			8/16/2019 09:35	....
Temperature	26.4		°C	1			8/16/2019 09:35	....
Turbidity	3.02		NTU	1			8/16/2019 09:35	....
pH	6.41		SU	1			8/16/2019 09:35	....

METALS

Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 17:12	T
Iron	0.91		mg/L	1	0.10	0.026	8/19/2019 17:12	T
Sodium	2.0		mg/L	1	0.20	0.17	8/19/2019 17:12	T
Zinc	0.041		mg/L	1	0.010	0.0074	8/19/2019 17:12	T

Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.0026		mg/L	1	0.00070	0.00011	8/30/2019 13:52	J
Arsenic	0.0031		mg/L	1	0.0010	0.000077	8/30/2019 13:52	J
Barium	0.0056		mg/L	1	0.00060	0.00024	8/30/2019 13:52	J
Cadmium	0.00025	I	mg/L	1	0.00050	0.000064	8/30/2019 13:52	J
Chromium	0.00061	I	mg/L	1	0.0020	0.00011	8/30/2019 13:52	J
Cobalt	0.0021		mg/L	1	0.00050	0.00019	8/30/2019 13:52	J
Copper	0.0038		mg/L	1	0.00070	0.00035	8/30/2019 13:52	J
Lead	0.00026	I	mg/L	1	0.00070	0.00024	8/30/2019 13:52	J
Nickel	0.0052		mg/L	1	0.0020	0.00098	8/30/2019 13:52	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/30/2019 13:52	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/30/2019 13:52	J
Thallium	0.00039		mg/L	1	0.00020	0.000057	8/30/2019 13:52	J
Vanadium	0.0072		mg/L	1	0.0020	0.00071	8/30/2019 13:52	J

Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/28/2019 10:47	T

VOLATILES

Report ID: 897450

Page 95 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151031**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **TH-67**

Date Collected: 08/16/19 09:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: 8260B VOCs Analysis, Water		Preparation Method: SW-846 5030B						
		Analytical Method: SW-846 8260B						
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 09:37	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 09:37	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 09:37	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 09:37	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 09:37	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 09:37	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 09:37	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 09:37	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:37	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 09:37	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:37	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 09:37	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 09:37	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 09:37	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 09:37	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 09:37	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 09:37	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:37	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 09:37	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 09:37	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 09:37	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 09:37	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 09:37	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 09:37	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 09:37	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 09:37	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 09:37	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 09:37	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 09:37	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 09:37	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 09:37	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 09:37	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 09:37	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:37	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 09:37	M
Trichloroethane	0.46	U	ug/L	1	1.0	0.46	8/28/2019 09:37	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 09:37	M

Report ID: 897450

Page 96 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151031**
Sample ID: **TH-67**

Date Received: 08/16/19 11:10 Matrix: Water
Date Collected: 08/16/19 09:35

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 09:37	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 09:37	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 09:37	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 09:37	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 09:37	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 09:37	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 09:37	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 09:37	M
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		8/28/2019 09:37	
Toluene-d8 (S)	96		%	1	77-119		8/28/2019 09:37	
Bromofluorobenzene (S)	106		%	1	86-123		8/28/2019 09:37	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 09:37	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 09:37	M
1,2-Dichloroethane-d4 (S)	118		%	1	77-125		8/28/2019 09:37	
Toluene-d8 (S)	98		%	1	80-121		8/28/2019 09:37	
Bromofluorobenzene (S)	109		%	1	80-129		8/28/2019 09:37	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.18		mg/L	1	0.10	0.029	8/26/2019 11:50	T
-------------	------	--	------	---	------	-------	-----------------	---

Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540 C

Total Dissolved Solids	90		mg/L	1	10	10	8/20/2019 12:00	T
------------------------	----	--	------	---	----	----	-----------------	---

Analysis Desc: Chlorides,SM4500-Cl-
E,Water

Analytical Method: SM 4500-Cl-E

Chloride	6.5		mg/L	1	5.0	2.6	8/20/2019 09:23	T
----------	-----	--	------	---	-----	-----	-----------------	---

Analysis Desc: Nitrate,Nitrite
SM4500NO3F,Water

Analytical Method: SM 4500NO3-F

Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:53	T
----------------	-------	---	------	---	------	-------	-----------------	---

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151032**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/16/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Beryllium	0.00029	U	mg/L	1	0.00060	0.00029	8/19/2019 17:16	T
Iron	0.98		mg/L	1	0.10	0.026	8/19/2019 17:16	T
Sodium	2.2		mg/L	1	0.20	0.17	8/19/2019 17:16	T
Zinc	0.042		mg/L	1	0.010	0.0074	8/19/2019 17:16	T
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.0025		mg/L	1	0.00070	0.00011	8/30/2019 14:20	J
Arsenic	0.0031		mg/L	1	0.0010	0.000077	8/30/2019 14:20	J
Barium	0.0053		mg/L	1	0.00060	0.00024	8/30/2019 14:20	J
Cadmium	0.00026	I	mg/L	1	0.00050	0.000064	8/30/2019 14:20	J
Chromium	0.00066	I	mg/L	1	0.0020	0.00011	8/30/2019 14:20	J
Cobalt	0.0022		mg/L	1	0.00050	0.00019	8/30/2019 14:20	J
Copper	0.0039		mg/L	1	0.00070	0.00035	8/30/2019 14:20	J
Lead	0.00028	I	mg/L	1	0.00070	0.00024	8/30/2019 14:20	J
Nickel	0.0049		mg/L	1	0.0020	0.00098	8/30/2019 14:20	J
Selenium	0.00058	U	mg/L	1	0.0050	0.00058	8/30/2019 14:20	J
Silver	0.000068	U	mg/L	1	0.00050	0.000068	8/30/2019 14:20	J
Thallium	0.00039		mg/L	1	0.00020	0.000057	8/30/2019 14:20	J
Vanadium	0.0072		mg/L	1	0.0020	0.00071	8/30/2019 14:20	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	8/28/2019 10:50	T
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 10:09	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 10:09	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 10:09	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 10:09	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 10:09	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 10:09	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 10:09	M

Report ID: 897450

Page 98 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151032**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/16/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 10:09	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:09	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 10:09	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:09	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 10:09	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 10:09	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 10:09	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 10:09	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 10:09	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 10:09	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:09	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 10:09	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 10:09	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 10:09	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 10:09	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 10:09	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 10:09	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 10:09	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 10:09	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 10:09	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 10:09	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 10:09	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 10:09	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 10:09	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 10:09	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 10:09	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:09	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:09	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 10:09	M
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 10:09	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 10:09	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 10:09	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 10:09	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:09	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 10:09	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 10:09	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 10:09	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 10:09	M
1,2-Dichloroethane-d4 (S)	101		%	1	70-128		8/28/2019 10:09	
Toluene-d8 (S)	98		%	1	77-119		8/28/2019 10:09	

Report ID: 897450

Page 99 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151032**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **Duplicate**

Date Collected: 08/16/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromofluorobenzene (S)	106		%	1	86-123		8/28/2019 10:09	
Analysis Desc: 8260B SIM Analysis, Water		Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B (SIM)						
1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 10:09	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 10:09	M
1,2-Dichloroethane-d4 (S)	115		%	1	77-125		8/28/2019 10:09	
Toluene-d8 (S)	103		%	1	80-121		8/28/2019 10:09	
Bromofluorobenzene (S)	108		%	1	80-129		8/28/2019 10:09	

WET CHEMISTRY

Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.17		mg/L	1	0.10	0.029	8/26/2019 11:50	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	100		mg/L	1	10	10	8/20/2019 12:00	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water		Analytical Method: SM 4500-Cl-E						
Chloride	6.1		mg/L	1	5.0	2.6	8/20/2019 09:24	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	8/16/2019 13:52	T

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151033**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/16/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1,2-Tetrachloroethane	0.67	U	ug/L	1	1.0	0.67	8/28/2019 10:38	M
1,1,1-Trichloroethane	0.55	U	ug/L	1	1.0	0.55	8/28/2019 10:38	M
1,1,2,2-Tetrachloroethane	0.16	U	ug/L	1	1.0	0.16	8/28/2019 10:38	M
1,1,2-Trichloroethane	0.61	U	ug/L	1	1.0	0.61	8/28/2019 10:38	M
1,1-Dichloroethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 10:38	M
1,1-Dichloroethylene	0.47	U	ug/L	1	1.0	0.47	8/28/2019 10:38	M
1,2,3-Trichloropropane	0.59	U	ug/L	1	1.0	0.59	8/28/2019 10:38	M
1,2-Dichlorobenzene	0.87	U	ug/L	1	1.0	0.87	8/28/2019 10:38	M
1,2-Dichloroethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:38	M
1,2-Dichloropropane	0.57	U	ug/L	1	1.0	0.57	8/28/2019 10:38	M
1,4-Dichlorobenzene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:38	M
2-Butanone (MEK)	1.6	U	ug/L	1	5.0	1.6	8/28/2019 10:38	M
2-Hexanone	0.78	U	ug/L	1	5.0	0.78	8/28/2019 10:38	M
4-Methyl-2-pentanone (MIBK)	1.9	U	ug/L	1	5.0	1.9	8/28/2019 10:38	M
Acetone	2.0	U	ug/L	1	25	2.0	8/28/2019 10:38	M
Acrylonitrile	2.6	U	ug/L	1	5.0	2.6	8/28/2019 10:38	M
Benzene	0.18	U	ug/L	1	1.0	0.18	8/28/2019 10:38	M
Bromochloromethane	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:38	M
Bromodichloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 10:38	M
Bromoform	0.73	U	ug/L	1	5.0	0.73	8/28/2019 10:38	M
Bromomethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 10:38	M
Carbon Disulfide	1.1	U	ug/L	1	5.0	1.1	8/28/2019 10:38	M
Carbon Tetrachloride	0.43	U	ug/L	1	1.0	0.43	8/28/2019 10:38	M
Chlorobenzene	0.69	U	ug/L	1	1.0	0.69	8/28/2019 10:38	M
Chloroethane	0.64	U	ug/L	1	1.0	0.64	8/28/2019 10:38	M
Chloroform	0.51	U	ug/L	1	1.0	0.51	8/28/2019 10:38	M
Chloromethane	0.42	U	ug/L	1	1.0	0.42	8/28/2019 10:38	M
Dibromochloromethane	0.37	U	ug/L	1	1.0	0.37	8/28/2019 10:38	M
Dibromomethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 10:38	M
Ethylbenzene	0.38	U	ug/L	1	1.0	0.38	8/28/2019 10:38	M
Iodomethane (Methyl Iodide)	1.2	U	ug/L	1	5.0	1.2	8/28/2019 10:38	M
Methylene Chloride	1.0	U	ug/L	1	5.0	1.0	8/28/2019 10:38	M
Styrene	0.45	U	ug/L	1	1.0	0.45	8/28/2019 10:38	M
Tetrachloroethylene (PCE)	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:38	M
Toluene	0.49	U	ug/L	1	1.0	0.49	8/28/2019 10:38	M
Trichloroethene	0.46	U	ug/L	1	1.0	0.46	8/28/2019 10:38	M

Report ID: 897450

Page 101 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID: **T1914151033**

Date Received: 08/16/19 11:10 Matrix: Water

Sample ID: **Trip Blank**

Date Collected: 08/16/19 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Trichlorofluoromethane	0.40	U	ug/L	1	1.0	0.40	8/28/2019 10:38	M
Vinyl Acetate	0.85	U	ug/L	1	5.0	0.85	8/28/2019 10:38	M
Vinyl Chloride	0.12	U	ug/L	1	1.0	0.12	8/28/2019 10:38	M
Xylene (Total)	1.1	U	ug/L	1	2.0	1.1	8/28/2019 10:38	M
cis-1,2-Dichloroethylene	0.48	U	ug/L	1	1.0	0.48	8/28/2019 10:38	M
cis-1,3-Dichloropropene	0.19	U	ug/L	1	1.0	0.19	8/28/2019 10:38	M
trans-1,2-Dichloroethylene	0.59	U	ug/L	1	1.0	0.59	8/28/2019 10:38	M
trans-1,3-Dichloropropylene	0.15	U	ug/L	1	1.0	0.15	8/28/2019 10:38	M
trans-1,4-Dichloro-2-butene	2.5	U	ug/L	1	5.0	2.5	8/28/2019 10:38	M
1,2-Dichloroethane-d4 (S)	103		%	1	70-128		8/28/2019 10:38	
Toluene-d8 (S)	96		%	1	77-119		8/28/2019 10:38	
Bromofluorobenzene (S)	107		%	1	86-123		8/28/2019 10:38	

Analysis Desc: 8260B SIM Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B (SIM)

1,2-Dibromo-3-Chloropropane	0.026	U	ug/L	1	0.10	0.026	8/28/2019 10:38	M
Ethylene Dibromide (EDB)	0.013	U	ug/L	1	0.10	0.013	8/28/2019 10:38	M
1,2-Dichloroethane-d4 (S)	116		%	1	77-125		8/28/2019 10:38	
Toluene-d8 (S)	99		%	1	80-121		8/28/2019 10:38	
Bromofluorobenzene (S)	110		%	1	80-129		8/28/2019 10:38	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



ANALYTICAL RESULTS QUALIFIERS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

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.
- [1] Workorder filtered 8/14/19 10:00
- B Results based upon colony counts outside the acceptable range.
- J4 Estimated Result

LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
- M DOH Certification #E82535(AEL-M)(FL NELAC Certification)
- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)
- T^ Not Certified

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

QC Batch: WCAI/12850 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1914151005, T1914151006, T1914151007, T1914151008

METHOD BLANK: 3187680

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.079	0.079 U

LABORATORY CONTROL SAMPLE: 3187681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	1.0	104	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187682 3187683 Original: T1914117001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	2.3	1	3.3	3.3	100	98	90-110	1	10	

QC Batch: DGM/3792 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3010A Prepared: 08/14/2019 10:00
Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008,

METHOD BLANK: 3188832

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Beryllium	mg/L	0.00029	0.00029 U
Iron	mg/L	0.026	0.026 U
Sodium	mg/L	0.17	0.17 U
Zinc	mg/L	0.0074	0.0074 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3188833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Beryllium	mg/L	0.4	0.41	102	80-120	
Iron	mg/L	25	27	108	80-120	
Sodium	mg/L	50	54	107	80-120	
Zinc	mg/L	0.4	0.41	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3188834 3188835 Original: G1906514008

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Beryllium	mg/L	3e-006	0.4	0.37	0.37	92	92	75-125	0	20	
Iron	mg/L	0.98	25	26	26	98	98	75-125	0	20	
Sodium	mg/L	8.2	50	57	57	96	96	75-125	0	20	
Zinc	mg/L	0.054	0.4	0.40	0.41	87	88	75-125	1	20	

QC Batch: WCA/12875 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1914151001, T1914151002, T1914151003

METHOD BLANK: 3189042

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Nitrate (as N)	mg/L	0.079	0.079	U

LABORATORY CONTROL SAMPLE: 3189043

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	1	0.98	98	90-110	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3189044 3189045 Original: T1914151001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	-0.037	1	1.0	1.0	103	101	90-110	2	10	

QC Batch: WCA/12878

Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F

Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015

METHOD BLANK: 3189077

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.079	0.079	U

LABORATORY CONTROL SAMPLE & LCSD: 3189078 3189079

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	0.98	0.96	98	96	90-110	2	10	

QC Batch: WCA/12881

Analysis Method: SM 5210B

QC Batch Method: SM 5210B

Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015

METHOD BLANK: 3189671

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	2.0	2.0	U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3189672

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	200	190	95	84.6-115.4	

SAMPLE DUPLICATE: 3189673

Original: T1914229001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	2900	3000	2	20	
QC Batch:	WCAI/12883		Analysis Method:	SM 4500-Cl-E		
QC Batch Method:	SM 4500-Cl-E		Prepared:			
Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008						

METHOD BLANK: 3189715

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Chloride	mg/L	2.6	2.6 U	

LABORATORY CONTROL SAMPLE: 3189716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Chloride	mg/L	50	48	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3189717 3189718 Original: T1914151002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Chloride	mg/L	240	50	280	290	75	92	90-110	3	10	

