Hillsborough County Florida

PUBLIC UTILITIES
PO Box 1110
Tampa, FL 33601-1110

BOARD OF COUNTY COMMISSIONERS
Victor D. Crist
Ken Hagan
Al Higginbotham
Pat Kemp
Lesley "Les" Miller, Jr.
Sandra L. Murman
Stacy R. White
COUNTY ADMINISTRATOR
Michael S. Merrill
COUNTY ATTORNEY
Chip Fletcher
INTERNAL AUDITOR
Peggy Caskey

CHIEF DEVELOPMENT & INFRASTRUCTURE SERVICES ADMINISTRATOR
Lucia E. Garsys

October 5, 2017

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

SUBJECT: Southeast County Class I Landfill
WACS Facility ID No. 41193
Supplemental Groundwater Sampling Report – August 2017
Consent Agreement, OGC File No. 17-0058

Dear Mr. Tafuni:

The Hillsborough County Public Utilities Department (County) has prepared this supplemental groundwater data report in accordance with part 9(g) of the referenced Consent Agreement and Rule 62-701.510(8)(a), F.A.C. This water quality sampling event was conducted at the Southeast County Landfill (SCLF) on August 2-3, 2017 to address impacts to the surficial aquifer on the east side of the Phase II area.

The County collected representative groundwater samples from monitoring wells TH-20B, TH-38B, TH-66A, TH-67, TH-79, TH-80, TH-81, and TH-82, and each sample was analyzed for total dissolved solids (TDS), chloride, sodium, and ammonia. Each of the groundwater samples were analyzed by our contract laboratory, Advanced Environmental Laboratories, Inc. (AEL). The following paragraphs provide a brief discussion of the parameter-specific water quality observations of the monitoring wells sampled.

Water Quality Observations

pH

Each of the eight (8) surficial aquifer monitoring wells continue to exhibit pH values below the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5 to 8.5 pH units. The pH values in the surficial aquifer across the SCLF have historically been observed below the acceptable range. Background water quality recorded prior to construction and operation of the landfill established these pH values within the surficial aquifer at and around the landfill. The pH values during this monitoring event range from 4.69 to 6.29 pH units, and the data remains consistent with the historical data set and background water quality.

Conductivity

The conductivity observed within the surficial aquifer at these sampling locations ranged from 46 to 2,221 umhos/cm, with the highest value recorded at TH-79. The conductivity exhibited in monitoring well TH-67 exhibited a value of 215 umhos/cm and represents a significant decrease from the historical values observed over the period of record. Over the past two months, the landfill has experienced above normal rainfall, and a few inches of standing water was observed surrounding TH-67 during this early August sampling event. Based upon the observed decrease in conductivity values, it appears the standing water has infiltrated and represents an extremely high water table in the surficial aquifer. The observed conditions appear to have affected the water quality results, and reduced the concentrations of contaminants in the affected area east of the landfill.

Chloride

Chloride ranged from 3.4 to 430 mg/l with the highest value observed in TH-79. The other sampling locations were all observed well below the SDWS of 250 mg/l, and the previously impacted wells appear to have been affected by the accumulation of storm water in the low area surrounding TH-67.

Total Dissolved Solids (TDS)

TDS concentrations in surficial aquifer monitoring wells TH-79 and TH-80 exhibited values of 1,200 and 680 mg/l, which continue to exceed the SDWS of 500 mg/l. Monitoring well TH-67 exhibited a value of 150 mg/l, which significantly lower than the value of 2,000 mg/l observed in this well during the May 2017 sampling event. As previously discussed, the County believes that the standing water accumulated in the low area surrounding TH-67 contributed to these significant reductions in the concentrations of these constituents.

Sodium

Sodium values range from 2.7 to 280 mg/l in the wells sampled, and only surficial aquifer monitoring well TH-79 exhibited a concentration above the Primary Drinking Water Standard (PDWS) of 160 mg/l. All the other wells exhibited very low concentrations, indicating the accumulated storm water contributed to reductions in concentrations of the contaminants.

Groundwater Elevations and Flow Direction

Groundwater elevations were recorded prior to sampling the eight (8) surficial aquifer groundwater monitoring wells on August 3, 2017. A surficial aquifer groundwater flow diagram for this sampling event was prepared to evaluate the general direction of flow at and around the affected area. The direction of flow in the surficial aquifer continues to flow toward the Mine Cutin a somewhat radial pattern to the southeast-east-northeast directions. This flow pattern is relatively consistent with the historical evaluations of flow in this area of the Southeast County Landfill property. The surface water elevation in Mine Cut 1 appears to be the primary influence on the direction of flow in this area, and this is clearly demonstrated by the elevation data recorded on August 7, 2017 during the semi-annual sampling event where TH-67 exhibited an elevation of 124.78, TH-81 was 123.41, TH-82 was 121.37, and the Mine Cut was 120.39. The progressive decrease in elevation of 4.39 feet over approximately 250 feet calculates to a gradient 0.018 ft/ft, which is a relatively steep gradient. The elevation observed in TH-38 appears to be somewhat of anomaly, in that it is higher than the elevation observed in TH-80. This would create a somewhat radial flow pattern from TH-38B to Mine Cut 1 and also back to the west. The County does not believe that this potential scenario of flow is representative of the actual flow occurring in the area. A review of the topography eastof Phase II, and the general soil profile of the unmined areas of the site, as described in Section 4.1 of 1983 Hydrogeologic Investigation of the Southeast County Landfill Site, Ardaman and Associates, Inc., the anomalous water level elevation in this well is likely a result of the infiltrated water perched on a layer of clay. This scenario is more likely at times of high rainfall, like what was observed during the first week of August 2017.

The installation of the additional monitoring wells in the area east of the Phase II has provided several additional data points for evaluating the direction flow, and based on the data generated and the topography of this area, the County believes that the direction of flow in the surficial aquifer is, and has always been, consistently towards Mine Cut 1.

Conclusions

The water quality observed in surficial aquifer monitoring wells along the east side of Phase II indicates impacts from leachate originating from the landfill only remain present in TH-79. Concentrations of TDS, chloride, and sodium exceeding their respective drinking water standards continue to be observed in this well. TH-80 only exhibits TDS above the SDWS of 500 mg/l, at a concentration of 680 mg/l. The remaining wells that previously exhibited impacts have shown significant reductions in the concentrations of these constituents. Of specific interest, TH-82 which is located east of the road continues to exhibit very low concentrations. No impacts have been observed in this well and the wells outside the immediate vicinity of TH-67, TH-79, TH-80 and TH-81. The plume appears to have been significantly reduced and delineated.