Report ID: 897450

Page 107 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3189719 3189720 Original: T1914151005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Chloride	mg/L	7.3	50	57	57	99	98	90-110	0	10	

QC Batch: WCA/12898 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1914151015

METHOD BLANK: 3190318

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	1.0	1.0	U

LABORATORY CONTROL SAMPLE: 3190319

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	200	200	99	85-115	

SAMPLE DUPLICATE: 3190320 Original: A1906646001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	98	100	6	10	

QC Batch: WCA/12899 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1914151010, T1914151011, T1914151012

METHOD BLANK: 3190321

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				

Report ID: 897450

Page 108 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3190321

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Total Suspended Solids	mg/L	1.0	1.0 U

LABORATORY CONTROL SAMPLE: 3190322

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	200	210	104	85-115

SAMPLE DUPLICATE: 3190580

Original: T1914151011

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	3.2	3.0	6	10
QC Batch:	WCAI/12900		Analysis Method:	SM 2540D	
QC Batch Method:	SM 2540D		Prepared:		
Associated Lab Samples:	T1914151013, T1914151014				

METHOD BLANK: 3190324

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	1.0	1.0 U

LABORATORY CONTROL SAMPLE: 3190325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	200	210	103	85-115

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

SAMPLE DUPLICATE: 3190326

Original: T1914122002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	190	200	3	10	
QC Batch:	WCA/12901		Analysis Method:		EPA 410.4	
QC Batch Method:	EPA 410.4		Prepared:			
Associated Lab Samples:	T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015					

METHOD BLANK: 3190364

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chemical Oxygen Demand	mg/L	24	24 U

LABORATORY CONTROL SAMPLE: 3190365

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	500	99	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3190367 3190368 Original: T1914236002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
WET CHEMISTRY										
Chemical Oxygen Demand	mg/L	26	500	530	530	102	102	90-110	0	10

QC Batch: WCA/12908 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020

METHOD BLANK: 3190683

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			

Report ID: 897450

Page 110 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3190683

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Nitrate (as N)	mg/L	0.079	0.079 U

LABORATORY CONTROL SAMPLE: 3190684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	0.98	98	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3190685 3190686 Original: T1914298002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.013	1	1.0	1.1	105	106	90-110	1	10	

QC Batch: WCA/12910

Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C

Prepared:

Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008,

METHOD BLANK: 3190831

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

LABORATORY CONTROL SAMPLE: 3190832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	660	700	106	85-115

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

SAMPLE DUPLICATE: 3190833

Original: T1914151001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	10U	10	0	10	
QC Batch:	WCA/12936		Analysis Method:		EPA 365.4	
QC Batch Method:	Copper Sulfate Digestion		Prepared:		08/15/2019 17:00	
Associated Lab Samples:	T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015					

METHOD BLANK: 3192203

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Phosphorus (as P)	mg/L	0.046	0.046	U

LABORATORY CONTROL SAMPLE: 3192205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Phosphorus (as P)	mg/L	1	1.1	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192207 3192209 Original: T1913913003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	0.17	1	1.1	1.2	93	98	80-120	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192211 3192213 Original: T1914157001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Phosphorus (as P)	mg/L	-0.07	1	1.1	1.1	107	108	80-120	1	20	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

QC Batch: WCAI/12939 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1914151022, T1914151023, T1914151024, T1914151025, T1914151026, T1914151027, T1914151028,

METHOD BLANK: 3192252

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Nitrate (as N)	mg/L	0.079	0.079 U

LABORATORY CONTROL SAMPLE: 3192253

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Nitrate (as N)	mg/L	0.05	0.079	92	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192254 3192255 Original: T1914405001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	-0.004	1	1.0	1.0	104	105	90-110	1	10	

QC Batch: DGM/3815 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3010A Prepared: 08/16/2019 10:00
Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020

METHOD BLANK: 3192269

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Beryllium	mg/L	0.00029	0.00029 U
Iron	mg/L	0.026	0.026 U
Sodium	mg/L	0.17	0.17 U
Zinc	mg/L	0.0074	0.0074 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3192270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Beryllium	mg/L	0.4	0.38	95	80-120	
Iron	mg/L	25	25	98	80-120	
Sodium	mg/L	50	50	98	80-120	
Zinc	mg/L	0.4	0.36	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192271 3192272 Original: T1914151016

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Beryllium	mg/L	8e-005	0.4	0.36	0.36	89	89	75-125	0	20	
Iron	mg/L	0.2	25	24	24	93	93	75-125	0	20	
Sodium	mg/L	30	50	76	76	91	91	75-125	0	20	
Zinc	mg/L	0.0004	0.4	0.34	0.34	85	86	75-125	1	20	

QC Batch: WCAg/7569 Analysis Method: SM 5310B

QC Batch Method: SM 5310B Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013

METHOD BLANK: 3192390

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	0.65	0.65 U	

LABORATORY CONTROL SAMPLE: 3192386

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Organic Carbon	mg/L	10	9.7	97	90-110	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192391 3192392 Original: M1903978001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Total Organic Carbon	mg/L	13	25	36	36	91	89	90-110	1	10	

QC Batch: DGMt/3818

Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A

Prepared: 08/16/2019 09:00

Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008

METHOD BLANK: 3192708

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	mg/L	0.000050	0.000050	U

LABORATORY CONTROL SAMPLE: 3192709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.001	0.00095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192710 3192711 Original: T1914151003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.001	0.0011	0.00097	110	97	80-120	12	20	

QC Batch: DGMt/3820

Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A

Prepared: 08/19/2019 10:00

Associated Lab Samples: T1914151022, T1914151023, T1914151024, T1914151025, T1914151026, T1914151027, T1914151028,

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3193373

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Beryllium	mg/L	0.00029	0.00029	U
Iron	mg/L	0.026	0.026	U
Sodium	mg/L	0.17	0.17	U
Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Zinc	mg/L	0.0074	0.0074	U

LABORATORY CONTROL SAMPLE: 3193374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Beryllium	mg/L	0.4	0.38	95	80-120	
Iron	mg/L	25	25	97	80-120	
Sodium	mg/L	50	49	98	80-120	
Zinc	mg/L	0.4	0.38	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193375 3193376 Original: T1914369001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
METALS											
Beryllium	mg/L	0	0.4	0.35	0.35	88	89	75-125	1	20	
Iron	mg/L	0.099	25	23	24	92	92	75-125	1	20	
Sodium	mg/L	88	50	130	130	79	85	75-125	2	20	
Zinc	mg/L	0.01	0.4	0.34	0.35	83	85	75-125	2	20	

QC Batch: WCA/12972

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Prepared:

Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3193633

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.029	0.029 U

LABORATORY CONTROL SAMPLE: 3193634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.5	0.52	104	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193635 3193636 Original: T1914014002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	-0.01	1	1.1	1.1	107	106	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193637 3193638 Original: T1914106002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	1	1	2.0	2.1	103	108	90-110	2	10	

QC Batch: WCA/12973

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Prepared:

Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020, T1914151022, T1914151023,

METHOD BLANK: 3193656

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.029	0.029 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3193657

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.5	0.53	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193658 3193659 Original: F1903116002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.28	1	1.3	1.3	101	98	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193660 3193661 Original: T1914270004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	-0.04	1	0.93	0.91	93	91	90-110	2	10	

QC Batch: MICt/4025

Analysis Method: SM 9222D

QC Batch Method: SM 9222D

Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015

METHOD BLANK: 3193923

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Microbiology Coliform Fecal	#/100 mL	1	1 U	

METHOD BLANK: 3193930

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Microbiology Coliform Fecal	#/100 mL	1	1 U	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

SAMPLE DUPLICATE: 3193925

Original: T1914151011

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
Microbiology					
Coliform Fecal	#/100 mL	40	1000	200	
QC Batch:	WCAI/12980		Analysis Method:	SM 2540 C	
QC Batch Method:	SM 2540 C		Prepared:		
Associated Lab Samples:	T1914151022, T1914151023, T1914151024, T1914151025, T1914151026, T1914151027, T1914151028,				

METHOD BLANK: 3194472

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

LABORATORY CONTROL SAMPLE: 3194473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	710	108	85-115

SAMPLE DUPLICATE: 3194474

Original: T1914151022

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	120	110	7	10
QC Batch:	DGMj/3867		Analysis Method:	SW-846 6020	
QC Batch Method:	SW-846 3010A		Prepared:	08/21/2019 03:30	
Associated Lab Samples:	T1914151001, T1914151002, T1914151003, T1914151005, T1914151006, T1914151007, T1914151008,				

METHOD BLANK: 3195169

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Vanadium	mg/L	0.00071	0.00071 U
Chromium	mg/L	0.00011	0.00011 U

Report ID: 897450

Page 119 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3195169

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Cobalt	mg/L	0.00019	0.00019 U
Nickel	mg/L	0.00098	0.00098 U
Copper	mg/L	0.00035	0.00035 U
Arsenic	mg/L	0.000077	0.000077 U
Selenium	mg/L	0.00058	0.00058 U
Silver	mg/L	0.000068	0.000068 U
Cadmium	mg/L	0.000064	0.000064 U
Antimony	mg/L	0.00011	0.00011 U
Barium	mg/L	0.00024	0.00024 U
Thallium	mg/L	0.000057	0.000057 U
Lead	mg/L	0.00024	0.00024 U

LABORATORY CONTROL SAMPLE: 3195170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
METALS					
Vanadium	mg/L	0.05	0.047	94	80-120
Chromium	mg/L	0.05	0.049	98	80-120
Cobalt	mg/L	0.05	0.051	102	80-120
Nickel	mg/L	0.05	0.052	104	80-120
Copper	mg/L	0.05	0.051	103	80-120
Arsenic	mg/L	0.05	0.049	99	80-120
Selenium	mg/L	0.05	0.051	101	80-120
Silver	mg/L	0.05	0.049	99	80-120
Cadmium	mg/L	0.05	0.048	96	80-120
Antimony	mg/L	0.05	0.047	93	80-120
Barium	mg/L	0.05	0.049	97	80-120
Thallium	mg/L	0.05	0.048	96	80-120
Lead	mg/L	0.05	0.049	97	80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195171 3195172 Original: T1914151005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
METALS										
Vanadium	mg/L	0.0015	0.05	0.041	0.050	79	96	75-125	19	20
Chromium	mg/L	0.0013	0.05	0.041	0.050	79	97	75-125	20	20
Cobalt	mg/L	5.3e-005	0.05	0.041	0.050	81	99	75-125	20	20

Report ID: 897450

Page 120 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195171 3195172 Original: T1914151005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
Nickel	mg/L	0	0.05	0.041	0.049	82	99	75-125	19	20	
Copper	mg/L	6.2e-005	0.05	0.041	0.050	81	99	75-125	20	20	
Arsenic	mg/L	0.00021	0.05	0.040	0.048	80	96	75-125	18	20	
Selenium	mg/L	0.00011	0.05	0.042	0.050	84	100	75-125	17	20	
Silver	mg/L	0	0.05	0.041	0.051	83	102	75-125	21	20	
Cadmium	mg/L	3.3e-006	0.05	0.040	0.051	81	102	75-125	23	20	
Antimony	mg/L	0.00038	0.05	0.042	0.051	83	101	75-125	19	20	
Barium	mg/L	0.033	0.05	0.071	0.085	77	104	75-125	17	20	
Thallium	mg/L	2e-005	0.05	0.042	0.050	83	100	75-125	18	20	
Lead	mg/L	0.00018	0.05	0.042	0.053	85	105	75-125	22	20	

QC Batch: WCAI/13003

Analysis Method: SM 4500-CI-E

QC Batch Method: SM 4500-CI-E

Prepared:

Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020, T1914151022, T1914151023,

METHOD BLANK: 3195326

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Chloride	mg/L	2.6	2.6 U	

LABORATORY CONTROL SAMPLE: 3195327

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Chloride	mg/L	50	47	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195328 3195329 Original: T1914377001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY Chloride	mg/L	1.8	50	48	49	95	97	90-110	2	10	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195330 3195331 Original: T1914151016

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Chloride	mg/L	32	50	77	79	91	94	90-110	2	10	

QC Batch: WCAI/13004

Analysis Method: SM 4500-Cl-E

QC Batch Method: SM 4500-Cl-E

Prepared:

Associated Lab Samples: T1914151026, T1914151027, T1914151028, T1914151029, T1914151031, T1914151032

METHOD BLANK: 3195332

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Chloride	mg/L	2.6	2.6	U

LABORATORY CONTROL SAMPLE: 3195333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Chloride	mg/L	50	51	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195334 3195335 Original: T1914151026

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Chloride	mg/L	130	50	170	180	85	96	90-110	3	10	

QC Batch: MSVI/4344

Analysis Method: SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B

Prepared: 08/22/2019 12:13

Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151004, T1914151005, T1914151006, T1914151007,

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3199901

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Ethylene Dibromide (EDB)	ug/L	0.020	0.020	U
1,2-Dibromo-3-Chloropropane	ug/L	0.020	0.020	U
1,2-Dichloroethane-d4 (S)	%	99	70-130	
Toluene-d8 (S)	%	97	70-130	
Bromofluorobenzene (S)	%	96	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3199902 3199903

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Ethylene Dibromide (EDB)	ug/L	0.8	0.84	0.85	105	106	70-130	1	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.8	0.77	0.83	96	104	70-130	8	30	
1,2-Dichloroethane-d4 (S)	%				101	99	70-130	3		
Toluene-d8 (S)	%				101	102	70-130	0		
Bromofluorobenzene (S)	%				100	99	70-130	1		

MATRIX SPIKE SAMPLE: 3199904 Original: T1914151002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.8	0.68	85	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.8	0.68	85	70-130	
1,2-Dichloroethane-d4 (S)	%	98			100	70-130	
Toluene-d8 (S)	%	98			98	70-130	
Bromofluorobenzene (S)	%	95			92	70-130	

QC Batch: MSVt/4346

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 08/22/2019 12:13

Associated Lab Samples: T1914151001, T1914151002, T1914151003, T1914151004, T1914151005, T1914151006, T1914151007,

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3199915

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.53	0.53	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Trichlorofluoromethane	ug/L	0.84	0.84	U
Acetone	ug/L	1.0	1.0	U
1,1-Dichloroethylene	ug/L	0.70	0.70	U
Iodomethane (Methyl Iodide)	ug/L	0.65	0.65	U
Acrylonitrile	ug/L	1.9	1.9	U
Methylene Chloride	ug/L	1.0	1.0	U
Carbon Disulfide	ug/L	0.49	0.49	U
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	U
1,1-Dichloroethane	ug/L	0.86	0.86	U
Vinyl Acetate	ug/L	0.40	0.40	U
2-Butanone (MEK)	ug/L	0.59	0.59	U
cis-1,2-Dichloroethylene	ug/L	0.51	0.51	U
Bromochloromethane	ug/L	0.33	0.33	U
Chloroform	ug/L	0.31	0.31	U
1,2-Dichloroethane	ug/L	0.60	0.60	U
1,1,1-Trichloroethane	ug/L	0.44	0.44	U
Carbon Tetrachloride	ug/L	0.60	0.60	U
Benzene	ug/L	0.20	0.20	U
Dibromomethane	ug/L	0.76	0.76	U
1,2-Dichloropropane	ug/L	0.76	0.76	U
Trichloroethene	ug/L	0.60	0.60	U
Bromodichloromethane	ug/L	0.60	0.60	U
cis-1,3-Dichloropropene	ug/L	0.20	0.20	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.93	0.93	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2-Trichloroethane	ug/L	0.46	0.46	U
Toluene	ug/L	0.45	0.45	U
2-Hexanone	ug/L	0.99	0.99	U
Dibromochloromethane	ug/L	0.40	0.40	U
Tetrachloroethylene (PCE)	ug/L	0.60	0.60	U
1,1,1,2-Tetrachloroethane	ug/L	0.64	0.64	U
Chlorobenzene	ug/L	0.56	0.56	U
Ethylbenzene	ug/L	0.26	0.26	U
Bromoform	ug/L	0.88	0.88	U
Styrene	ug/L	0.84	0.84	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.58	0.58	U
1,4-Dichlorobenzene	ug/L	0.97	0.97	U
1,2-Dichlorobenzene	ug/L	0.63	0.63	U
trans-1,4-Dichloro-2-butene	ug/L	0.39	0.39	U

Report ID: 897450

Page 124 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3199915

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Xylene (Total)	ug/L	0.56	0.56 U
1,2-Dichloroethane-d4 (S)	%	99	70-128
Toluene-d8 (S)	%	98	77-119
Bromofluorobenzene (S)	%	91	86-123

LABORATORY CONTROL SAMPLE & LCSD: 3199916 3199917

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
VOLATILES									
Chloromethane	ug/L	20	26	27	129	136		5	
Vinyl Chloride	ug/L	20	24	26	119	132	70-130	11	20 J3
Bromomethane	ug/L	20	22	29	111	145		27	
Chloroethane	ug/L	20	23	28	116	141		19	
Trichlorofluoromethane	ug/L	20	21	22	103	111		7	
Acetone	ug/L	20	17	20	86	100		15	
1,1-Dichloroethylene	ug/L	20	20	21	101	106	70-130	4	20
Iodomethane (Methyl Iodide)	ug/L	20	16	20	79	99		23	
Acrylonitrile	ug/L	20	16	18	80	88		11	
Methylene Chloride	ug/L	20	27	26	137	132		3	
Carbon Disulfide	ug/L	20	21	22	104	108		4	
trans-1,2-Dichloroethylene	ug/L	20	20	21	100	103		4	
1,1-Dichloroethane	ug/L	20	19	20	93	101		7	
Vinyl Acetate	ug/L	20	19	21	94	106		12	
2-Butanone (MEK)	ug/L	20	17	19	84	94		12	
cis-1,2-Dichloroethylene	ug/L	20	18	20	91	102	70-130	12	20
Bromochloromethane	ug/L	20	22	24	111	118		6	
Chloroform	ug/L	20	20	21	98	104	70-130	6	20
1,2-Dichloroethane	ug/L	20	19	21	95	103		8	
1,1,1-Trichloroethane	ug/L	20	20	21	100	107		7	
Carbon Tetrachloride	ug/L	20	19	20	96	102		5	
Benzene	ug/L	20	19	20	94	102	70-130	8	20
Dibromomethane	ug/L	20	18	20	89	99		10	
1,2-Dichloropropane	ug/L	20	19	21	93	103		11	
Trichloroethene	ug/L	20	19	21	96	103	70-130	8	20
Bromodichloromethane	ug/L	20	19	21	93	104		11	
cis-1,3-Dichloropropene	ug/L	20	19	21	97	106		9	
4-Methyl-2-pentanone (MIBK)	ug/L	20	16	18	81	89		10	
trans-1,3-Dichloropropylene	ug/L	20	19	21	94	106		12	
1,1,2-Trichloroethane	ug/L	20	18	20	89	100		11	
Toluene	ug/L	20	19	20	97	101	70-130	4	20
2-Hexanone	ug/L	20	16	18	81	88		9	

Report ID: 897450

Page 125 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE & LCSD: 3199916 3199917

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Dibromochloromethane	ug/L	20	18	20	91	100		9		
Tetrachloroethylene (PCE)	ug/L	20	17	18	87	90	70-130	4	20	
1,1,1,2-Tetrachloroethane	ug/L	20	19	20	94	102		8		
Chlorobenzene	ug/L	20	19	20	96	100	70-130	4	20	
Ethylbenzene	ug/L	20	20	21	101	106	70-130	4	20	
Bromoform	ug/L	20	18	21	90	104		14		
Styrene	ug/L	20	20	22	101	109		7		
1,1,2,2-Tetrachloroethane	ug/L	20	17	19	87	95		8		
1,2,3-Trichloropropane	ug/L	20	17	20	87	98		12		
1,4-Dichlorobenzene	ug/L	20	19	20	96	101		5		
1,2-Dichlorobenzene	ug/L	20	18	20	92	98	70-130	7	20	
Xylene (Total)	ug/L	60	61	65	102	108	70-130	5	20	
1,2-Dichloroethane-d4 (S)	%				99	98	70-128	1		
Toluene-d8 (S)	%				99	100	77-119	1		
Bromofluorobenzene (S)	%				95	94	86-123	1		

MATRIX SPIKE SAMPLE: 3199918

Original: T1914151003

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	17	84		
Vinyl Chloride	ug/L	0	20	18	91	70-130	
Bromomethane	ug/L	0	20	14	71		
Chloroethane	ug/L	0	20	22	111		
Trichlorofluoromethane	ug/L	0	20	18	92		
Acetone	ug/L	0	20	14	71		
1,1-Dichloroethylene	ug/L	0	20	18	88	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	10	51		
Acrylonitrile	ug/L	0	20	14	70		
Methylene Chloride	ug/L	0.18	20	17	83		
Carbon Disulfide	ug/L	0	20	18	89		
trans-1,2-Dichloroethylene	ug/L	0	20	17	85		
1,1-Dichloroethane	ug/L	0	20	16	80		
Vinyl Acetate	ug/L	0	20	14	70		
2-Butanone (MEK)	ug/L	0	20	14	68		
cis-1,2-Dichloroethylene	ug/L	0	20	16	82	70-130	
Bromochloromethane	ug/L	0	20	18	92		
Chloroform	ug/L	0	20	16	83	70-130	
1,2-Dichloroethane	ug/L	0	20	16	82		

Report ID: 897450

Page 126 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE SAMPLE: 3199918

Original: T1914151003

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	0	20	18	90		
Carbon Tetrachloride	ug/L	0	20	17	86		
Benzene	ug/L	0	20	16	82	70-130	
Dibromomethane	ug/L	0	20	16	80		
1,2-Dichloropropane	ug/L	0	20	16	78		
Trichloroethene	ug/L	0	20	17	86	70-130	
Bromodichloromethane	ug/L	0	20	17	85		
cis-1,3-Dichloropropene	ug/L	0	20	15	77		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	15	73		
trans-1,3-Dichloropropylene	ug/L	0	20	15	75		
1,1,2-Trichloroethane	ug/L	0	20	16	81		
Toluene	ug/L	0	20	17	83	70-130	
2-Hexanone	ug/L	0	20	14	70		
Dibromochloromethane	ug/L	0	20	16	82		
Tetrachloroethylene (PCE)	ug/L	0	20	15	74	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	17	86		
Chlorobenzene	ug/L	0	20	17	83	70-130	
Ethylbenzene	ug/L	0	20	18	88	70-130	
Bromoform	ug/L	0	20	18	88		
Styrene	ug/L	0	20	17	84		
1,1,2,2-Tetrachloroethane	ug/L	0	20	16	78		
1,2,3-Trichloropropane	ug/L	0	20	15	74		
1,4-Dichlorobenzene	ug/L	0	20	17	85		
1,2-Dichlorobenzene	ug/L	0	20	16	81	70-130	
Xylene (Total)	ug/L	0	60	53	88	70-130	
1,2-Dichloroethane-d4 (S)	%	99			100	70-128	
Toluene-d8 (S)	%	98			98	77-119	
Bromofluorobenzene (S)	%	90			88	86-123	

QC Batch: DGM/3870

Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A

Prepared: 08/23/2019 10:00

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015, T1914151016, T1914151017,

METHOD BLANK: 3200693

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	mg/L	0.000050	0.000050	U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3200694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.001	0.00099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3200695 3200696 Original: T1914151026

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	2.3e-005	0.001	0.0011	0.0010	111	104	80-120	6	20	

QC Batch: WCA/13125

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Prepared:

Associated Lab Samples: T1914151026, T1914151027, T1914151028, T1914151029

METHOD BLANK: 3201289

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.029	0.029 U	

LABORATORY CONTROL SAMPLE: 3201290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.46	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201291 3201292 Original: T1914326002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											

Report ID: 897450

Page 128 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201291 3201292 Original: T1914326002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Ammonia (N)	mg/L	1.1	1	2.2	2.2	107	108	90-110	0	10	

QC Batch: WCAI/13126

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Prepared:

Associated Lab Samples: T1914151031, T1914151032

METHOD BLANK: 3201297

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.029	0.029	U

LABORATORY CONTROL SAMPLE: 3201298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.5	0.45	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201299 3201300 Original: T1914405001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	-0.16	1	1.1	1.1	107	108	90-110	1	10	

QC Batch: DGMj/3890

Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A

Prepared: 08/27/2019 04:00

Associated Lab Samples: T1914151022, T1914151023, T1914151024, T1914151025, T1914151026, T1914151027, T1914151028, T1914151029

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3201362

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Vanadium	mg/L	0.00071	0.00071	U
Chromium	mg/L	0.00011	0.00011	U
Cobalt	mg/L	0.00019	0.00019	U
Nickel	mg/L	0.00098	0.00098	U
Copper	mg/L	0.00035	0.00035	U
Arsenic	mg/L	0.000077	0.000077	U
Selenium	mg/L	0.00058	0.00058	U
Silver	mg/L	0.000068	0.000068	U
Cadmium	mg/L	0.000064	0.000064	U
Antimony	mg/L	0.00011	0.00011	U
Barium	mg/L	0.00024	0.00024	U
Thallium	mg/L	0.000057	0.000057	U
Lead	mg/L	0.00024	0.00024	U

LABORATORY CONTROL SAMPLE: 3201363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Vanadium	mg/L	0.05	0.049	97	80-120	
Chromium	mg/L	0.05	0.050	100	80-120	
Cobalt	mg/L	0.05	0.051	103	80-120	
Nickel	mg/L	0.05	0.052	104	80-120	
Copper	mg/L	0.05	0.052	103	80-120	
Arsenic	mg/L	0.05	0.049	98	80-120	
Selenium	mg/L	0.05	0.048	97	80-120	
Silver	mg/L	0.05	0.048	96	80-120	
Cadmium	mg/L	0.05	0.048	96	80-120	
Antimony	mg/L	0.05	0.045	91	80-120	
Barium	mg/L	0.05	0.049	98	80-120	
Thallium	mg/L	0.05	0.046	91	80-120	
Lead	mg/L	0.05	0.048	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201364 3201365 Original: J1910481033

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Qualifiers
METALS										

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201364 3201365 Original: J1910481033

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Vanadium	mg/L	0.0045	0.05	0.045	0.045	81	81	75-125	0	20	
Chromium	mg/L	0.0013	0.05	0.042	0.042	82	81	75-125	1	20	
Cobalt	mg/L	8.3e-005	0.05	0.041	0.042	83	83	75-125	0	20	
Nickel	mg/L	0.00049	0.05	0.042	0.042	84	83	75-125	1	20	
Copper	mg/L	0.0002	0.05	0.042	0.042	84	84	75-125	0	20	
Arsenic	mg/L	0.00011	0.05	0.039	0.039	77	78	75-125	1	20	
Selenium	mg/L	0.00014	0.05	0.039	0.039	78	77	75-125	1	20	
Silver	mg/L	0	0.05	0.044	0.045	88	90	75-125	1	20	
Cadmium	mg/L	1.4e-005	0.05	0.045	0.045	89	90	75-125	1	20	
Antimony	mg/L	0.00027	0.05	0.045	0.046	90	91	75-125	2	20	
Barium	mg/L	0.073	0.05	0.12	0.12	97	96	75-125	0	20	
Thallium	mg/L	1.8e-005	0.05	0.044	0.045	89	91	75-125	2	20	
Lead	mg/L	0.00046	0.05	0.047	0.049	94	96	75-125	3	20	

QC Batch: DGMJ/3891

Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A

Prepared: 08/27/2019 04:00

Associated Lab Samples: T1914151031, T1914151032

METHOD BLANK: 3201372

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Vanadium	mg/L	0.00071	0.00071 U
Chromium	mg/L	0.00011	0.00011 U
Cobalt	mg/L	0.00019	0.00019 U
Nickel	mg/L	0.00098	0.00098 U
Copper	mg/L	0.00035	0.00035 U
Arsenic	mg/L	0.000077	0.000077 U
Selenium	mg/L	0.00058	0.00058 U
Silver	mg/L	0.000068	0.000068 U
Cadmium	mg/L	0.000064	0.000064 U
Antimony	mg/L	0.00011	0.00011 U
Barium	mg/L	0.00024	0.00024 U
Thallium	mg/L	0.000057	0.000057 U
Lead	mg/L	0.00024	0.00024 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3201373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Vanadium	mg/L	0.05	0.043	86	80-120	
Chromium	mg/L	0.05	0.043	85	80-120	
Cobalt	mg/L	0.05	0.043	86	80-120	
Nickel	mg/L	0.05	0.044	87	80-120	
Copper	mg/L	0.05	0.043	87	80-120	
Arsenic	mg/L	0.05	0.042	84	80-120	
Selenium	mg/L	0.05	0.046	93	80-120	
Silver	mg/L	0.05	0.047	95	80-120	
Cadmium	mg/L	0.05	0.047	95	80-120	
Antimony	mg/L	0.05	0.046	91	80-120	
Barium	mg/L	0.05	0.047	94	80-120	
Thallium	mg/L	0.05	0.046	92	80-120	
Lead	mg/L	0.05	0.048	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3201374 3201375 Original: T1914151031

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Vanadium	mg/L	0.0072	0.05	0.051	0.051	87	88	75-125	1	20	
Chromium	mg/L	0.00061	0.05	0.043	0.044	86	86	75-125	1	20	
Cobalt	mg/L	0.0021	0.05	0.045	0.046	85	87	75-125	2	20	
Nickel	mg/L	0.0052	0.05	0.048	0.049	86	88	75-125	3	20	
Copper	mg/L	0.0038	0.05	0.047	0.048	86	88	75-125	2	20	
Arsenic	mg/L	0.0031	0.05	0.045	0.046	85	86	75-125	1	20	
Selenium	mg/L	0.00036	0.05	0.045	0.046	91	91	75-125	1	20	
Silver	mg/L	4.9e-005	0.05	0.047	0.048	94	96	75-125	2	20	
Cadmium	mg/L	0.00025	0.05	0.048	0.048	95	96	75-125	1	20	
Antimony	mg/L	0.0026	0.05	0.049	0.050	93	95	75-125	2	20	
Barium	mg/L	0.0056	0.05	0.053	0.053	95	95	75-125	1	20	
Thallium	mg/L	0.00039	0.05	0.046	0.046	91	92	75-125	0	20	
Lead	mg/L	0.00026	0.05	0.048	0.049	96	98	75-125	2	20	

QC Batch: WCAg/7686

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Prepared:

Associated Lab Samples: T1914151014

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3202090

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Total Organic Carbon	mg/L	0.65	0.65 U

METHOD BLANK: 3202096

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Total Organic Carbon	mg/L	0.65	0.65 U

LABORATORY CONTROL SAMPLE: 3202092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Organic Carbon	mg/L	10	10	100	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202093 3202094 Original: J1910589001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY Total Organic Carbon	mg/L	0.31	25	27	26	106	105	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3202097 3202098 Original: J1910481036

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY Total Organic Carbon	mg/L	7.3	25	29	30	85	90	90-110	4	10	

QC Batch: WCAg/7708

Analysis Method: SM 10200 H

QC Batch Method: SM 10200 H

Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3203732

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Corrected Chlorophyll A	mg/m3	2.5	2.5	U

METHOD BLANK: 3203734

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Corrected Chlorophyll A	mg/m3	2.5	2.5	U

SAMPLE DUPLICATE: 3203731

Original: T1914123002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Corrected Chlorophyll A	mg/m3	6.4	6.4	0	35	

SAMPLE DUPLICATE: 3203733

Original: T1914151011

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Corrected Chlorophyll A	mg/m3	7.2	8.8	20	35	

SAMPLE DUPLICATE: 3203735

Original: J1910481034

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Corrected Chlorophyll A	mg/m3	8.0	8.0	0	35	

QC Batch: MSVm/3831

Analysis Method:

SW-846 8260B (SIM)