The County continues the ongoing evaluation of these impacts, and believes that the installation of the horizontal collector inside the east landfill berm has and will continue to keep leachate from over topping the berm. The water quality changes observed in this sampling event are believed to be attributable to the significant amounts of rainfall at the site and the removal of leachate inside the berm from the horizontal collector pipe. The next quarterly sampling event is scheduled for November 2017.

Enclosed for your review please find a detailed site location map, the water quality data summary table, the groundwater elevation data summary table, an August 2017 surficial aquifer groundwater elevation and contour diagram, historical data tables for the eight monitoring wells included in the supplemental assessment sampling events, and the complete laboratory analytical data report from AEL.

Should you have any questions, require any additional information, or would like to discuss the information provided within this submittal, please feel free to contact us at (813) 663-3222 or (813) 663-3221.

Respectfully submitted,

Michael D. Townsel
Senior Hydrologist
Environmental Services
Public Utilities Department

David S. Adams, P.G.
Environmental Manager
Environmental Services
Public Utilities Department

DSA/mdt
TSD\…\solid waste\enviro\Southeast\TH-67 Evaluation\Reports\SCLF Supplemental Eval Report August 17.pdf

Enclosures
xc: Kim Byer, Director, Solid Waste Management Division
Larry Ruiz, Landfill Manager, Solid Waste Management Division
Jeffry Greenwell, GMIII, Public Utilities, Environmental Services Section
Joe O'Neill, Professional Engineer II, Solid Waste Management Division
Ernest Ely, Manager, WMI, Southeast County Landfill
Clark Moore, Florida Department of Environmental Protection
Andy Schipfer, HC Environmental Protection Commission
Bruce Clark, SCS Engineers
Bob Curtis, SCS Engineers, Inc.

SOUTHEAST COUNTY LANDFILL

GROUNDWATER MONITORING WELL LOCATION MAP

2016 AERIAL PHOTO

Legend

- Existing Monitoring Wells
- Direction Of Flow

Hillsborough County Florida

Southeast County Landfill
Supplemental Site Assessment Data
August 2-3, 2017

General Parameters Detected	Surficial Aquifer Wells								MCL Standard
	TH-20B	TH-38B	TH-66A	TH-67	TH-79	TH-80	TH-81	TH-82	
well type	**Background**	**Background**	**Detection**	**Detection**	**Detection**	**Detection**	**Detection**	**Background**	
conductivity (umhos/cm) (field)	294	46	376	215	2221	1055	493	82	**NS**
dissolved oxygen (mg/l) (field)	0.1	0.96	0.09	0.31	1.67	0.05	1.77	4.11	**NS**
ORP (mV)	-34	158	-102.9	43.2	-30.8	-120.4	68.5	177.2	**NS**
temperature (°C) (field)	25.51	26.66	26.63	26.79	28.04	25.17	28.68	27.84	**NS**
turbidity (NTU) (field)	2.82	46.6	1.81	16.5	2.66	37	22.7	34.3	**NS**
pH (SU) (field)	**5.72**	**4.69**	**5.88**	**6.29**	**6.19**	**5.69**	**6.12**	**4.73**	**(6.5 - 8.5)****
ammonia nitrogen (mg/l as N)	1.7	0.14	0.02 u	0.02 u	8.8	0.64	0.52	0.02 u	**NS**
chloride (mg/l)	34	3.4 i	16	13	**430**	210	62	4.3 i	**250****
total dissolved solids (mg/l)	150	73	250	150	**1200**	**680**	230	65	**500****
Metals Detected (mg/l)									**MCL Standard**
sodium	14	2.7	15	8.4	**280**	92	37	2.8	**160***

Notes: Reference Groundwater Guidance Concentrations, FDEP 2012

NS=No Standard

MCL=Maximum Contaminant Level (Groundwater Standards)

*= Primary Drinking Water Standards as per Cahpter 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

5.72 Exceeds Standard

NTU=Nephelometric Turbidity Units

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

u = parameter was analyzed but not detected.