QC Batch Method: SW-846 5030B

Prepared:

08/27/2019 00:00

Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020, T1914151021, T1914151022,

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3203816

Parameter	Units	Blank Result	Reporting Limit Qualifiers
VOLATILES			
Ethylene Dibromide (EDB)	ug/L	0.013	0.013 U
1,2-Dibromo-3-Chloropropane	ug/L	0.026	0.026 U
1,2-Dichloroethane-d4 (S)	%	113	77-125
Toluene-d8 (S)	%	98	80-121
Bromofluorobenzene (S)	%	104	80-129

LABORATORY CONTROL SAMPLE & LCSD: 3203817 3203818

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
VOLATILES									
Ethylene Dibromide (EDB)	ug/L	0.2	0.19	0.18	95	90	70-130	5	30
1,2-Dibromo-3-Chloropropane	ug/L	0.2	0.16	0.20	80	100	70-130	22	30
1,2-Dichloroethane-d4 (S)	%				106	103	77-125	3	
Toluene-d8 (S)	%				99	100	80-121	1	
Bromofluorobenzene (S)	%				106	101	80-129	5	

MATRIX SPIKE SAMPLE: 3203819 Original: T1914151017

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
VOLATILES						
Ethylene Dibromide (EDB)	ug/L	0	0.2	0.18	90	70-130
1,2-Dibromo-3-Chloropropane	ug/L	0	0.2	0.20	100	70-130
1,2-Dichloroethane-d4 (S)	%	111			111	77-125
Toluene-d8 (S)	%	101			98	80-121
Bromofluorobenzene (S)	%	107			104	80-129

QC Batch: MSVm/3835

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 08/27/2019 00:00

Associated Lab Samples: T1914151016, T1914151017, T1914151018, T1914151019, T1914151020, T1914151021, T1914151022,

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3203824

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.42	0.42	U
Vinyl Chloride	ug/L	0.12	0.12	U
Bromomethane	ug/L	0.64	0.64	U
Chloroethane	ug/L	0.64	0.64	U
Trichlorofluoromethane	ug/L	0.40	0.40	U
Acetone	ug/L	2.0	2.0	U
1,1-Dichloroethylene	ug/L	0.47	0.47	U
Iodomethane (Methyl Iodide)	ug/L	1.2	1.2	U
Acrylonitrile	ug/L	2.6	2.6	U
Methylene Chloride	ug/L	1.0	1.0	U
Carbon Disulfide	ug/L	1.1	1.1	U
trans-1,2-Dichloroethylene	ug/L	0.59	0.59	U
1,1-Dichloroethane	ug/L	0.37	0.37	U
Vinyl Acetate	ug/L	0.85	0.85	U
2-Butanone (MEK)	ug/L	1.6	1.6	U
cis-1,2-Dichloroethylene	ug/L	0.48	0.48	U
Bromochloromethane	ug/L	0.49	0.49	U
Chloroform	ug/L	0.51	0.51	U
1,2-Dichloroethane	ug/L	0.49	0.49	U
1,1,1-Trichloroethane	ug/L	0.55	0.55	U
Carbon Tetrachloride	ug/L	0.43	0.43	U
Benzene	ug/L	0.18	0.18	U
Dibromomethane	ug/L	0.40	0.40	U
1,2-Dichloropropane	ug/L	0.57	0.57	U
Trichloroethene	ug/L	0.46	0.46	U
Bromodichloromethane	ug/L	0.42	0.42	U
cis-1,3-Dichloropropene	ug/L	0.19	0.19	U
4-Methyl-2-pentanone (MIBK)	ug/L	1.9	1.9	U
trans-1,3-Dichloropropylene	ug/L	0.15	0.15	U
1,1,2-Trichloroethane	ug/L	0.61	0.61	U
Toluene	ug/L	0.49	0.49	U
2-Hexanone	ug/L	0.78	0.78	U
Dibromochloromethane	ug/L	0.37	0.37	U
Tetrachloroethylene (PCE)	ug/L	0.48	0.48	U
1,1,1,2-Tetrachloroethane	ug/L	0.67	0.67	U
Chlorobenzene	ug/L	0.69	0.69	U
Ethylbenzene	ug/L	0.38	0.38	U
Bromoform	ug/L	0.73	0.73	U
Styrene	ug/L	0.45	0.45	U
1,1,2,2-Tetrachloroethane	ug/L	0.16	0.16	U
1,2,3-Trichloropropane	ug/L	0.59	0.59	U
1,4-Dichlorobenzene	ug/L	0.48	0.48	U
1,2-Dichlorobenzene	ug/L	0.87	0.87	U
trans-1,4-Dichloro-2-butene	ug/L	2.5	2.5	U

Report ID: 897450

Page 136 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3203824

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Xylene (Total)	ug/L	1.1	1.1 U
1,2-Dichloroethane-d4 (S)	%	99	70-128
Toluene-d8 (S)	%	96	77-119
Bromofluorobenzene (S)	%	105	86-123

LABORATORY CONTROL SAMPLE & LCSD: 3203825 3203826

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
VOLATILES									
Chloromethane	ug/L	20	13	17	66	86		26	
Vinyl Chloride	ug/L	20	15	16	74	82	70-130	10	20
Bromomethane	ug/L	20	6.5	6.9	33	35		6	
Chloroethane	ug/L	20	16	18	81	92		13	
Trichlorofluoromethane	ug/L	20	15	17	77	84		8	
Acetone	ug/L	20	20	20	101	99		3	
1,1-Dichloroethylene	ug/L	20	19	20	94	98	70-130	4	20
Iodomethane (Methyl Iodide)	ug/L	20	1.2	1.2U	0	0		0	
Acrylonitrile	ug/L	100	3.8	4.9	4	5		24	
Methylene Chloride	ug/L	20	17	19	87	94		8	
Carbon Disulfide	ug/L	20	12	16	59	79		30	
trans-1,2-Dichloroethylene	ug/L	20	18	20	91	100		10	
1,1-Dichloroethane	ug/L	20	19	21	93	103		11	
Vinyl Acetate	ug/L	20	17	17	83	87		4	
2-Butanone (MEK)	ug/L	20	33	35	165	175		6	
cis-1,2-Dichloroethylene	ug/L	20	18	21	92	106	70-130	14	20
Bromochloromethane	ug/L	20	20	20	102	99		3	
Chloroform	ug/L	20	18	19	92	94	70-130	2	20
1,2-Dichloroethane	ug/L	20	19	22	97	109		12	
1,1,1-Trichloroethane	ug/L	20	19	21	96	107		11	
Carbon Tetrachloride	ug/L	20	11	14	55	71		26	
Benzene	ug/L	20	19	21	95	103	70-130	9	20
Dibromomethane	ug/L	20	19	20	97	100		3	
1,2-Dichloropropane	ug/L	20	17	19	87	97		11	
Trichloroethene	ug/L	20	19	21	96	103	70-130	7	20
Bromodichloromethane	ug/L	20	17	19	86	95		9	
cis-1,3-Dichloropropene	ug/L	20	17	18	84	88		5	
4-Methyl-2-pentanone (MIBK)	ug/L	20	21	22	103	109		6	
trans-1,3-Dichloropropylene	ug/L	20	17	18	84	88		5	
1,1,2-Trichloroethane	ug/L	20	19	20	94	102		9	
Toluene	ug/L	20	18	19	91	93	70-130	2	20
2-Hexanone	ug/L	20	22	19	111	97		14	

Report ID: 897450

Page 137 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE & LCSD: 3203825 3203826

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Dibromochloromethane	ug/L	20	17	17	86	84		2		
Tetrachloroethylene (PCE)	ug/L	20	19	18	94	88	70-130	7	20	
1,1,1,2-Tetrachloroethane	ug/L	20	16	17	83	83		1		
Chlorobenzene	ug/L	20	18	19	91	94	70-130	3	20	
Ethylbenzene	ug/L	20	18	19	91	94	70-130	4	20	
Bromoform	ug/L	20	17	16	85	81		5		
Styrene	ug/L	20	19	19	96	95		0		
1,1,2,2-Tetrachloroethane	ug/L	20	18	17	88	85		4		
1,2,3-Trichloropropane	ug/L	20	18	17	88	87		2		
1,4-Dichlorobenzene	ug/L	20	21	21	106	104		2		
1,2-Dichlorobenzene	ug/L	20	22	20	108	98	70-130	10	20	
Xylene (Total)	ug/L	60	56	57	94	95	70-130	1	20	
1,2-Dichloroethane-d4 (S)	%				98	102	70-128	3		
Toluene-d8 (S)	%				103	103	77-119	0		
Bromofluorobenzene (S)	%				104	98	86-123	5		

MATRIX SPIKE SAMPLE: 3203827

Original: T1914151021

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L	0	20	16	80		
Vinyl Chloride	ug/L	0	20	18	88	70-130	
Bromomethane	ug/L	0	20	6.9	34		
Chloroethane	ug/L	0	20	19	97		
Trichlorofluoromethane	ug/L	0	20	18	92		
Acetone	ug/L	0	20	19	93		
1,1-Dichloroethylene	ug/L	0	20	22	108	70-130	
Iodomethane (Methyl Iodide)	ug/L	0	20	1.2	0		
Acrylonitrile	ug/L	0	100	4.0	4		
Methylene Chloride	ug/L	0	20	18	91		
Carbon Disulfide	ug/L	0	20	17	85		
trans-1,2-Dichloroethylene	ug/L	0	20	21	105		
1,1-Dichloroethane	ug/L	0	20	22	108		
Vinyl Acetate	ug/L	0	20	17	85		
2-Butanone (MEK)	ug/L	0	20	20	100		
cis-1,2-Dichloroethylene	ug/L	0	20	20	102	70-130	
Bromochloromethane	ug/L	0	20	20	98		
Chloroform	ug/L	0	20	20	101	70-130	
1,2-Dichloroethane	ug/L	0	20	21	104		

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

MATRIX SPIKE SAMPLE: 3203827

Original: T1914151021

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	0	20	23	114		
Carbon Tetrachloride	ug/L	0	20	17	85		
Benzene	ug/L	0	20	21	103	70-130	
Dibromomethane	ug/L	0	20	19	97		
1,2-Dichloropropane	ug/L	0	20	20	100		
Trichloroethene	ug/L	0	20	22	108	70-130	
Bromodichloromethane	ug/L	0	20	19	96		
cis-1,3-Dichloropropene	ug/L	0	20	18	91		
4-Methyl-2-pentanone (MIBK)	ug/L	0	20	21	105		
trans-1,3-Dichloropropylene	ug/L	0	20	18	91		
1,1,2-Trichloroethane	ug/L	0	20	20	100		
Toluene	ug/L	0	20	19	95	70-130	
2-Hexanone	ug/L	0	20	19	97		
Dibromochloromethane	ug/L	0	20	16	82		
Tetrachloroethylene (PCE)	ug/L	0	20	18	92	70-130	
1,1,1,2-Tetrachloroethane	ug/L	0	20	16	81		
Chlorobenzene	ug/L	0	20	18	91	70-130	
Ethylbenzene	ug/L	0	20	19	95	70-130	
Bromoform	ug/L	0	20	16	81		
Styrene	ug/L	0	20	19	96		
1,1,2,2-Tetrachloroethane	ug/L	0	20	17	86		
1,2,3-Trichloropropane	ug/L	0	20	18	91		
1,4-Dichlorobenzene	ug/L	0	20	18	90		
1,2-Dichlorobenzene	ug/L	0	20	18	91	70-130	
Xylene (Total)	ug/L	0	60	59	98	70-130	
1,2-Dichloroethane-d4 (S)	%	101			106	70-128	
Toluene-d8 (S)	%	97			106	77-119	
Bromofluorobenzene (S)	%	104			96	86-123	

QC Batch: WCAg/7711

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Prepared:

Associated Lab Samples: T1914151015

METHOD BLANK: 3203906

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Organic Carbon	mg/L	0.65	0.65 U	

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

METHOD BLANK: 3203912

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Organic Carbon	mg/L	0.65	0.65 U

LABORATORY CONTROL SAMPLE: 3203908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Organic Carbon	mg/L	10	10	100	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3203909 3203910 Original: J1910922002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
WET CHEMISTRY										
Total Organic Carbon	mg/L	5.5	25	27	29	86	92	90-110	6	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3203913 3203914 Original: G1906956002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
WET CHEMISTRY										
Total Organic Carbon	mg/L	14	25	36	36	89	90	90-110	0	10

QC Batch: WCAI/13178

Analysis Method: SM 2340C

QC Batch Method: SM 2340C

Prepared:

Associated Lab Samples: T1914151010, T1914151011, T1914151012, T1914151013, T1914151014, T1914151015

METHOD BLANK: 3204084

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Hardness (as CaCO ₃)	mg/L	2.6	2.6 U

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

LABORATORY CONTROL SAMPLE: 3204085

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Hardness (as CaCO ₃)	mg/L	400	400	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204086 3204087 Original: T1914186001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Hardness (as CaCO ₃)	mg/L	100	200	300	320	102	108	90-110	4	10	

QC Batch: DGM/3889

Analysis Method: SW-846 7470A

QC Batch Method: SW-846 7470A

Prepared: 08/28/2019 08:00

Associated Lab Samples: T1914151027, T1914151028, T1914151029, T1914151031, T1914151032

METHOD BLANK: 3204287

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	mg/L	0.000050	0.000050	U

LABORATORY CONTROL SAMPLE: 3204288

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.001	0.00093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3204289 3204290 Original: T1914151027

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.001	0.0011	0.0011	113	106	80-120	6	20	

Report ID: 897450

Page 141 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

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.
- J3 Lab QC Failure
- J4 Estimated Result
- [1] Workorder filtered 8/14/19 10:00
- [2] Workorder filtered 8/15/19 14:12

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151005	TH-22A			SM 4500NO3-F	WCA/t/12850
T1914151006	TH-40			SM 4500NO3-F	WCA/t/12850
T1914151007	TH-57			SM 4500NO3-F	WCA/t/12850
T1914151008	TH-28A			SM 4500NO3-F	WCA/t/12850
T1914151001	Field Blank	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151002	TH-72	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151003	TH-58	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151005	TH-22A	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151006	TH-40	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151007	TH-57	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151008	TH-28A	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151010	Equipment Blank	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151011	Stream 3A	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151012	Mine Cut 1D	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151013	Stream 3C2	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151014	3B2B	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151015	Duplicate	SW-846 3010A	DGM/t/3792	SW-846 6010	ICP/t/2617
T1914151001	Field Blank			SM 4500NO3-F	WCA/t/12875
T1914151002	TH-72			SM 4500NO3-F	WCA/t/12875
T1914151003	TH-58			SM 4500NO3-F	WCA/t/12875
T1914151010	Equipment Blank			SM 4500NO3-F	WCA/t/12878
T1914151011	Stream 3A			SM 4500NO3-F	WCA/t/12878
T1914151012	Mine Cut 1D			SM 4500NO3-F	WCA/t/12878
T1914151013	Stream 3C2			SM 4500NO3-F	WCA/t/12878
T1914151014	3B2B			SM 4500NO3-F	WCA/t/12878
T1914151015	Duplicate			SM 4500NO3-F	WCA/t/12878
T1914151010	Equipment Blank			SM 5210B	WCA/t/12881
T1914151011	Stream 3A			SM 5210B	WCA/t/12881
T1914151012	Mine Cut 1D			SM 5210B	WCA/t/12881

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151013	Stream 3C2			SM 5210B	WCA/12881
T1914151014	3B2B			SM 5210B	WCA/12881
T1914151015	Duplicate			SM 5210B	WCA/12881
T1914151001	Field Blank			SM 4500-CI-E	WCA/12883
T1914151002	TH-72			SM 4500-CI-E	WCA/12883
T1914151003	TH-58			SM 4500-CI-E	WCA/12883
T1914151005	TH-22A			SM 4500-CI-E	WCA/12883
T1914151006	TH-40			SM 4500-CI-E	WCA/12883
T1914151007	TH-57			SM 4500-CI-E	WCA/12883
T1914151008	TH-28A			SM 4500-CI-E	WCA/12883
T1914151015	Duplicate			SM 2540D	WCA/12898
T1914151010	Equipment Blank			SM 2540D	WCA/12899
T1914151011	Stream 3A			SM 2540D	WCA/12899
T1914151012	Mine Cut 1D			SM 2540D	WCA/12899
T1914151013	Stream 3C2			SM 2540D	WCA/12900
T1914151014	3B2B			SM 2540D	WCA/12900
T1914151010	Equipment Blank			EPA 410.4	WCA/12901
T1914151011	Stream 3A			EPA 410.4	WCA/12901
T1914151012	Mine Cut 1D			EPA 410.4	WCA/12901
T1914151013	Stream 3C2			EPA 410.4	WCA/12901
T1914151014	3B2B			EPA 410.4	WCA/12901
T1914151015	Duplicate			EPA 410.4	WCA/12901
T1914151016	TH-78			SM 4500NO3-F	WCA/12908
T1914151017	TH-19			SM 4500NO3-F	WCA/12908
T1914151018	TH-36A			SM 4500NO3-F	WCA/12908
T1914151019	TH-71A			SM 4500NO3-F	WCA/12908
T1914151020	TH-68			SM 4500NO3-F	WCA/12908

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151001	Field Blank			SM 2540 C	WCA/12910
T1914151002	TH-72			SM 2540 C	WCA/12910
T1914151003	TH-58			SM 2540 C	WCA/12910
T1914151005	TH-22A			SM 2540 C	WCA/12910
T1914151006	TH-40			SM 2540 C	WCA/12910
T1914151007	TH-57			SM 2540 C	WCA/12910
T1914151008	TH-28A			SM 2540 C	WCA/12910
T1914151010	Equipment Blank			SM 2540 C	WCA/12910
T1914151011	Stream 3A			SM 2540 C	WCA/12910
T1914151012	Mine Cut 1D			SM 2540 C	WCA/12910
T1914151013	Stream 3C2			SM 2540 C	WCA/12910
T1914151014	3B2B			SM 2540 C	WCA/12910
T1914151015	Duplicate			SM 2540 C	WCA/12910
T1914151016	TH-78			SM 2540 C	WCA/12910
T1914151017	TH-19			SM 2540 C	WCA/12910
T1914151018	TH-36A			SM 2540 C	WCA/12910
T1914151019	TH-71A			SM 2540 C	WCA/12910
T1914151020	TH-68			SM 2540 C	WCA/12910
T1914151010	Equipment Blank	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151011	Stream 3A	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151012	Mine Cut 1D	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151013	Stream 3C2	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151014	3B2B	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151015	Duplicate	Copper Sulfate Digestion	WCA/12936	EPA 365.4	WCA/12951
T1914151022	TH-64			SM 4500NO3-F	WCA/12939
T1914151023	TH-61			SM 4500NO3-F	WCA/12939
T1914151024	TH-61A			SM 4500NO3-F	WCA/12939
T1914151025	TH-70A			SM 4500NO3-F	WCA/12939
T1914151026	TH-69A			SM 4500NO3-F	WCA/12939
T1914151027	TH-65			SM 4500NO3-F	WCA/12939
T1914151028	TH-66A			SM 4500NO3-F	WCA/12939
T1914151029	TH-66			SM 4500NO3-F	WCA/12939

Report ID: 897450

Page 145 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151031	TH-67			SM 4500NO3-F	WCA/t/12939
T1914151032	Duplicate			SM 4500NO3-F	WCA/t/12939
T1914151016	TH-78	SW-846 3010A	DGMt/3815	SW-846 6010	ICPt/2629
T1914151017	TH-19	SW-846 3010A	DGMt/3815	SW-846 6010	ICPt/2629
T1914151018	TH-36A	SW-846 3010A	DGMt/3815	SW-846 6010	ICPt/2629
T1914151019	TH-71A	SW-846 3010A	DGMt/3815	SW-846 6010	ICPt/2629
T1914151020	TH-68	SW-846 3010A	DGMt/3815	SW-846 6010	ICPt/2629
T1914151010	Equipment Blank			SM 5310B	WCAg/7569
T1914151011	Stream 3A			SM 5310B	WCAg/7569
T1914151012	Mine Cut 1D			SM 5310B	WCAg/7569
T1914151013	Stream 3C2			SM 5310B	WCAg/7569
T1914151001	Field Blank	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151002	TH-72	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151003	TH-58	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151005	TH-22A	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151006	TH-40	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151007	TH-57	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151008	TH-28A	SW-846 7470A	DGMt/3818	SW-846 7470A	CVA/t/1715
T1914151022	TH-64	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151023	TH-61	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151024	TH-61A	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151025	TH-70A	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151026	TH-69A	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151027	TH-65	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151028	TH-66A	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151029	TH-66	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151031	TH-67	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632
T1914151032	Duplicate	SW-846 3010A	DGMt/3820	SW-846 6010	ICPt/2632

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151010	Equipment Blank			DEP SOP 10/03/83	WCAI/12965
T1914151011	Stream 3A			DEP SOP 10/03/83	WCAI/12965
T1914151012	Mine Cut 1D			DEP SOP 10/03/83	WCAI/12965
T1914151013	Stream 3C2			DEP SOP 10/03/83	WCAI/12965
T1914151014	3B2B			DEP SOP 10/03/83	WCAI/12965
T1914151015	Duplicate			DEP SOP 10/03/83	WCAI/12965
T1914151001	Field Blank			EPA 350.1	WCAI/12972
T1914151002	TH-72			EPA 350.1	WCAI/12972
T1914151003	TH-58			EPA 350.1	WCAI/12972
T1914151005	TH-22A			EPA 350.1	WCAI/12972
T1914151006	TH-40			EPA 350.1	WCAI/12972
T1914151007	TH-57			EPA 350.1	WCAI/12972
T1914151008	TH-28A			EPA 350.1	WCAI/12972
T1914151016	TH-78			EPA 350.1	WCAI/12973
T1914151017	TH-19			EPA 350.1	WCAI/12973
T1914151018	TH-36A			EPA 350.1	WCAI/12973
T1914151019	TH-71A			EPA 350.1	WCAI/12973
T1914151020	TH-68			EPA 350.1	WCAI/12973
T1914151022	TH-64			EPA 350.1	WCAI/12973
T1914151023	TH-61			EPA 350.1	WCAI/12973
T1914151024	TH-61A			EPA 350.1	WCAI/12973
T1914151025	TH-70A			EPA 350.1	WCAI/12973
T1914151010	Equipment Blank			SM 9222D	MIC/4025
T1914151011	Stream 3A			SM 9222D	MIC/4025
T1914151012	Mine Cut 1D			SM 9222D	MIC/4025
T1914151013	Stream 3C2			SM 9222D	MIC/4025
T1914151014	3B2B			SM 9222D	MIC/4025
T1914151015	Duplicate			SM 9222D	MIC/4025
T1914151022	TH-64			SM 2540 C	WCAI/12980

Report ID: 897450

Page 147 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151023	TH-61			SM 2540 C	WCA/t/12980
T1914151024	TH-61A			SM 2540 C	WCA/t/12980
T1914151025	TH-70A			SM 2540 C	WCA/t/12980
T1914151026	TH-69A			SM 2540 C	WCA/t/12980
T1914151027	TH-65			SM 2540 C	WCA/t/12980
T1914151028	TH-66A			SM 2540 C	WCA/t/12980
T1914151029	TH-66			SM 2540 C	WCA/t/12980
T1914151031	TH-67			SM 2540 C	WCA/t/12980
T1914151032	Duplicate			SM 2540 C	WCA/t/12980
T1914151001	Field Blank	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151002	TH-72	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151003	TH-58	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151005	TH-22A	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151006	TH-40	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151007	TH-57	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151008	TH-28A	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151010	Equipment Blank	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151011	Stream 3A	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151012	Mine Cut 1D	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151013	Stream 3C2	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151014	3B2B	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151015	Duplicate	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151016	TH-78	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151017	TH-19	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151018	TH-36A	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151019	TH-71A	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151020	TH-68	SW-846 3010A	DGMj/3867	SW-846 6020	ICMj/2033
T1914151016	TH-78			SM 4500-CI-E	WCA/t/13003
T1914151017	TH-19			SM 4500-CI-E	WCA/t/13003
T1914151018	TH-36A			SM 4500-CI-E	WCA/t/13003
T1914151019	TH-71A			SM 4500-CI-E	WCA/t/13003
T1914151020	TH-68			SM 4500-CI-E	WCA/t/13003

Report ID: 897450

Page 148 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151022	TH-64			SM 4500-CI-E	WCA/t/13003
T1914151023	TH-61			SM 4500-CI-E	WCA/t/13003
T1914151024	TH-61A			SM 4500-CI-E	WCA/t/13003
T1914151025	TH-70A			SM 4500-CI-E	WCA/t/13003
T1914151026	TH-69A			SM 4500-CI-E	WCA/t/13004
T1914151027	TH-65			SM 4500-CI-E	WCA/t/13004
T1914151028	TH-66A			SM 4500-CI-E	WCA/t/13004
T1914151029	TH-66			SM 4500-CI-E	WCA/t/13004
T1914151031	TH-67			SM 4500-CI-E	WCA/t/13004
T1914151032	Duplicate			SM 4500-CI-E	WCA/t/13004
T1914151001	Field Blank	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151002	TH-72	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151003	TH-58	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151004	Trip Blank	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151005	TH-22A	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151006	TH-40	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151007	TH-57	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151008	TH-28A	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151009	Trip Blank	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151010	Equipment Blank	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151011	Stream 3A	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151012	Mine Cut 1D	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151013	Stream 3C2	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151014	3B2B	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151015	Duplicate	SW-846 5030B	MSVt/4344	SW-846 8260B (SIM)	MSVt/4345
T1914151001	Field Blank	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151002	TH-72	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151003	TH-58	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151004	Trip Blank	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151005	TH-22A	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151006	TH-40	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347

Report ID: 897450

Page 149 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151007	TH-57	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151008	TH-28A	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151009	Trip Blank	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151010	Equipment Blank	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151011	Stream 3A	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151012	Mine Cut 1D	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151013	Stream 3C2	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151014	3B2B	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151015	Duplicate	SW-846 5030B	MSVt/4346	SW-846 8260B	MSVt/4347
T1914151010	Equipment Blank	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151011	Stream 3A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151012	Mine Cut 1D	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151013	Stream 3C2	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151014	3B2B	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151015	Duplicate	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151016	TH-78	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151017	TH-19	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151018	TH-36A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151019	TH-71A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151020	TH-68	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151022	TH-64	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151023	TH-61	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151024	TH-61A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151025	TH-70A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151026	TH-69A	SW-846 7470A	DGMt/3870	SW-846 7470A	CVA/1728
T1914151026	TH-69A			EPA 350.1	WCA/13125
T1914151027	TH-65			EPA 350.1	WCA/13125
T1914151028	TH-66A			EPA 350.1	WCA/13125
T1914151029	TH-66			EPA 350.1	WCA/13125
T1914151031	TH-67			EPA 350.1	WCA/13126
T1914151032	Duplicate			EPA 350.1	WCA/13126

Report ID: 897450

Page 150 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151022	TH-64	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151023	TH-61	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151024	TH-61A	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151025	TH-70A	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151026	TH-69A	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151027	TH-65	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151028	TH-66A	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151029	TH-66	SW-846 3010A	DGMj/3890	SW-846 6020	ICMj/2043
T1914151031	TH-67	SW-846 3010A	DGMj/3891	SW-846 6020	ICMj/2044
T1914151032	Duplicate	SW-846 3010A	DGMj/3891	SW-846 6020	ICMj/2044
T1914151014	3B2B			SM 5310B	WCAg/7686
T1914151010	Equipment Blank			SM 10200 H	WCAg/7708
T1914151011	Stream 3A			SM 10200 H	WCAg/7708
T1914151012	Mine Cut 1D			SM 10200 H	WCAg/7708
T1914151013	Stream 3C2			SM 10200 H	WCAg/7708
T1914151014	3B2B			SM 10200 H	WCAg/7708
T1914151015	Duplicate			SM 10200 H	WCAg/7708
T1914151016	TH-78	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151017	TH-19	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151018	TH-36A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151019	TH-71A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151020	TH-68	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151021	Trip Blank	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151022	TH-64	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151023	TH-61	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151024	TH-61A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151025	TH-70A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151026	TH-69A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151027	TH-65	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151028	TH-66A	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151029	TH-66	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151030	Trip Blank	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151031	TH-67	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151032	Duplicate	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151033	Trip Blank	SW-846 5030B	MSVm/3831	SW-846 8260B (SIM)	MSVm/3832
T1914151016	TH-78	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151017	TH-19	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151018	TH-36A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151019	TH-71A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151020	TH-68	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151021	Trip Blank	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151022	TH-64	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151023	TH-61	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151024	TH-61A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151025	TH-70A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151026	TH-69A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151027	TH-65	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151028	TH-66A	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151029	TH-66	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151030	Trip Blank	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151031	TH-67	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151032	Duplicate	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151033	Trip Blank	SW-846 5030B	MSVm/3835	SW-846 8260B	MSVm/3836
T1914151015	Duplicate			SM 5310B	WCAg/7711
T1914151010	Equipment Blank			SM 2340C	WCAt/13178
T1914151011	Stream 3A			SM 2340C	WCAt/13178
T1914151012	Mine Cut 1D			SM 2340C	WCAt/13178
T1914151013	Stream 3C2			SM 2340C	WCAt/13178
T1914151014	3B2B			SM 2340C	WCAt/13178

Report ID: 897450

Page 152 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151015	Duplicate			SM 2340C	WCAt/13178
T1914151027	TH-65	SW-846 7470A	DGMt/3889	SW-846 7470A	CVAAt/1732
T1914151028	TH-66A	SW-846 7470A	DGMt/3889	SW-846 7470A	CVAAt/1732
T1914151029	TH-66	SW-846 7470A	DGMt/3889	SW-846 7470A	CVAAt/1732
T1914151031	TH-67	SW-846 7470A	DGMt/3889	SW-846 7470A	CVAAt/1732
T1914151032	Duplicate	SW-846 7470A	DGMt/3889	SW-846 7470A	CVAAt/1732
T1914151002	TH-72	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151003	TH-58	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151005	TH-22A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151006	TH-40	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151007	TH-57	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151008	TH-28A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151010	Equipment Blank	Calculation	CLCt/	Calculation	CLCt/
T1914151011	Stream 3A	Calculation	CLCt/	Calculation	CLCt/
T1914151011	Stream 3A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151012	Mine Cut 1D	Calculation	CLCt/	Calculation	CLCt/
T1914151012	Mine Cut 1D	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151013	Stream 3C2	Calculation	CLCt/	Calculation	CLCt/
T1914151013	Stream 3C2	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151014	3B2B	Calculation	CLCt/	Calculation	CLCt/
T1914151014	3B2B	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151015	Duplicate	Calculation	CLCt/	Calculation	CLCt/
T1914151016	TH-78	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151017	TH-19	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151018	TH-36A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151019	TH-71A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151020	TH-68	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151022	TH-64	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151023	TH-61	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151024	TH-61A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151025	TH-70A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151026	TH-69A	Field Measurements	FLDt/	Field Measurements	FLDt/

Report ID: 897450

Page 153 of 154

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1914151 SELF Semi-Annual SE CntyLndfil

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1914151027	TH-65	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151028	TH-66A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151029	TH-66	Field Measurements	FLDt/	Field Measurements	FLDt/
T1914151031	TH-67	Field Measurements	FLDt/	Field Measurements	FLDt/

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





* T 1 9 1 4 1 5 1 *

* T 1914151 *

[illegible]

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID: _____

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site Address: _____



Advanced
Environmental Laboratories, LLC. Cont.

7/19/15

- ☐ Altamonte Springs: 528 S. Northlake Blvd. Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
☐ Gainesville: 4965 SW 41st Blvd • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
☐ Jacksonville: 6681 Southpoint Pkwy • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐ Miramar: 10200 USA Today Way • Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ Tallahassee: 1288 Cedar Center Drive • Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
☐ Tampa: 9610 Princess Palm Ave • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

Client Name: Hills, Co. Public Utilities

Project Name: SELF Semi-Annual

Address: 332 North Falkenburg Rd.