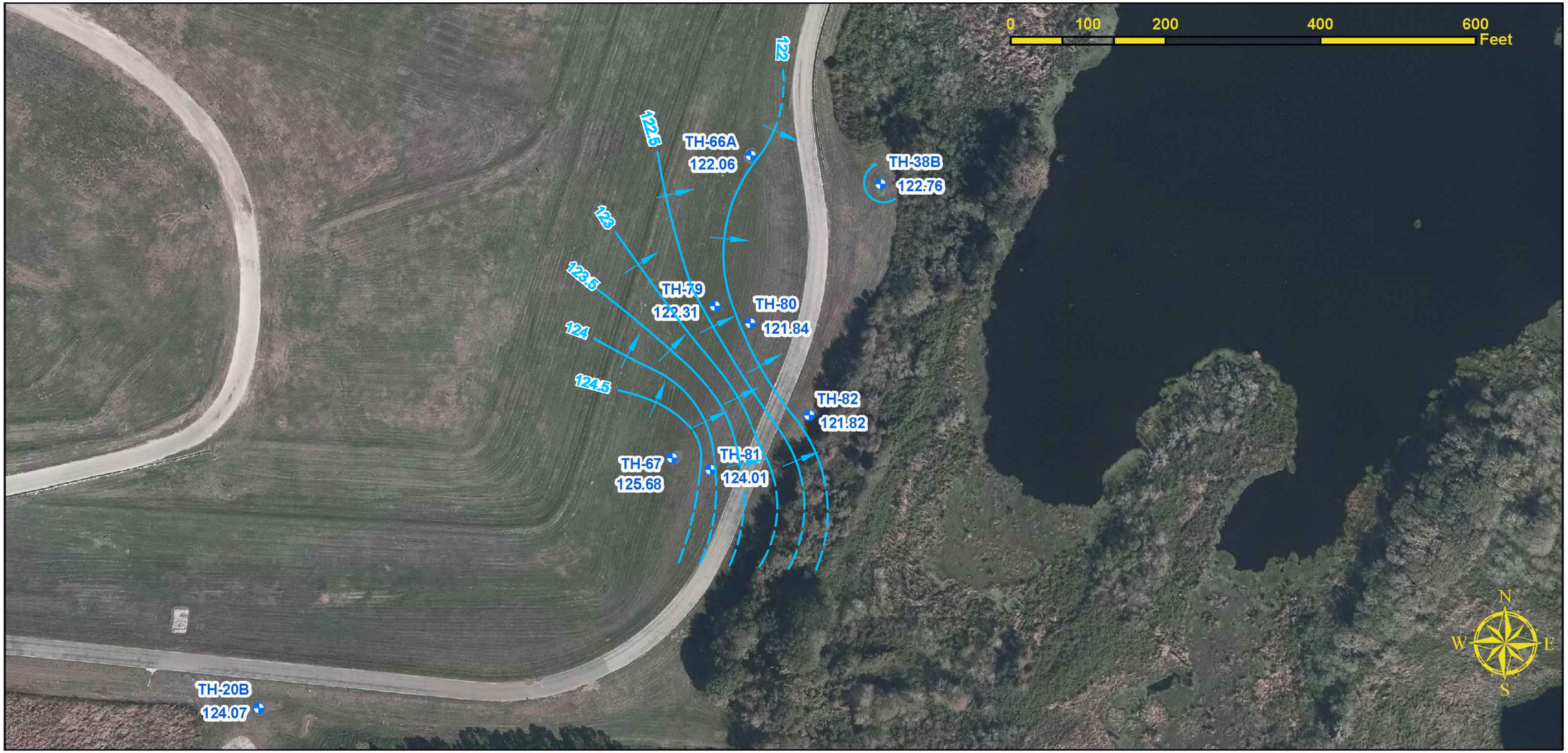
ug/l=micrograms per liter

mg/l=milligrams per liter

mV = millivolts

Southeast County Landfill
Surficial Aquifer Groundwater Elevations
August 3, 2017

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)
TH-20B	132.57	8.50	124.07
TH-38B	131.81	9.05	122.76
TH-66A	130.66	8.60	122.06
TH-67	129.51	3.83	125.68
TH-79	129.60	7.29	122.31
TH-80	129.52	7.68	121.84
TH-81	130.26	6.25	124.01
TH-82	131.24	9.42	121.82
NGVD	**= National Geodetic Vertical Datum**		
T.O.C.	**= Top of Casing**		
B.T.O.C.	**= Below Top of Casing**		
DNU	**= Did Not Utilize (Water level collected the following day)**		
ND	**= No Data**		
W.L.	**= Water Level**		



SOUTHEAST COUNTY LANDFILL
SURFICIAL AQUIFER GROUNDWATER CONTOUR MAP

AUGUST 3, 2017

2016 AERIAL PHOTO

Legend

- Existing Monitoring Wells
- Direction Of Flow

Hillsborough County Florida

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-20B

Field Parameters	May-16	Nov-16	Feb-17	Jun-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	473	332	427	275	294	NS
dissolved oxygen (mg/l) (field)	0.23	0.27	0.18	0.19	0.1	NS
ORP (mV)	-9.6	-31.2	-41.7	36.9	-34	NS
temperature (°C) (field)	23.47	25.47	23.77	23.92	25.51	NS
turbidity (NTU) (field)	2.39	4.14	3.77	1.37	2.82	NS
pH (field)	**5.67**	**5.43**	**5.82**	**5.52**	**5.72**	(6.5 - 8.5)**
General Parameters						**MCL Standard**
total dissolved solids (mg/l)	310	200	230	130	150	500**
chloride (mg/l)	92	63	83	38	34	250**
ammonia nitrogen (mg/l as N)	2.2	1.5	1.2	1.2	1.7	NS
Metals Detected (mg/l)						**MCL Standard**
sodium	35	15	31	24	14	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
5.67 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-38B

Field Parameters	May-16	Nov-16	Feb-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	70	61	103	ND	46	**NS**
dissolved oxygen (mg/l) (field)	1.5	0.76	2.02	ND	0.96	**NS**
ORP (mV)	175.5	-22.9	6.2	ND	158	**NS**
temperature (°C) (field)	24.78	25.37	23.93	ND	26.66	**NS**
turbidity (NTU) (field)	8.75	16	16.5	ND	46.6	**NS**
pH (field)	**4.95**	**4.73**	**5.45**	ND	4.69	**(6.5 - 8.5)****
General Parameters						**MCL Standard**
total dissolved solids (mg/l)	65	45	57	ND	73	**500****
chloride (mg/l)	4.2 i	4.2 i	8.2	ND	3.4 i	**250****
ammonia nitrogen (mg/l as N)	0.79	0.66	1.4	ND	0.14	**NS**
Metals Detected (mg/l)						**MCL Standard**
sodium	2.8	3	3.6	ND	2.7	**160***

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
ND = No Data, well was dry
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-66A

Field Parameters	Feb-16	Feb-16	May-16	Nov-16	Feb-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	295	313	334	512	580	513	376	NS
dissolved oxygen (mg/l) (field)	0.38	0.5	0.65	0.33	0.64	1.13	0.09	NS
ORP (mV)	ND	ND	69.7	-3	-69.2	30.3	-102.9	NS
temperature (°C) (field)	27.01	21.5	24.55	25.44	23.68	27.67	26.63	NS
turbidity (NTU) (field)	3.17	1.35	0.86	0.49	1.06	2.17	1.81	NS
pH (field)	**6.00**	**6.12**	**6.03**	**5.82**	**6.18**	**6.09**	**5.88**	(6.5 - 8.5)**
General Parameters								**MCL Standard**
total dissolved solids (mg/l)	180	180	180	320	300	230	250	500**
chloride (mg/l)	4.9 i	15	15	92	78	52	16	250**
ammonia nitrogen (mg/l as N)	0.22	0.12	0.34	0.44	0.5	0.57	0.02 u	NS
Metals Detected (mg/l)								**MCL Standard**
sodium	5.7	8.7	9.5	21	21	20	15	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
6.00 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-67

Field Parameters	Aug-15	Feb-16	May-16	Nov-16	Feb-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	429	1780	3973	2166	3830	3630	215	NS
dissolved oxygen (mg/l) (field)	0.55	1.05	0.42	3.04	2.13	0.26	0.31	NS
ORP (mV)	ND	ND	-7.9	-100	-41.7	-12.1	43.2	NS
temperature (°C) (field)	28.32	20.81	24.63	25.23	24.52	25.25	26.79	NS
turbidity (NTU) (field)	1.13	10.11	7.64	5.29	8.72	7.64	16.5	NS
pH (field)	**6.41**	**5.98**	**6.18**	**6.21**	**6.44**	**6.32**	**6.29**	(6.5 - 8.5)**
General Parameters								**MCL Standard**
total dissolved solids (mg/l)	220	**1600**	**2200**	**1400**	**2000**	**2000**	150	500**
chloride (mg/l)	29	**620**	**910**	**600**	**990**	**790**	13	250**
ammonia nitrogen (mg/l as N)	0.12	1.5	36	11	14	14	0.02 u	NS
Metals Detected (mg/l)								**MCL Standard**
sodium	8.7	120	**360**	49	**330**	**380**	8.4	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
6.18 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-79

General Parameters	Nov-16	Feb-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	2740	4980	5212	2221	NS
dissolved oxygen (mg/l) (field)	0.25	1.73	1.23	1.67	NS
ORP (mV)	1.4	-20.3	-40.6	-30.8	NS
temperature (°C) (field)	24.03	21.77	25.49	28.04	NS
turbidity (NTU) (field)	27.6	60.2	12	2.66	NS
pH (field)	**6.09**	**6.40**	**6.29**	**6.19**	(6.5 - 8.5)**
Field Parameters					**MCL Standard**
total dissolved solids (mg/l)	**1500**	**2700**	**2600**	**1200**	500**
chloride (mg/l)	500	**1200**	**1000**	**430**	250**
ammonia nitrogen (mg/l as N)	30	35	32	8.8	NS
Metals Detected (mg/l)					**MCL Standard**
sodium	140	**650**	**730**	**280**	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
6.09 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Groundwater Assessment Groundwater Data
TH-80

Field Parameters	Mar-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	889	1090	1055	NS
dissolved oxygen (mg/l) (field)	0.38	0.16	0.05	NS
ORP (mV)	-10.7	34.2	-120.4	NS
temperature (°C) (field)	24.49	25.26	25.17	NS
turbidity (NTU) (field)	16	10.6	37	NS
pH (field)	5.67	5.63	5.69	(6.5 - 8.5)**
General Parameters				**MCL Standard**
total dissolved solids (mg/l)	500	630	680	500**
chloride (mg/l)	130 j4	170	210	250**
ammonia nitrogen (mg/l as N)	1.5	0.74	0.64	NS
Metals Detected (mg/l)				**MCL Standard**
sodium	37	55	92	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
5.67 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-81

Field Parameters	Mar-17	May-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	2723	2476	493	NS
dissolved oxygen (mg/l) (field)	0.53	0.72	1.77	NS
ORP (mV)	24.9	17.7	68.5	NS
temperature (°C) (field)	23.7	25.81	28.68	NS
turbidity (NTU) (field)	16.1	27.5	22.7	NS
pH (field)	6.00	6.05	6.12	(6.5 - 8.5)**
General Parameters				**MCL Standard**
total dissolved solids (mg/l)	2000	1500	230	500**
chloride (mg/l)	810	670	62	250**
ammonia nitrogen (mg/l as N)	4.1	2.3	0.52	NS
Metals Detected (mg/l)				**MCL Standard**
sodium	250	280	37	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
6.00 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Southeast County Landfill
Historical Supplemental Assessment Groundwater Data
TH-82

Field Parameters	Mar-17	Jun-17	Aug-17	MCL Standard
conductivity (umhos/cm) (field)	239	210	82	NS
dissolved oxygen (mg/l) (field)	0.23	0.70	4.11	NS
ORP (mV)	-147.1	41.9	177.2	NS
temperature (°C) (field)	26.16	25.5	27.84	NS
turbidity (NTU) (field)	ND	33.4	34.3	NS
pH (field)	**5.69**	**5.48**	**4.73**	(6.5 - 8.5)**
General Parameters				**MCL Standard**
total dissolved solids (mg/l)	130	94	65	500**
chloride (mg/l)	25	22	4.3 i	250**
ammonia nitrogen (mg/l as N)	4.9	4.7	0.02 u	NS
Metals Detected (mg/l)				**MCL Standard**
sodium	11	9	2.8	160*

Note: Reference FDEP Groundwater Guidance Concentrations
NS = No Standard
MCL = Maximum Contaminant Level
* = Primary Drinking Water Standard
** = Secondary Drinking Water Standard
5.69 = Exceeds Standard
mV = millivolts
NTU = Nephelometric Turbidity Units
mg/l = milligrams per liter
NGVD = National Geodedic Vertical Datum

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

August 31, 2017

David Adams
Hillsborough Co Public Utilites
332 North Falkenburg Rd
Tampa, FL 33619

RE: Workorder: T1713026 SELF Supplemental Site Assess.

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory between Wednesday, August 02, 2017 and Thursday, August 03, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,

Heidi Parker

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

SAMPLE SUMMARY

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1713026001	TH-38B	Water	8/2/2017 10:04	8/2/2017 15:40
T1713026002	TH-66A	Water	8/2/2017 12:44	8/2/2017 15:40
T1713026003	TH-67	Water	8/2/2017 14:08	8/2/2017 15:40
T1713026004	TH-79	Water	8/2/2017 13:21	8/2/2017 15:40
T1713026005	TH-80	Water	8/2/2017 12:13	8/2/2017 15:40
T1713026006	TH-82	Water	8/2/2017 11:05	8/2/2017 15:40
T1713026007	Duplicate	Water	8/2/2017 00:00	8/2/2017 15:40
T1713026008	Field Blank	Water	8/2/2017 09:15	8/2/2017 15:40
T1713026009	TH-20B	Water	8/3/2017 10:33	8/3/2017 11:51
T1713026010	TH-81	Water	8/3/2017 10:10	8/3/2017 11:51

CERTIFICATE OF ANALYSIS

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

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026001** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **TH-38B** Date Collected: 08/02/17 10:04

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	**46**		**umhos/cm**	**1**			8/2/2017 10:04	
Dissolved Oxygen	**0.96**		**mg/L**	**1**			8/2/2017 10:04	
ORP-2580BW	**158**		**mV**	**1**			8/2/2017 10:04	
Temperature	**26.66**		**°C**	**1**			8/2/2017 10:04	
Turbidity	**46.6**		**NTU**	**1**			8/2/2017 10:04	
pH	**4.69**		**SU**	**1**			8/2/2017 10:04	
METALS								
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**3.4**	**I**	**mg/L**	**1**	5.0	2.6	8/9/2017 13:06	T
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**2.7**		**mg/L**	**1**	0.20	0.17	8/9/2017 19:46	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.14**		**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**73**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026002** Date Received: 08/02/17 15:40 Matrix: Water
Sample ID: **TH-66A** Date Collected: 08/02/17 12:44