P.O. Number/Project Number: N/A

Tampa, Florida 33619

Project Location: Southeast County Landfill

Phone: (813) 663-3222

REMARKS/SPECIAL INSTRUCTIONS:

FAX: (813) 274-6801

Contact: Michael Townsel

Sampled By: T. Aguilar M. Morales

Turn Around Time: ☒ STANDARD ☐ RUSH

Page: 1 of 1

SAMPLE ID

SAMPLE DESCRIPTION

Grab Comp

SAMPLING DATE

TIME

MATRIX

NO. COUNT

PRESER-VATION

ANALYSIS REQUIRED

40 CFR Part 258 Appendix I

Fe, Hg, Na

Total Ammonia-N

Nitrate

Chloride

TDS

LABORATORY I.D. NUMBER

TH-22 A

G

8/12/14

10:22

GW

8

X

X

X

X

X

X

X

X

X

TH-40

G

8/12/14

11:20

GW

8

X

X

X

X

X

X

X

X

X

TH-57

G

8/12/14

11:57

GW

8

X

X

X

X

X

X

X

X

X

TH-28A

G

8/12/14

12:38

GW

8

X

X

X

X

X

X

X

X

X

Trip Blank

-

8/12/14

-

-

-

-

-

-

-

-

-

-

-

-

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

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 1A S 1V

Form revised 09/19/2012

Relinquished by: Date: Time: Received by: Date: Time:

8/12/14 11:12

8/12/14

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID:

Contact Person:

Supplier of Water:

Site Address:

Phone:

☐ JACKSONVILLE, 1001 Southside Dr. • Jacksonville, FL 32205 • 954-889-2288
☐ MIAMI: 10200 USA Today Way • Miramar, FL 33025 • 954-889-2288
☐ TAMPA: 1288 Cedar Center Drive • Tallahassee, FL 32301 • 850-933-1111
☐ TAMPA: 9610 Princess Palm Ave • Tampa, FL 33619 • 813-630-9616 • Fax 813-630-4327

PUBLIC UTILITIES
 332 North Falkenburg Rd.
 Tampa, Florida 33619
 Phone: (813) 663-3222
 FAX: (813) 274-6801
 Contact: Michael Townsel
 Sampled By: T. Aguilar M. Morales
 Turn Around Time: ☒ STANDARD ☐ RUSH

Project Name: SELF Semi-Annual
 P.O. Number/Project Number: N/A
 Project Location: Southeast County Landfill
 REMARKS/SPECIAL INSTRUCTIONS:

BOTTLE SIZE & TYPE:

ANALYSIS REQUIRED:

40 CFR Part 258 Appendix I
 Unionized Ammonia
 Total Hardness as CaCO₃
 BOD-5
 Fe, Hg
 Nitrate
 TDS, TSS
 TOC
 Fecal Coliform
 Total Phosphorous

LABORATORY I.D. NUMBER:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION										
			DATE	TIME													
	Equipment Blank	G	8/13/14	9:15	DI			X	X	X	X	X	X	X	X	X	X
	Stream 3A	G	8/13/14	9:32	SW			X	X	X	X	X	X	X	X	X	X
	Mine Cut 1D	G	8/13/14	9:58	SW			X	X	X	X	X	X	X	X	X	X
	Stream 3C2	G	8/13/14	13:25	SW			X	X	X	X	X	X	X	X	X	X
	3B2B	G	8/13/14	13:50	SW			X	X	X	X	X	X	X	X	X	X
	Duplicate	G	8/13/14	—	SW			X	X	X	X	X	X	X	X	X	X

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
 Received on Ice: ☒ Yes ☐ No Temp taken from sample: ☐ Temp from blank
 Form revised 09/19/2012

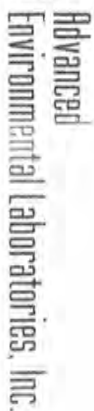
Relinquished by: Date: 8/13/14 Time: 14:59 Received by: Date: 8/13/14 Time: 15:00

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: 1A S: 1V

WHERE REQUIRED, pH CHECKED: 2.4 (in degrees Celsius)

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID: _____
 Contact Person: _____
 Supplier of Water: _____
 Site Address: _____



11919193

Client Name: Hills. Co. Public Utilities		Project Name: SELF Semi-Annual	
Address: 332 North Falkenburg Rd. Tampa, Florida 33619		P.O. Number/Project Number: N/A	
Phone: (813) 663-3222		Project Location: Southeast County Landfill	
FAX: (813) 274-6801		REMARKS/SPECIAL INSTRUCTIONS:	
Contact: Michael Townsend			
Sampled By: T. Aguilar M. Morales			
Turn Around Time: ☒ STANDARD ☐ RUSH			
Page: 2 of 2			

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING		MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED	Chlorophyll A	Nitrogen	COD	LABORATORY I.D. NUMBER
			DATE	TIME								
	Equipment Blank	G	8/13/19	9:15	DI							
	Stream 3A	G	8/13/19	9:32	SW				X	X	X	005
	Mine cut 1D	G	8/13/19	9:58	SW				X	X	X	005
	Stream CC2	G	8/13/19	13:25	SW				X	X	X	005
	3B2B	G	8/13/19	13:50	SW				X	X	X	005
	Duplicate	G	8/13/19	—	SW				X	X	X	005

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on Ice: ☒ Yes ☐ No Temp taken from sample: ☐ Temp from blank

Form revised 09/19/2012

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 1A S 1V

Where required, pH checked

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID: _____

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site Address: _____



Advanced
Environmental Laboratories, Inc.

Altamonte Springs: 528 S. Northlake Blvd. Ste. 1016 • Altamonte Springs, FL 32701 • 407 937 1594 • Fax 407 937 1597
Gainesville: 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352 377 2349 • Fax 352 385 6639
Jacksonville: 6581 Southpoint Pkwy. • Jacksonville, FL 32216 • 904 363 9350 • Fax 904 363 9354
Miramar: 10200 USA Today Way Miramar, FL 33025 • 954 889 2288 • Fax 954 889 2281
Tallahassee: 1286 Cedar Center Drive, Tallahassee, FL 32301 • 850 219 6274 • Fax 850 219 6275
Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813 630 9616 • Fax 813 630 4327

1177 4151 cont

Client Name: Hills. Co. Public Utilities		Project Name: SELF Semi-Annual		BOTTLE SIZE & TYPE				
Address: 332 North Falkenburg Rd. Tampa, Florida 33619		P.O. Number/Project Number: N/A		Project Location: Southeast County Landfill		REMARKS/SPECIAL INSTRUCTIONS		
Phone: (813) 663-3222								
FAX: (813) 274-6801								
Contact: Michael Townsend								
Sampled By: T. Aguilar M. Morales								
Turn Around Time: ☒ STANDARD ☐ RUSH								
Page: 1 of 1								
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	MATRIX	NO COUNT	PRESERVATION	ANALYSIS REQUIRED	LABORATORY I.D. NUMBER
	TH-78	G	8/14/19 11:11	GM	8	X	40 CFR Part 258 Appendix I	016
	TH-19	G	8/14/19 11:59	GM	8	X	Fe, Hg, Na	019
	TH-36A	G	8/14/19 12:27	GM	8	X	Total Ammonia-N	014
	TH-71A	G	8/14/19 13:03	GM	8	X	Nitrate	019
	TH-68	G	8/14/19 15:25	GM	8	X	Chloride	020
	Tap Blank	-	8/14/19 -	-	1	X	TDS	021

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on ice ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank

Form revised 09/19/2012

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-1A S-1V

Where required, pH checked

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID: _____

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site Address: _____



Advanced
Environmental Laboratories, Inc.

Altamonte Springs: 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407 937 1594 • Fax 407 937 1597
Gainesville: 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352 377 2349 • Fax 352 395 6639
Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904 363 9350 • Fax 904 363 9354
Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954 889 2288 • Fax 954 889 2281
Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850 219 6274 • Fax 850 219 6275
Tampa: 9810 Princess Palm Ave. • Tampa, FL 33619 • 813 630 9616 • Fax 813 630 4327

T1914151 CONTD

Client Name: Hills, Co. Public Utilities		Project Name: SELF Semi-Annual		BOTTLE SIZE & TYPE				
Address: 332 North Falkenburg Rd.		P.O. Number/Project Number: N/A						
Tampa, Florida 33619		Project Location: Southeast County Landfill						
Phone: (813) 663-3222		REMARKS/SPECIAL INSTRUCTIONS						
FAX: (813) 274-6801								
Contact: Michael Townsend								
Sampled by: T. Aguilar, M. Morales								
Time Around Time: ☒ STANDARD ☐ RUSH								
Page: 1 of 1								
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED	LABORATORY I.D. NUMBER
	TH-64	G	8/15/14 9:16	GW	8	X	40 CFR Part 258 Appendix I	022
	TH-61	G	8/15/14 9:46	GW	8	X	Fe, Hg, Na	023
	TH-61A	G	8/15/14 10:14	GW	8	X	Total Ammonia-N	024
	TH-70A	G	8/15/14 11:01	GW	8	X	Nitrate	025
	TH-69A	G	8/15/14 11:46	GW	8	X	Chloride	026
	TH-65	G	8/15/14 12:34	GW	8	X	TDS	027
	TH-66A	G	8/15/14 13:30	GW	8	X		028
	TH-66	G	8/15/14 14:04	GW	8	X		029
	Tip Blank	-	8/15/14 -	-	1	X		030

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on Ice ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank

Relinquished by: Date Time Received by: Date Time

Device used for measuring Temp by unique identifier (circle IR Temp gun used) J 9A G LT-1 LT-2 (T10A) A. 3A M. 1A S. 1V

Where required, pH checked Temperature when received 5.2 (in degrees Celsius)

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID: Contact Person: Supplier of Water: Site Address: Phone:



Advanced
Environmental Laboratories, Inc.

☐ Altamonte Springs: 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407 937 1594 • Fax 407 937 1597
☐ Gainesville: 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352 377 2349 • Fax 352 395 6639
☐ Jacksonville: 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904 363 9350 • Fax 904 363 9354
☐ Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954 889 2288 • Fax 954 889 2281
☐ Tallahassee: 1288 Cedar Center Drive Tallahassee, FL 32301 • 850 219 6274 • Fax 850 219 6275
☐ Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813 630 9616 • Fax 813 630 4327

T1914151 GMB

Client Name: Hills. Co. Public Utilities		Project Name: SELF Semi-Annual		BOTTLE SIZE & TYPE										
Address: 332 North Falkenburg Rd. Tampa, Florida 33619		P.O. Number/Project Number: N/A												
Phone: (813) 663-3222		Project Location: Southeast County Landfill												
FAX: (813) 274-6801		REMARKS/SPECIAL INSTRUCTIONS:												
Contact: Michael Townsel														
Sampled By: T. Aguilar M. Morales														
Turn Around Time: ☒ STANDARD ☐ RUSH														
Page: 1 of 1														
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED	40 CFR Part 258 Appendix I	Fe, Hg, Na	Total Ammonia-N	Nitrate	Chloride	TDS	LABORATORY I.D. NUMBER
	TH-67	G	8/6/19	9:35	GM	6		X	X	X	X	X	X	031 011
	Duplicate	G	8/6/19	—	GM	6		X	X	X	X	X	X	032 012
	Tap Blank	—	8/6/19	—	—	1		X						033 031
														034 032
														035 033
														036 034
														037 035
														038 036
														039 037
														040 038
														041 039
														042 040
														043 041
														044 042
														045 043
														046 044
														047 045
														048 046
														049 047
														050 048
														051 049
														052 050
														053 051
														054 052
														055 053
														056 054
														057 055
														058 056
														059 057
														060 058
														061 059
														062 060
														063 061
														064 062
														065 063
														066 064
														067 065
														068 066
														069 067
														070 068
														071 069
														072 070
														073 071
														074 072
														075 073
														076 074
														077 075
														078 076
														079 077
														080 078
														081 079
														082 080
														083 081
														084 082
														085 083
														086 084
														087 085
														088 086
														089 087
														090 088
														091 089
														092 090
														093 091
														094 092
														095 093
														096 094
														097 095
														098 096
														099 097
														100 098

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 3.1 (in degrees Celsius)
Form revised 09/19/2012	Device used for measuring Temp by unique identifier (circle IR temp gun used) J-9A G-LT-1 LT-2 (T-9A A-3A M-1A S-1V)
Retinquished by: [Signature]	Date: 8/6/19 Time: 11:12
Received by: [Signature]	Date: 8/6/19 Time: 11:10

PWS ID: _____	Phone: _____
Contact Person: _____	
Supplier of Water: _____	
Site Address: _____	

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-72	SAMPLE ID: TH-72	DATE: 8/13/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 180 ft to 190 ft	STATIC DEPTH TO WATER (feet): 85.43	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (190 feet - 85.43 feet) X 0.16 gallons/foot = 16.73 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 189	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 189	PURGING INITIATED AT: 10:55	PURGING ENDED AT: 12:04	TOTAL VOLUME PURGED (gallons): 17.94

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:00	16.9	16.9	0.26	85.44	6.67	24.2	1535	0.15	4.49	Clear	None
12:02	0.52	17.42	0.26	85.44	6.67	24.2	1531	0.15	2.89	Clear	None
12:04	0.52	17.94	0.26	85.44	6.67	24.2	1547	0.14	0.82	Clear	None

8/13/19

OK

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: J. Aguilar M. Morales		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: 12:04	SAMPLING ENDED AT: 12:09
PUMP OR TUBING DEPTH IN WELL (feet): 189		TUBING MATERIAL CODE: T	FIELD-FILTERED Y (N)	FILTER SIZE: _____ μm	
FIELD DECONTAMINATION PUMP Y (N)		TUBING Y (N) (replaced)	DUPLICATE Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **12:00(-74.1), 12:02(-74.5), 12:04(-75.9)**

MATERIAL CODES AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-58	SAMPLE ID: TH-58
DATE: 8/13/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 22.92 ft to 32.92 ft	STATIC DEPTH TO WATER (feet): 26.92	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (32.92 feet - 26.92 feet) X 0.16 gallons/foot = 0.96 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 31.92	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 31.92	PURGING INITIATED AT: 12:24	PURGING ENDED AT: 12:36	TOTAL VOLUME PURGED (gallons): 1.92

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:30	0.96	0.96	0.16	27.07	5.90	26.9	377.4	0.94	2.92	Clear	None
12:32	0.32	1.28	0.16	27.07	5.88	26.9	361.9	0.59	1.60	Clear	None
12:34	0.32	1.6	0.16	27.07	5.87	26.9	353.5	0.58	1.18	Clear	None
12:36	0.32	1.92	0.16	27.07	5.87	26.9	349.4	0.56	1.63	Clear	None

8/13/19

OK

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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 12:36		SAMPLING ENDED AT: 12:41	
PUMP OR TUBING DEPTH IN WELL (feet): 31.92				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ N ☐			FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐				DUPLICATE: Y ☒ N ☐							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: SEE COC FOR ANALYSIS ORP: 12:30(65.2), 12:32(58.6), 12:34(55.9), 12:36(53.9)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-22A	SAMPLE ID: TH-22A	DATE: 8/12/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 17.90 ft to 27.90 ft	STATIC DEPTH TO WATER (feet): 4.29	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (27.90 \text{ feet} - 4.29 \text{ feet}) \times 0.16 \text{ gallons/foot} = 3.78 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{N/A gallons} + (\text{N/A gallons/foot} \times \text{N/A feet}) + \text{N/A gallons} = \text{N/A gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 26.90	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 26.90	PURGING INITIATED AT: 10:03	PURGING ENDED AT: 10:22	TOTAL VOLUME PURGED (gallons): 4.94