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	**376**		**umhos/cm**	**1**			8/2/2017 12:44	
Dissolved Oxygen	**0.09**		**mg/L**	**1**			8/2/2017 12:44	
ORP-2580BW	**-102.9**		**mV**	**1**			8/2/2017 12:44	
Temperature	**26.63**		**°C**	**1**			8/2/2017 12:44	
Turbidity	**1.81**		**NTU**	**1**			8/2/2017 12:44	
pH	**5.88**		**SU**	**1**			8/2/2017 12:44	
METALS								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**	**U**	**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**15**		**mg/L**	**1**	0.20	0.17	8/9/2017 19:50	T
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**250**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**16**		**mg/L**	**1**	5.0	2.6	8/9/2017 13:08	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026003** Date Received: 08/02/17 15:40 Matrix: Water
Sample ID: **TH-67** Date Collected: 08/02/17 14:08

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	**215**		**umhos/cm**	**1**			8/2/2017 14:08	
Dissolved Oxygen	**0.31**		**mg/L**	**1**			8/2/2017 14:08	
ORP-2580BW	**43.2**		**mV**	**1**			8/2/2017 14:08	
Temperature	**26.79**		**°C**	**1**			8/2/2017 14:08	
Turbidity	**16.5**		**NTU**	**1**			8/2/2017 14:08	
pH	**6.29**		**SU**	**1**			8/2/2017 14:08	
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**8.4**		**mg/L**	**1**	0.20	0.17	8/9/2017 19:53	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**	**U**	**mg/L**	**1**	0.10	0.02	8/14/2017 14:54	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**150**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**13**		**mg/L**	**1**	5.0	2.6	8/9/2017 13:09	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026004** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **TH-79** Date Collected: 08/02/17 13:21

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	**2221**		**umhos/cm**	**1**			8/2/2017 13:21	
Dissolved Oxygen	**1.67**		**mg/L**	**1**			8/2/2017 13:21	
ORP-2580BW	**-30.8**		**mV**	**1**			8/2/2017 13:21	
Temperature	**28.04**		**°C**	**1**			8/2/2017 13:21	
Turbidity	**2.66**		**NTU**	**1**			8/2/2017 13:21	
pH	**6.19**		**SU**	**1**			8/2/2017 13:21	
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**280**		**mg/L**	**10**	2.0	1.7	8/10/2017 16:30	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**8.8**		**mg/L**	**10**	1.00	0.25	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1200**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**430**		**mg/L**	**5**	25	13	8/9/2017 13:26	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026005** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **TH-80** Date Collected: 08/02/17 12:13

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	**1055**		**umhos/cm**	**1**			8/2/2017 12:13	
Dissolved Oxygen	**0.05**		**mg/L**	**1**			8/2/2017 12:13	
ORP-2580BW	**-120.4**		**mV**	**1**			8/2/2017 12:13	
Temperature	**25.17**		**°C**	**1**			8/2/2017 12:13	
Turbidity	**37**		**NTU**	**1**			8/2/2017 12:13	
pH	**5.69**		**SU**	**1**			8/2/2017 12:13	
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**92**		**mg/L**	**1**	0.20	0.17	8/9/2017 20:01	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.64**		**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**680**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**210**		**mg/L**	**5**	25	13	8/9/2017 13:27	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026006** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **TH-82** Date Collected: 08/02/17 11:05

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	**82**		**umhos/cm**	**1**			8/2/2017 11:05	
Dissolved Oxygen	**4.11**		**mg/L**	**1**			8/2/2017 11:05	
ORP-2580BW	**177.2**		**mV**	**1**			8/2/2017 11:05	
Temperature	**27.84**		**°C**	**1**			8/2/2017 11:05	
Turbidity	**34.3**		**NTU**	**1**			8/2/2017 11:05	
pH	**4.73**		**SU**	**1**			8/2/2017 11:05	
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**2.8**		**mg/L**	**1**	0.20	0.17	8/9/2017 20:05	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.02**	**U**	**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**65**		**mg/L**	**1.25**	12	12	8/7/2017 16:14	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**4.3**	**I**	**mg/L**	**1**	5.0	2.6	8/9/2017 13:11	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026007** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **Duplicate** Date Collected: 08/02/17 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							
Sodium	**270**		**mg/L**	**10**	2.0	1.7	8/10/2017 16:33	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**8.2**		**mg/L**	**5**	0.50	0.12	8/14/2017 14:54	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1200**		**mg/L**	**1.25**	12	12	8/8/2017 08:59	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**420**		**mg/L**	**5**	25	13	8/9/2017 13:27	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026008** Date Received: 08/02/17 15:40 Matrix: Water

Sample ID: **Field Blank** Date Collected: 08/02/17 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							
Sodium	**0.17**	**U**	**mg/L**	**1**	0.20	0.17	8/9/2017 20:12	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.09**	**I**	**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**	**U**	**mg/L**	**1.25**	12	12	8/8/2017 08:59	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	8/9/2017 13:04	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026009** Date Received: 08/03/17 11:51 Matrix: Water
Sample ID: **TH-20B** Date Collected: 08/03/17 10:33

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	**294**		**umhos/cm**	**1**			8/3/2017 10:33	
Dissolved Oxygen	**0.1**		**mg/L**	**1**			8/3/2017 10:33	
ORP-2580BW	**-34**		**mV**	**1**			8/3/2017 10:33	
Temperature	**25.51**		**°C**	**1**			8/3/2017 10:33	
Turbidity	**2.82**		**NTU**	**1**			8/3/2017 10:33	
pH	**5.72**		**SU**	**1**			8/3/2017 10:33	
METALS								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.7**		**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**14**		**mg/L**	**1**	0.20	0.17	8/9/2017 20:16	T
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**150**		**mg/L**	**1.25**	12	12	8/8/2017 08:59	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**34**		**mg/L**	**1**	5.0	2.6	8/10/2017 15:51	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID: **T1713026010** Date Received: 08/03/17 11:51 Matrix: Water

Sample ID: **TH-81** Date Collected: 08/03/17 10:10

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	**493**		**umhos/cm**	**1**			8/3/2017 10:10	
Dissolved Oxygen	**1.77**		**mg/L**	**1**			8/3/2017 10:10	
ORP-2580BW	**68.5**		**mV**	**1**			8/3/2017 10:10	
Temperature	**28.68**		**°C**	**1**			8/3/2017 10:10	
Turbidity	**22.7**		**NTU**	**1**			8/3/2017 10:10	
pH	**6.12**		**SU**	**1**			8/3/2017 10:10	
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**37**		**mg/L**	**1**	0.20	0.17	8/9/2017 20:35	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.52**		**mg/L**	**1**	0.10	0.02	8/10/2017 11:05	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**230**		**mg/L**	**1.25**	12	12	8/8/2017 08:59	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**62**		**mg/L**	**1**	5.0	2.6	8/10/2017 15:52	T

CERTIFICATE OF ANALYSIS

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS QUALIFIERS

Workorder: T1713026 SELF Supplemental Site Assess.

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

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.

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

QC Batch: WCAt/10127 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1713026001, T1713026002, T1713026003, T1713026004, T1713026005, T1713026006

METHOD BLANK: 2428721

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

LABORATORY CONTROL SAMPLE: 2428722

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	600	90	75-125	

SAMPLE DUPLICATE: 2428724 Original: T1713024018

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	870	910	4	5	

QC Batch: WCAt/10133 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1713026007, T1713026008, T1713026009, T1713026010

METHOD BLANK: 2429197

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

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

LABORATORY CONTROL SAMPLE: 2429198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	590	90	75-125	

SAMPLE DUPLICATE: 2429199 Original: T1713026007

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	1200	1200	2	5	

SAMPLE DUPLICATE: 2429200 Original: T1713033001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	330	320	2	5	

QC Batch: DGMt/3458 Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A Prepared: 08/08/2017 10:00

Associated Lab Samples: T1713026001, T1713026002, T1713026003, T1713026004, T1713026005, T1713026006, T1713026007,

METHOD BLANK: 2429456

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Sodium	mg/L	0.17	0.17	U

LABORATORY CONTROL SAMPLE: 2429457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Sodium	mg/L	50	50	99	80-120	

CERTIFICATE OF ANALYSIS

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

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2429458 2429459 Original: F1700566005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Sodium	mg/L	14	50	65	66	102	102	75-125	0	20	

QC Batch: WCAt/10180 Analysis Method: SM 4500-Cl-E

QC Batch Method: SM 4500-Cl-E Prepared:

Associated Lab Samples: T1713026001, T1713026002, T1713026003, T1713026004, T1713026005, T1713026006, T1713026007, T1713026008

METHOD BLANK: 2431548

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

LABORATORY CONTROL SAMPLE: 2431549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	49	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431550 2431551 Original: T1712906006

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	11	50	58	59	94	98	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2431552 2431553 Original: T1713026001

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	3.4	50	53	54	100	100	90-110	0	10	

CERTIFICATE OF ANALYSIS

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

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

QC Batch: WCAt/10197 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: T1713026001, T1713026002, T1713026004, T1713026005, T1713026006, T1713026008, T1713026009, T1713026010

METHOD BLANK: 2432458

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.02	0.02	U

LABORATORY CONTROL SAMPLE: 2432459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.50	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432470 2432471 Original: T1713026002

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	1	1.1	1.1	110	109	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2432472 2432473 Original: T1713026009

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	1.7	1	2.7	2.7	106	103	90-110	1	10	

QC Batch: WCAt/10213 Analysis Method: SM 4500-Cl-E
QC Batch Method: SM 4500-Cl-E Prepared:
Associated Lab Samples: T1713026009, T1713026010

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

METHOD BLANK: 2433237

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

LABORATORY CONTROL SAMPLE: 2433238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	49	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2433241 2433242 Original: T1713315015

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	310	50	340	340	67	60	90-110	1	10	J4

QC Batch: WCAt/10277 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: T1713026003, T1713026007

METHOD BLANK: 2436139

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.02	0.02	U

LABORATORY CONTROL SAMPLE: 2436140

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.54	107	90-110	

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

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1713026 SELF Supplemental Site Assess.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2436141 2436142 Original: T1713049002

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	0.02	1	1.1	1.1	110	110	90-110	0	10	

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1713026 SELF Supplemental Site Assess.

QUALITY CONTROL PARAMETER QUALIFIERS

U The compound was analyzed for but not detected.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J4 Estimated Result

CERTIFICATE OF ANALYSIS

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

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1713026001	TH-38B			SM 2540 C	WCAt/10127
T1713026002	TH-66A			SM 2540 C	WCAt/10127
T1713026003	TH-67			SM 2540 C	WCAt/10127
T1713026004	TH-79			SM 2540 C	WCAt/10127
T1713026005	TH-80			SM 2540 C	WCAt/10127
T1713026006	TH-82			SM 2540 C	WCAt/10127
T1713026007	Duplicate			SM 2540 C	WCAt/10133
T1713026008	Field Blank			SM 2540 C	WCAt/10133
T1713026009	TH-20B			SM 2540 C	WCAt/10133
T1713026010	TH-81			SM 2540 C	WCAt/10133
T1713026001	TH-38B	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026002	TH-66A	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026003	TH-67	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026004	TH-79	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026005	TH-80	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026006	TH-82	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026007	Duplicate	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026008	Field Blank	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026009	TH-20B	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026010	TH-81	SW-846 3010A	DGMt/3458	SW-846 6010	ICPt/2511
T1713026001	TH-38B			SM 4500-Cl-E	WCAt/10180
T1713026002	TH-66A			SM 4500-Cl-E	WCAt/10180
T1713026003	TH-67			SM 4500-Cl-E	WCAt/10180
T1713026004	TH-79			SM 4500-Cl-E	WCAt/10180
T1713026005	TH-80			SM 4500-Cl-E	WCAt/10180
T1713026006	TH-82			SM 4500-Cl-E	WCAt/10180
T1713026007	Duplicate			SM 4500-Cl-E	WCAt/10180
T1713026008	Field Blank			SM 4500-Cl-E	WCAt/10180
T1713026001	TH-38B			EPA 350.1	WCAt/10197

CERTIFICATE OF ANALYSIS

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

3004.1.0.0

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1713026 SELF Supplemental Site Assess.

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1713026002	TH-66A			EPA 350.1	WCAt/10197
T1713026004	TH-79			EPA 350.1	WCAt/10197
T1713026005	TH-80			EPA 350.1	WCAt/10197
T1713026006	TH-82			EPA 350.1	WCAt/10197
T1713026008	Field Blank			EPA 350.1	WCAt/10197
T1713026009	TH-20B			EPA 350.1	WCAt/10197
T1713026010	TH-81			EPA 350.1	WCAt/10197
T1713026009	TH-20B			SM 4500-Cl-E	WCAt/10213
T1713026010	TH-81			SM 4500-Cl-E	WCAt/10213
T1713026003	TH-67			EPA 350.1	WCAt/10277
T1713026007	Duplicate			EPA 350.1	WCAt/10277
T1713026001	TH-38B	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026002	TH-66A	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026003	TH-67	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026004	TH-79	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026005	TH-80	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026006	TH-82	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026009	TH-20B	Field Measurements	FLDt/	Field Measurements	FLDt/
T1713026010	TH-81	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.