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or (S/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:18	3.9	3.9	0.26	4.59	4.77	25.0	161.6	0.14	4.64	Clear	Sulphur
10:20	0.52	4.42	0.26	4.59	4.77	25.0	161.5	0.13	4.82	Clear	Sulphur
10:22	0.52	4.94	0.26	4.59	4.77	25.0	161.6	0.12	5.90	Clear	Sulphur

8/12/19

JTB

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: T. Aguilar / M.M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 10:22		SAMPLING ENDED AT: 10:27	
PUMP OR TUBING: TUBING				FIELD-FILTERED Y (N)				FILTER SIZE: _____ μm			
DEPTH IN WELL (feet): 26.90				MATERIAL CODE: T				Filtration Equipment Type: _____			
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N replaced)				DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **10:18 (26.7), 10:20 (23.4), 10:22 (20.5)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME Southeast County Landfill		SITE LOCATION: Lithia, Florida		DATE: 8/12/19
WELL NO: TH-40		SAMPLE ID: TH-40		
PURGING DATA				
STATIC DEPTH		PURGE PUMP TYPE		

WELL NO: TH-40

PURGING DATA

WELL

DIAMETER (inches): 2

TUBING

DIAMETER (inches): 1/2

WELL SCREEN INTERVAL

DEPTH: 155.9 ft to 165.9 ft

STATIC DEPTH TO WATER (feet): 83.38

PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

= (165.9 feet - 83.38 feet) X 0.16

gallons/foot = 13.2

gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A

gallons = N/A

gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 164.9

FINAL PUMP OR TUBING DEPTH IN WELL (feet): 164.9

PURGING INITIATED AT: 10:57

PURGING ENDED AT: 11:20

TOTAL VOLUME PURGED (gallons): 16.56

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:16	13.68	13.68	0.72	83.38	7.58	23.6	361.5	0.15	0.55	Clear	None
11:18	1.44	15.12	0.72	83.38	7.60	23.7	361.7	0.13	0.44	Clear	None
11:20	1.44	16.56	0.72	83.38	7.61	23.7	362.8	0.26	0.57	Clear	None

8/12/19

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02,

TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006,

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

SAMPLING DATA

SAMPLING

SAMPLING

[illegible]

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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-57	SAMPLE ID: TH-57	DATE: 8/12/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 16.83 ft to 26.83 ft	STATIC DEPTH TO WATER (feet): 18.01	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (26.83 feet - 18.01 feet) X 0.16 gallons/foot = 1.41 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 25.83	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 25.83	PURGING INITIATED AT: 11:46	PURGING ENDED AT: 11:57	TOTAL VOLUME PURGED (gallons): 2.31

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:53	1.47	1.47	0.21	18.01	5.38	28.5	368.8	0.99	1.29	Clear	None
11:55	0.42	1.89	0.21	18.14	5.38	28.4	363.9	0.93	0.96	Clear	None
11:57	0.42	2.31	0.21	18.14	5.37	28.4	361.6	0.64	0.88	Clear	None

8/12/19

JP

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: T. Aguilar M. Morales		SAMPLER(S) SIGNATURE(S): 		SAMPLING INITIATED AT: 11:57	SAMPLING ENDED AT: 12:02
PUMP OR TUBING DEPTH IN WELL (feet): 25.83		TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ μm
FIELD DECONTAMINATION PUMP Y ☒ N ☐		TUBING Y ☒ N (replaced) ☐		DUPLICATE Y ☒ N ☐	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: SEE COC FOR ANALYSIS ORP: 11:53(-82.6), 11:55(-82.7), 11:57(-93.4)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME Southeast County Landfill		SITE LOCATION Lithia, Florida	
WELL NO TH-28A	SAMPLE ID TH-28A	DATE 8/12/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 24.3 ft to 34.3 ft	STATIC DEPTH TO WATER (feet): 27.06	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (34.3 feet - 27.06 feet) X 0.16 gallons/foot = 1.15 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 33.3	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 33.3	PURGING INITIATED AT: 12:22	PURGING ENDED AT: 12:38	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 (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:34	1.2	1.2	0.1	27.21	5.26	28.4	306.0	0.36	2.64	Clear	None
12:36	0.2	1.4	0.1	27.21	5.25	28.4	303.4	0.35	2.38	Clear	None
12:38	0.2	1.6	0.1	27.21	5.24	28.4	301.5	0.33	2.24	Clear	None

8/12/19

[Signature]

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: T. Aguilar N. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 12:38		SAMPLING ENDED AT: 12:43	
PUMP OR TUBING DEPTH IN WELL (feet): 33.3				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ N ☒		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ (replaced)				DUPLICATE Y ☒ N ☒							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **12:34(-38.6), 12:36(-42.5), 12:38(-45.6)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: Stream 3A	SAMPLE ID: Stream 3A	DATE: 8/13/19	

PURGING DATA

WELL DIAMETER (inches): N/A		TUBING DIAMETER (inches): N/A		WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft		STATIC DEPTH TO WATER (feet): N/A		PURGE PUMP TYPE OR BAILER:	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (N/A feet - N/A feet) X N/A gallons/foot = N/A gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A		FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A		PURGING INITIATED AT: N/A		PURGING ENDED AT: N/A		TOTAL VOLUME PURGED (gallons): N/A	

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:32	—	—	—	2.10	6.39	27.2	276.2	0.07	2.50	Clear	None

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 9:32		SAMPLING ENDED AT: 9:40	
PUMP OR TUBING DEPTH IN WELL (feet): N/A				TUBING MATERIAL CODE: N/A				FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐				TUBING Y ☒ N (replaced) ☐				DUPLICATE: Y ☒ N ☐			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: 9:32 (-58.4)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: Mine-Cut 1D	SAMPLE ID: Mine-Cut 1D DATE: 8/13/19

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: BAILER
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (N/A feet - N/A feet) X N/A gallons/foot = N/A gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:58	—	—	—	2.20	6.83	28.4	491.9	0.76	3.72	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 9:58		SAMPLING ENDED AT: 10:05	
PUMP OR TUBING DEPTH IN WELL (feet): N/A				TUBING MATERIAL CODE: N/A				FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)				DUPLICATE: Y ☒ N ☐							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS**

ORP: 9:58 (522)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: Stream 3C2	SAMPLE ID: Stream 3C2 DATE: 8/13/19

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER:
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (N/A feet - N/A feet) X N/A gallons/foot = N/A gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
13:25	—	—	—	2.18	27.7	27.7	285.6	2.67	5.15	Clear	None
8/13/19 6.58 OR 8/13/19											

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: J. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 13:25		SAMPLING ENDED AT: 13:32	
PUMP OR TUBING DEPTH IN WELL (feet): N/A				TUBING MATERIAL CODE: N/A				FIELD-FILTERED: Y ☒ (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ (N) TUBING Y ☒ (N) (replaced)				DUPLICATE: Y ☒ (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: 13.25 (69.0)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump, B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, 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)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: Equipment Blank	SAMPLE ID: Equipment Blank DATE: 8/13/19

PURGING DATA

WELL	TUBING	WELL SCREEN INTERVAL	STATIC DEPTH	PURGE PUMP TYPE
DIAMETER (inches): N/A	DIAMETER (inches): N/A	DEPTH: N/A ft to N/A ft	TO WATER (feet): N/A	OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (N/A feet - N/A feet) X N/A gallons/foot = N/A gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING	FINAL PUMP OR TUBING	PURGING	PURGING	TOTAL VOLUME
DEPTH IN WELL (feet): N/A	DEPTH IN WELL (feet): N/A	INITIATED AT: N/A	ENDED AT: N/A	PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
Equipment Blank 8/13/19 GA											

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: J. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 9:15		SAMPLING ENDED AT: 9:20	
PUMP OR TUBING: N/A				TUBING: N/A				FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ μm	
DEPTH IN WELL (feet): N/A				MATERIAL CODE: N/A				Filtration Equipment Type: _____			
FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ (replaced)				DUPLICATE: Y ☒ N ☐							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: N/A**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME Southeast County Landfill		SITE LOCATION Lithia, Florida	
WELL NO: 3B2B	SAMPLE ID: 3B2B	DATE: 8/13/19	

PURGING DATA

WELL DIAMETER (inches): N/A		TUBING DIAMETER (inches): N/A		WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft		STATIC DEPTH TO WATER (feet): N/A		PURGE PUMP TYPE OR BAILER:	
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)		FINAL PUMP OR TUBING DEPTH IN WELL (feet)		PURGING INITIATED AT		PURGING ENDED AT		TOTAL VOLUME PURGED (gallons)	

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
13:50	—	—	—	N/A	6.39	26.1	231.0	3.26	5.15	Clear	None
									6.76		
									8/13/19		

8/13/19

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 T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>				SAMPLING INITIATED AT 13:50		SAMPLING ENDED AT 13:57	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:				FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE _____ μm	
FIELD DECONTAMINATION PUMP Y ☒ N ☐				TUBING Y ☒ N (replaced) ☐				DUPLICATE Y ☒ N ☐			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: 13:50 (822)**

MATERIAL CODES AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: Duplicate	SAMPLE ID: Duplicate	DATE: 8/13/19	

PURGING DATA

WELL DIAMETER (inches)		TUBING DIAMETER (inches)		WELL SCREEN INTERVAL DEPTH N/A ft to N/A ft		STATIC DEPTH TO WATER (feet)		PURGE PUMP TYPE OR BAILER			
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) = gallons + (gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A			FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A			PURGING INITIATED AT: N/A		PURGING ENDED AT: N/A		TOTAL VOLUME PURGED (gallons): N/A	
TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
Duplicate 8/13/19 CA											
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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: _____	SAMPLING ENDED AT: _____	
PUMP OR TUBING DEPTH IN WELL (feet): _____				TUBING MATERIAL CODE: _____		FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type: _____	FILTER SIZE _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)						DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
REMARKS: SEE COC FOR ANALYSIS ▲ ORP: N/A									
MATERIAL CODES AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; 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: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-78	SAMPLE ID: TH-78 DATE: 8/14/19

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 163.14 ft to 178.14 ft	STATIC DEPTH TO WATER (feet): 69.96	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (178.14 feet - 69.96 feet) X 0.16 gallons/foot = 17.31 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 177.14	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 177.14	PURGING INITIATED AT: 10:20	PURGING ENDED AT: 11:11	TOTAL VOLUME PURGED (gallons): 18.87

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:08	17.39	17.39	0.37	69.98	8.28	23.4	520	0.10	1.01	Clear	None
11:09	0.74	18.13	0.37	69.98	8.23	23.4	522	0.10	1.65	Clear	None
11:11	0.74	18.87	0.37	69.98	8.24	23.4	522	0.09	2.28	Clear	None

8/14/19

[Signature]

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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 11:11		SAMPLING ENDED AT: 11:16	
PUMP OR TUBING DEPTH IN WELL (feet): 177.14				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ N		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION: PUMP Y ☒ N				TUBING Y ☒ N (replaced)		DUPLICATE: Y ☒ N					

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **11:08(-220.7), 11:09(-221.2), 11:11(-222.3)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-19	SAMPLE ID: TH-19	DATE: 8/14/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 143.6 ft to 153.6 ft	STATIC DEPTH TO WATER (feet): 88.66	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (153.6 feet - 88.66 feet) X 0.16 gallons/foot = 10.39 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 152.6	PURGING INITIATED AT: 11:40	PURGING ENDED AT: 11:59	TOTAL VOLUME PURGED (gallons): 13.68

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:55	10.8	10.8	0.72	88.81	7.40	23.5	410.9	0.13	1.11	Clear	None
11:57	1.44	12.24	0.72	88.81	7.40	23.5	411.5	0.14	0.67	Clear	None
11:59	1.44	13.68	0.72	88.81	7.40	23.5	411.0	0.11	0.87	Clear	None

8/14/19

✱

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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 11:59		SAMPLING ENDED AT: 12:04	
PUMP OR TUBING DEPTH IN WELL (feet): 152.6				TUBING MATERIAL CODE: T				FIELD-FILTERED: Y (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)				DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **11:55(-69.1), 11:57(-73.0), 11:59(-75.5)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-36A	SAMPLE ID: TH-36A DATE: 8/14/19

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 28.7 ft to 38.7 ft	STATIC DEPTH TO WATER (feet): 31.51	PURGE PUMP TYPE OR BAILER: BP
----------------------------------	--------------------------------------	---	--	--------------------------------------

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (38.7 \text{ feet} - 31.51 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.15 \text{ gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{N/A gallons} + (\text{N/A gallons/foot} \times 31.51 \text{ feet}) + \text{N/A gallons} = \text{N/A gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 37.7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 37.7	PURGING INITIATED AT: 12:18	PURGING ENDED AT: 12:27	TOTAL VOLUME PURGED (gallons): 2.32
--	--	------------------------------------	--------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:23	1.16	1.16	0.29	31.72	5.77	25.3	201.6	1.03	11.3	Clear	None
12:25	0.58	1.74	0.29	31.72	5.73	25.3	205.5	0.57	6.79	Clear	None
12:27	0.58	2.32	0.29	31.72	5.74	25.3	210.2	0.51	4.48	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: 12:27	SAMPLING ENDED AT: 12:32
--	---	-------------------------------------	---------------------------------

PUMP OR TUBING DEPTH IN WELL (feet): 37.7	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N)	FILTER SIZE: _____ μm
--	--------------------------------	------------------------------	-----------------------

FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)
--	--------------------------------	-------------------------

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **12:23(119.0), 12:25(132.3), 12:27(135.5)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-71A		SAMPLE ID: TH-71A	
DATE: 8/14/19			

PURGING DATA

WELL DIAMETER (inches): 2		TUBING DIAMETER (inches): 0.5		WELL SCREEN INTERVAL DEPTH: 22.78 ft to 37.78 ft		STATIC DEPTH TO WATER (feet): 23.31		PURGE PUMP TYPE OR BAILER: BP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (37.78 feet - 23.31 feet) X 0.16 gallons/foot = 2.32 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 36.78		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 36.78		PURGING INITIATED AT: 12:48		PURGING ENDED AT: 13:03		TOTAL VOLUME PURGED (gallons): 7.36	

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:53	2.76	2.76	0.46	23.22	6.17	25.0	1471	0.33	23.4	Clear	None
12:59	2.76	5.52	0.46	23.22	6.16	24.9	1475	0.09	9.02	Clear	None
13:01	0.92	6.44	0.46	23.22	6.17	24.9	1478	0.25	12.9	Clear	None
13:03	0.92	7.36	0.46	23.22	6.16	24.9	1476	0.13	6.51	Clear	None

8/14/19

JA

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: T. Aguila M. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 13:03		SAMPLING ENDED AT: 13:08	
PUMP OR TUBING DEPTH IN WELL (feet): 36.78				TUBING MATERIAL CODE: T				FIELD-FILTERED: Y (N) FILTER SIZE: _____ μm		Filtration Equipment Type: _____	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)				DUPLICATE: Y (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **12:53 (-33.9), 12:59 (-39.5), 13:01 (-40.1), 13:03 (-40.4)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME Southeast County Landfill		SITE LOCATION Lithia, Florida	
WELL NO TH-68	SAMPLE ID TH-68	DATE 8/14/19	

PURGING DATA

WELL DIAMETER (inches) 2	TUBING DIAMETER (inches) 1/2	WELL SCREEN INTERVAL DEPTH 12.2 ft to 22.2 ft	STATIC DEPTH TO WATER (feet) 11.42	PURGE PUMP TYPE OR BAILER BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (22.2 feet - 11.42 feet) X 0.16 gallons/foot = 1.72 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet) 21.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet) 21.2	PURGING INITIATED AT 13:43	PURGING ENDED AT 15:25	TOTAL VOLUME PURGED (gallons) 89.32

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
14:05	1.76	1.76	0.08	15.63	5.68	28.5	200.4	0.45	25.8	Clear	None
14:16	0.88	2.64	0.08	16.20	5.66	28.4	204.9	0.68	32.0	Clear	None
14:27	0.88	3.52	0.08	16.14	5.72	28.5	196.1	1.46	36.7	Clear	None
14:45	1.8	5.32	0.1	16.00	5.69	28.1	194.1	1.20	44.6	Clear	None
15:03	1.8	7.12	0.1	15.92	5.66	28.2	194.3	1.10	27.5	Clear	None
15:21	1.8	8.92	0.1	15.85	5.63	28.4	194.6	0.54	20.4	Clear	None
15:23	0.2	8.99	0.1	15.85	5.63	28.4	194.9	0.61	20.3	Clear	None
15:25	0.2	8.96	0.1	15.85	5.63	28.4	194.9	0.65	19.7	Clear	None