3004.1.0.0

T1713026

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

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: J. FULLER / A. LAFON
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: SELF Supplemental Site Assessment
P.O. Number/Project Number: N/A
Project Location: Southeast County Landfill
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	Total Ammonia-N	Sodium	Chloride	TDS							LABORATORY I.D. NUMBER
TH-38 B	TH-38 B	G	8/2/17	1004	GW			X	X	X	X							001
TH-66A	TH-66A	G		1244	GW			X	X	X	X							002
TH-67	TH-67	G		1408	GW			X	X	X	X							003
TH-79	TH-79	G		1321	GW			X	X	X	X							004
TH-80	TH-80	G		1213	GW			X	X	X	X							005
TH-82	TH-82	G		1105	GW			X	X	X	X							006
DUPLICATE	DUPLICATE	G		N/A	GW			X	X	X	X							007
FIELD BLANK	FIELD BLANK	G		915	DI			X	X	X	X							008

Matrix Code: **WW** = wastewater **SW** = surface water **GW** = ground water **DW** = drinking water **O** = oil **A** = air **SO** = soil **SL** = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

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

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

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Anthony LaFon	8/2/17	1540		8/2/17	1540
2						
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:
Site Address:

Advanced Environmental Laboratories, Inc.

☐ **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

T713026

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: J. FULLER/A. LAFON
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: SELF Supplemental Site Assessment
P.O. Number/Project Number: N/A
Project Location: Southeast County Landfill
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE / PRESERVATION	Total Ammonia-N	Sodium	Chloride	TDS							LABORATORY I.D. NUMBER
TH-20B	TH-20B	G	8/3/17	1033	GW			X	X	X	X							009
TH-81	TH-81	G	8/3/17	1010	GW			X	X	X	X							010

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received 4.0 (in degrees celcius)

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

	Relinquished by:	Date	Time	Received by:	Date	Time
1	[illegible]	8/3/17	1151	[illegible]	8/3	1155
2						11:51
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida
WELL NO: TH-38B	SAMPLE ID: TH-38B — DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 5.42 ft to 15.42 Ft	STATIC DEPTH TO WATER (feet): 9.29	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)

= (15.42 feet – 9.29 feet) X 0.16 gallons/foot = 0.99 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): 14.42	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.42	PURGING INITIATED AT: 932	PURGING ENDED AT: 1004	TOTAL VOLUME PURGED (gallons): 5.36

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)
938	1.08	1.08	0.18	10.20	4.62	26.77	45	2.43	42.7	CLOUDY	NONE
940	0.36	1.44	0.18	10.30	4.67	26.79	45	2.38	48.8	CLOUDY	NONE
942	0.36	1.80	0.18	10.36	4.66	26.77	45	2.16	49.2	CLOUDY	NONE
944	0.36	2.16	0.18	10.36	4.67	26.75	45	2.01	52.4	CLOUDY	NONE
946	0.32	2.48	0.16	10.36	4.65	26.72	45	1.91	51.6	CLOUDY	NONE
953	1.12	3.60	0.16	10.36	4.64	26.68	45	1.60	50.5	CLOUDY	NONE
1000	1.12	4.72	0.16	10.40	4.68	26.69	45	1.18	47.2	CLOUDY	NONE
1002	0.32	5.04	0.16	10.40	4.67	26.67	46	1.02	47.5	CLOUDY	NONE
1004	0.32	5.36	0.16	10.40	4.69	26.66	46	0.96	46.6	CLOUDY	NONE

AL 8/17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1004	SAMPLING ENDED AT: 1008
PUMP OR TUBING DEPTH IN WELL (feet): 14.42	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N) AL 8/2/17

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			
								944	(179.3)
								946	(179.0)
								953	(177.5)
								1000	(170.6)
								1002	(161.0)
								1004	(158.0)

ORP (CTD.)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 938 (167.1) 940 (169.4) 942 (176.3)

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-66A	SAMPLE ID: TH-66A — DATE: 8/2/17

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): 8.65	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 – 8.65 feet) X 0.16 gallons/foot = 1.08 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: 1229	PURGING ENDED AT: 1244	TOTAL VOLUME PURGED (gallons): 1.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1240	1.10	1.10	0.10	10.55	5.88	26.68	375	0.11	6.45	CLEAR	NONE
1242	0.20	1.30	0.10	10.55	5.90	26.66	375	0.10	2.07	CLEAR	NONE
1244	0.20	1.50	0.10	10.55	5.88	26.63	376	0.09	1.81	CLEAR	NONE
								AL 8/2/17			

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1244	SAMPLING ENDED AT: 1248
PUMP OR TUBING DEPTH IN WELL (feet): 14.37	TUBING MATERIAL CODE: T	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 C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1240(-100.8) 1242(-101.7) 1244(-102.9)

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-67	SAMPLE ID: TH-67 / DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.5	WELL SCREEN INTERVAL DEPTH: 5.25 ft to 15.25 ft	STATIC DEPTH TO WATER (feet): 3.73	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 feet – 3.73 feet) X 0.16 gallons/foot = 1.85 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): 14.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	PURGING INITIATED AT: 1345	PURGING ENDED AT: 1408	TOTAL VOLUME PURGED (gallons): 2.30

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)
1404	1.90	1.90	0.10	4.32	6.34	26.74	220	0.32	15.4	CLEAR	NONE
1406	0.20	2.10	0.10	4.32	6.30	26.77	217	0.31	15.4	CLEAR	NONE
1408	0.20	2.30	0.10	4.32	6.29	26.79	215	0.31	16.5	CLEAR	NONE
								AL 8/2/17			

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1408	SAMPLING ENDED AT: 1412
PUMP OR TUBING DEPTH IN WELL (feet): 14.25	TUBING MATERIAL CODE: T	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 C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1404 (41.9) 1406 (43.6) 1408 (43.2)

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-79	SAMPLE ID: TH-79 — DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 7.80 ft to 17.80 Ft	STATIC DEPTH TO WATER (feet): 7.26	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)

= (17.80 feet – 7.26 feet) X 0.16 gallons/foot = 1.69 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): 16.80	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 16.80	PURGING INITIATED AT: 1300	PURGING ENDED AT: 1321	TOTAL VOLUME PURGED (gallons): 2.10

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)
1317	1.70	1.70	0.10	7.81	6.19	28.05	2196	2.11	3.14	CLEAR	NONE
1319	0.20	1.90	0.10	7.81	6.20	28.04	2216	2.07	2.77	CLEAR	NONE
1321	0.20	2.10	0.10	7.81	6.19	28.04	2221	1.67	2.66	CLEAR	NONE
								AL 8/2/17			

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): Anthony [illegible]	SAMPLING INITIATED AT: 1321	SAMPLING ENDED AT: 1325
PUMP OR TUBING DEPTH IN WELL (feet): 16.80	TUBING MATERIAL CODE: T	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 C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1317 (-35.2) 1319 (-28.6) 1321 (-30.8)

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
WELL NO: TH-80	SAMPLE ID: TH-80 — DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 8.65 ft to 18.65 Ft	STATIC DEPTH TO WATER (feet): 7.85	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)

= (18.65 feet – 7.85 feet) X 0.16 gallons/foot = 1.73 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): 17.65	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.65	PURGING INITIATED AT: 1117	PURGING ENDED AT: 1213	TOTAL VOLUME PURGED (gallons): 8.96

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)
1128	1.76	1.76	0.16	8.13	5.68	25.34	1046	0.15	38.2	CLOUDY	NONE
1130	0.32	2.08	0.16	8.13	5.69	25.34	1047	0.15	34.3	CLOUDY	NONE
1132	0.32	2.40	0.16	8.13	5.70	25.32	1048	0.13	37.0	CLOUDY	NONE
1139	1.12	3.52	0.16	8.13	5.69	25.27	1050	0.09	35.7	CLOUDY	NONE
1150	1.76	5.28	0.16	8.13	5.69	25.41	1051	0.06	42.4	CLOUDY	NONE
1201	1.76	7.04	0.16	8.13	5.70	25.33	1053	0.04	49.5	CLOUDY	NONE
1207	0.96	8.00	0.16	8.13	5.69	25.25	1054	0.03	41.6	CLOUDY	NONE
1210	0.48	8.48	0.16	8.13	5.69	25.18	1055	0.06	37.8	CLOUDY	NONE
1213	0.48	8.96	0.16	8.13	5.69	25.17	1055	0.05	37.0	CLOUDY	NONE

L
.17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1213	SAMPLING ENDED AT: 1217
PUMP OR TUBING DEPTH IN WELL (feet): 17.65	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N) AL 8/2/17

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			
								1139	(-95.6)
								1150	(-105.0)
								1201	(-111.6)
								1207	(-115.2)
								1210	(-115.7)
								1213	(-120.4)

ORP (CTD.)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1128(-76.0) 1130(-80.7) 1132(-84.8)

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
WELL NO: TH-82	SAMPLE ID: TH-82 — DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 8.94 ft to 18.94 Ft	STATIC DEPTH TO WATER (feet): 9.22	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)

= (18.94 feet – 9.22 feet) X 0.16 gallons/foot = 1.56 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): 17.94	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.94	PURGING INITIATED AT: 1015	PURGING ENDED AT: 1105	TOTAL VOLUME PURGED (gallons): 8.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1025	1.60	1.60	0.16	9.25	4.61	27.52	66	4.76	22.8	CLOUDY	NONE
1027	0.32	1.92	0.16	9.25	4.61	27.56	69	4.70	23.9	CLOUDY	NONE
1029	0.32	2.24	0.16	9.25	4.62	27.58	72	4.57	26.6	CLOUDY	NONE
1035	0.96	3.20	0.16	9.25	4.70	27.66	76	4.37	27.2	CLOUDY	NONE
1045	1.60	4.80	0.16	9.25	4.72	27.72	80	4.21	32.2	CLOUDY	NONE
1055	1.60	6.40	0.16	9.25	4.73	27.78	81	4.17	32.7	CLOUDY	NONE
1105	1.60	8.00	0.16	9.25	4.73	27.84	82	4.11	34.3	CLOUDY	NONE

AL 8/2/17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1105	SAMPLING ENDED AT: 1109
PUMP OR TUBING DEPTH IN WELL (feet): 17.94	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N) AL 8/2/17

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			
								1035	(200.2)
								1045	(175.1)
								1055	(173.5)
								1105	(177.2)

ORP (CTD.)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1025(229.8) 1027(226.4) 1029(223.5)

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: DUPLICATE	SAMPLE ID: DUPLICATE	DATE: 8/2/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A	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 0.16 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)

DUPLICATE
AL
8/2/17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): Anthony LaFon	SAMPLING INITIATED AT: N/A	SAMPLING ENDED AT: N/A
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: T	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 C.O.C. FOR SAMPLE ANALYSIS** DUPLICATE

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: 8/2/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A	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 0.16 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

AL 8/2/17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 915	SAMPLING ENDED AT: 919
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	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 C.O.C. FOR SAMPLE ANALYSIS** FIELD BLANK

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-20B	SAMPLE ID: TH-20B — DATE: 8/3/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 12.80 ft to 22.80 ft	STATIC DEPTH TO WATER (feet): 8.50	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)

= (22.8 feet – 8.50 feet) X 0.16 gallons/foot = 2.29 gallons

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): 21.8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 21.8	PURGING INITIATED AT: 1022	PURGING ENDED AT: 1033	TOTAL VOLUME PURGED (gallons): 4.07

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)
1029	2.59	2.59	0.37	11.05	5.72	25.52	290	0.10	2.40	CLEAR	NONE
1031	0.74	3.33	0.37	11.05	5.73	25.51	292	0.09	1.48	CLEAR	NONE
1033	0.74	4.07	0.37	11.05	5.72	25.51	294	0.10	2.82	CLEAR	NONE

AL 8/3/17

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1033	SAMPLING ENDED AT: 1037
PUMP OR TUBING DEPTH IN WELL (feet): 21.8	TUBING MATERIAL CODE: T	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 C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1029 (-31.6) 1031 (-32.5) 1033 (-34.0)

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** = 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-81	SAMPLE ID: TH-81	DATE: 8/3/17

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 6.94 ft to 16.94 Ft	STATIC DEPTH TO WATER (feet): 6.25	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)

= (16.94 feet – 6.25 feet) X 0.16 gallons/foot = 1.71 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): 15.94	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.94	PURGING INITIATED AT: 913	PURGING ENDED AT: 1010	TOTAL VOLUME PURGED (gallons): 9.12

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)
924	1.76	1.76	0.16	6.28	6.11	28.13	470	1.81	99.4	CLOUDY	NONE
935	1.76	3.52	0.16	6.28	6.11	28.16	475	1.82	30.9	CLOUDY	NONE
946	1.76	5.28	0.16	6.28	6.12	28.17	480	1.81	23.9	CLOUDY	NONE
952	0.96	6.24	0.16	6.28	6.13	28.33	484	1.79	21.4	CLEAR	NONE
958	0.96	7.20	0.16	6.28	6.12	28.50	