9.12 9.32 8/14/19

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: J. Aguilar M. Morales		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT 15:25	SAMPLING ENDED AT 15:30
PUMP OR TUBING DEPTH IN WELL (feet): 21.2		TUBING MATERIAL CODE: T	FIELD FILTERED: Y ☒ N	FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N		TUBING Y ☒ N (replaced)		DUPLICATE: Y ☒ N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
							ONP: 15:03 (-17.4)		
							15:21 (-25.2)		
							15:23 (-25.2)		
							15:25 (-24.4)		

REMARKS: **SEE COC FOR ANALYSIS** ORP: **14:05(5.7), 14:16(-6.4), 14:27(-3.2), 14:45(-10.2)**

MATERIAL CODES AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

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

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

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-64	SAMPLE ID: TH-64	DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 9.20 ft to 19.20 ft	STATIC DEPTH TO WATER (feet): 14.90	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19.20 feet - 14.90 feet) X 0.16 gallons/foot = 0.69 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.2	PURGING INITIATED AT: 9:08	PURGING ENDED AT: 9:16	TOTAL VOLUME PURGED (gallons): 1.68

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:12	0.84	0.84	0.21	15.13	5.48	26.9	179.2	0.70	19.5	Clear	None
9:14	0.42	1.26	0.21	15.13	5.46	26.9	178.4	0.37	15.4	Clear	None
9:16	0.42	1.68	0.21	15.13	5.45	26.9	178.9	0.27	14.6	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 9:16		SAMPLING ENDED AT: 9:21	
PUMP OR TUBING DEPTH IN WELL (feet): 18.2				TUBING MATERIAL CODE: T				FIELD-FILTERED: Y ☒ N		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N				TUBING Y ☒ N (replaced)				DUPLICATE: Y ☒ N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **9:12 (161.7), 9:14 (159.6), 9:16 (157.7)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-61	DATE: 8/15/19

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 15.9 ft to 25.9 ft	STATIC DEPTH TO WATER (feet): 15.62	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (25.9 feet - 15.62 feet) X 0.16 gallons/foot = 1.65 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 24.9	PURGING INITIATED AT: 9:38	PURGING ENDED AT: 9:48	TOTAL VOLUME PURGED (gallons): 2.9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:44	1.74	1.74	0.29	16.30	5.80	25.6	231.5	6.35	3.36	Clear	None
9:46	0.58	2.32	0.29	16.30	5.79	25.6	229.5	0.23	1.79	Clear	None
9:48	0.59	2.90	0.29	16.30	5.78	25.7	228.5	0.18	1.76	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 9:48		SAMPLING ENDED AT: 9:53	
PUMP OR TUBING DEPTH IN WELL (feet): 24.9				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) FILTER SIZE: _____ μm			Filtration Equipment Type: _____		
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)				DUPLICATE: Y (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **9:44(165.9), 9:46(164.2), 9:48(165.6)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-61A	SAMPLE ID: TH-61A
DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 13.18 ft to 23.18 ft	STATIC DEPTH TO WATER (feet): 13.49	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (23.18 feet - 13.49 feet) X 0.16 gallons/foot = 1.55 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22.18	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22.18	PURGING INITIATED AT: 10:00	PURGING ENDED AT: 10:14	TOTAL VOLUME PURGED (gallons): 2.24

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or (S/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:10	1.6	1.6	0.16	15.31	5.89	26.8	291.5	0.78	4.67	Clear	None
10:12	0.32	1.92	0.16	15.31	5.90	26.8	288.7	0.62	3.40	Clear	None
10:14	0.32	2.24	0.16	15.31	5.90	26.7	285.1	0.50	2.23	Clear	None

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.66; 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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 10:14		SAMPLING ENDED AT: 10:19	
PUMP OR TUBING DEPTH IN WELL (feet): 22.18				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ (N) FILTER SIZE: ____ μm			Filtration Equipment Type:		
FIELD DECONTAMINATION PUMP Y ☒ (N)				TUBING Y ☒ (N) (replaced)				DUPLICATE: Y ☒ (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: SEE COC FOR ANALYSIS ORP: 10:10(104.5), 10:12(106.4), 10:14(107.1)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME Southeast County Landfill		SITE LOCATION Lithia, Florida	
WELL NO: TH-70A	SAMPLE ID: TH-70A	DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH 21.58 ft to 36.58 ft	STATIC DEPTH TO WATER (feet): 26.59	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (36.58 feet - 26.59 feet) X 0.16 gallons/foot = 1.60 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 35.58	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 35.58	PURGING INITIATED AT: 10:41	PURGING ENDED AT: 11:01	TOTAL VOLUME PURGED (gallons): 9.2

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:45	1.84	1.84	0.46	26.81	6.26	25.9	689	0.30	234.6	Orange	None
10:49	1.84	3.68	0.46	26.81	6.25	25.8	686	0.11	282.3	Orange	None
10:53	1.84	5.52	0.46	26.81	6.25	25.8	688	0.09	255.9	Orange	None
10:57	1.84	7.36	0.46	26.81	6.26	25.8	688	0.11	175.2	Orange	None
11:01	1.84	9.2	0.46	26.81	6.26	25.8	688	0.08	154.8	Orange	None

8/15/19

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: T. Aguilar M. Morales		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: 11:01	SAMPLING ENDED AT: 11:06
PUMP OR TUBING DEPTH IN WELL (feet): 35.58		TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N)	FILTER SIZE: _____ μm	
FIELD DECONTAMINATION PUMP Y (N)		TUBING Y (N (replaced))		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
							ORP: 11:01 (-73.6)		

REMARKS: **SEE COC FOR ANALYSIS** **ORP: 10:45 (-59.7), 10:49 (-66.0), 10:53 (-70.4), 10:57 (-71.9)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump, B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, 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)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-69A	SAMPLE ID: TH-69A
DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 20 ft to 35 ft	STATIC DEPTH TO WATER (feet): 24.83	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (35 feet - 24.83 feet) X 0.16 gallons/foot = 1.63 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 34	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 34	PURGING INITIATED AT: 11:19	PURGING ENDED AT: 11:48	TOTAL VOLUME PURGED (gallons): 9.57

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:24	1.65	1.65	0.33	25.08	6.14	26.3	529	1.04	320.4	Orange	None
11:29	1.65	3.3	0.33	25.08	6.12	26.2	559	0.67	40.0	Clear	None
11:34	1.65	4.95	0.33	25.08	6.11	26.1	601	0.26	8.04	Clear	None
11:36	0.66	5.61	0.33	25.08	6.11	26.2	619	0.23	4.78	Clear	None
11:38	0.66	6.27	0.33	25.08	6.11	26.2	636	0.23	4.79	Clear	None
11:40	0.66	6.93	0.33	25.08	6.11	26.2	654	0.26	3.97	Clear	None
11:44	1.32	8.25	0.33	25.08	6.11	26.1	697	0.27	4.70	Clear	None
11:46	0.66	8.91	0.33	25.08	6.10	26.1	709	0.27	4.64	Clear	None
11:48	0.66	9.57	0.33	25.08	6.10	26.1	729	0.27	3.18	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 11:48		SAMPLING ENDED AT: 11:53	
PUMP OR TUBING DEPTH IN WELL (feet): 34				TUBING MATERIAL CODE: T				FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION PUMP Y ☒ N ☐				TUBING Y ☒ N ☐ (replaced)				DUPLICATE: Y ☒ N ☐			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			
							ORP; 11:38 (22.1)		
							11:40 (19.1)		
							11:44 (13.6)		
							11:46 (11.0)		
							11:48 (8.7)		

REMARKS: SEE COC FOR ANALYSIS ORP: 11:24(60.0), 11:29(45.1), 11:34(24.7), 11:36(25.8)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silty Sand; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-65	SAMPLE ID: TH-65	DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH 13 ft to 23 ft	STATIC DEPTH TO WATER (feet): 13.20	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (23 feet - 13.20 feet) X 0.16 gallons/foot = 1.57 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22	PURGING INITIATED AT: 12:13	PURGING ENDED AT: 12:24	TOTAL VOLUME PURGED (gallons): 2.86

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:20	1.82	1.82	0.26	15.03	5.79	25.7	241.4	0.15	3.37	Clear	None
12:22	0.52	2.34	0.26	15.03	5.78	25.7	240.5	0.14	3.85	Clear	None
12:24	0.52	2.86	0.26	15.03	5.77	25.5	239.3	0.16	4.11	Clear	None

8/15/19

OK

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: T. Aguilar M. Morales		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: 12:24	SAMPLING ENDED AT: 12:29
PUMP OR TUBING DEPTH IN WELL (feet): 22		TUBING MATERIAL CODE: T	FIELD-FILTERED: Y ☒ N	FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N		TUBING Y ☒ N (replaced)		DUPLICATE: Y ☒ N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **12:20(-9.1), 12:22(-10.9), 12:24(-14.8)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida	DATE: 8/15/19
WELL NO: TH-66A	SAMPLE ID: TH-66A	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 5.37 ft to 15.37 ft	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (15.37 feet - 6.42 feet) X 0.16 gallons/foot = 1.43 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.37	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.37	PURGING INITIATED AT: 13:11	PURGING ENDED AT: 13:30	TOTAL VOLUME PURGED (gallons): 1.9

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
13:26	1.5	1.5	0.1	7.69	6.24	26.8	272.6	0.36	1.59	Clear	None
13:28	0.2	1.7	0.1	7.69	6.24	26.8	272.6	0.33	1.29	Clear	None
13:30	0.2	1.9	0.1	7.69	6.24	26.8	272.3	0.28	1.28	Clear	None

8/15/19

CA

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: T. Aguilar McMorales				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 13:30		SAMPLING ENDED AT: 13:35	
PUMP OR TUBING DEPTH IN WELL (feet): 14.37				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N) FILTER SIZE: ____ μm			Filtration Equipment Type:		
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)				DUPLICATE: Y (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: SEE COC FOR ANALYSIS ORP: 13:26(15.0), 13:28(9.5), 13:30(3.5)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = 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)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-66		SAMPLE ID: TH-66	
		DATE: 8/15/19	

PURGING DATA

WELL DIAMETER (inches): 2		TUBING DIAMETER (inches): 1/2		WELL SCREEN INTERVAL DEPTH: 11.30 ft to 21.30 ft		STATIC DEPTH TO WATER (feet): 6.41		PURGE PUMP TYPE OR BAILER: BP			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (21.30 feet - 6.41 feet) X 0.16 gallons/foot = 2.38 gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20.30			FINAL PUMP OR TUBING DEPTH IN WELL (feet): 20.30			PURGING INITIATED AT: 13:48		PURGING ENDED AT: 14:04		TOTAL VOLUME PURGED (gallons): 3.36	

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
8/15/19 14:00	2.52	2.52	0.21	6.75	6.02	26.1	333.8	0.12	0.55	Clear	None
14:02	0.42	2.94	0.21	6.75	6.02	26.1	329.6	0.11	0.48	Clear	None
14:04	0.42	3.36	0.21	6.75	6.02	26.1	327.8	0.10	0.54	Clear	None

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

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 14:04		SAMPLING ENDED AT: 14:09	
PUMP OR TUBING DEPTH IN WELL (feet): 20.30				TUBING MATERIAL CODE: T		FIELD-FILTERED Y ☒ (N)		FILTER SIZE: _____ μm			
FIELD DECONTAMINATION PUMP Y ☒ (N)				TUBING Y ☒ (replaced)				DUPLICATE Y ☒ (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** ORP: **14:00(-18.9), 14:02(-20.6), 14:04(-21.6)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: Field Blank	SAMPLE ID: Field Blank DATE: 8/13/19

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (N/A feet - N/A feet) X N/A gallons/foot = N/A gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
Field Blank 8/13/19 ORP											

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: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 11:20		SAMPLING ENDED AT: 11:25	
PUMP OR TUBING DEPTH IN WELL (feet): N/A				TUBING MATERIAL CODE: N/A		FIELD-FILTERED: Y ☒ N ☐ FILTER SIZE: _____ μm			Filtration Equipment Type: _____		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)				DUPLICATE: Y ☒ N ☐							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: N/A**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill		SITE LOCATION: Lithia, Florida	
WELL NO: TH-67	SAMPLE ID: TH-67	DATE: 8/16/19	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 5.25 ft to 15.25 ft	STATIC DEPTH TO WATER (feet): 2.84	PURGE PUMP TYPE OR BAILER: BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (15.25 \text{ feet} - 2.84 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.99 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{N/A gallons} + (\text{N/A gallons/foot} \times \text{N/A feet}) + \text{N/A gallons} = \text{N/A gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	PURGING INITIATED AT: 9:18	PURGING ENDED AT: 9:35	TOTAL VOLUME PURGED (gallons): 2.72

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:31	2.08	2.08	0.16	3.16	6.41	26.2	191.2	0.25	3.03	Clear	None
9:33	0.32	2.40	0.16	3.16	6.41	26.3	189.4	0.29	3.09	Clear	None
9:35	0.32	2.72	0.16	3.16	6.41	26.4	187.4	0.26	3.02	Clear	None

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump, O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: 9:35		SAMPLING ENDED AT: 9:40	
PUMP OR TUBING DEPTH IN WELL (feet): 14.25				TUBING MATERIAL CODE: T				FIELD-FILTERED: Y (N) FILTER SIZE: 0 μm		Filtration Equipment Type: 0	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)				DUPLICATE: Y (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: **SEE COC FOR ANALYSIS** **ORP: 9:31(3.4), 9:33(6.5), 9:35(8.6)**

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: Duplicate	SAMPLE ID: Duplicate
DATE: 8/16/19	

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
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) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
8/16/19 Duplicate A											

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: J. Aguilar M. Morales				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: —		SAMPLING ENDED AT: —	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:				FIELD FILTERED: Y (N)		FILTER SIZE: — μm	
FIELD DECONTAMINATION PUMP Y (N)				TUBING Y (N) (replaced)				DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			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			

REMARKS: SEE COC FOR ANALYSIS ORP: N/A

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

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 6020
Preparation: SW-846 3010A

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 relative percent difference (RPD) for the following analytes in the replicate matrix spike analyses of T1914151-005 was outside control criteria: Silver and Cadmium. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

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 Laboratory Control Sample Duplicate (LCSD) recovery of Vinyl Chloride was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and Matrix Spike (MS) were acceptable, which indicates the analytical batch was in control. The high recovery indicates a high bias but all associated samples were nondetect; therefore, the data is considered not significantly affected.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

I. Receipt

No Exceptions were encountered.

II. Holding Times

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

III. Method

Analysis: SM 5310B
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 matrix spike recovery of [TOC] for [J1910481036] was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike Duplicate (MSD) and % RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low 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:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

I. Receipt

No Exceptions were encountered.

II. Holding Times

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

III. Method

Analysis: SM 5310B
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 matrix spike recovery of [TOC] for [J1910922002 and G1906956002] was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike Duplicates (MSD) and %RPDs were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

I. Receipt

No Exceptions were encountered.

II. Holding Times

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

III. Method

Analysis: SM 4500-Cl-E
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 control criteria for matrix spike recoveries of Chloride for T1914151002 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. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Project No.: T1914151
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Semi-Annual SE CntyLndfil

I. Receipt

No Exceptions were encountered.

II. Holding Times

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

III. Method

Analysis: SM 4500-Cl-E
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 matrix spike recovery of Chloride for T1914151026 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike Duplicate (MSD) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: WCAg

Batch Number: 7569

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 5310B

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 matrix spike duplicate recovery of [TOC] for M1903978001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike (MS) and %RPDs were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.

E. Serial Dilution: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other: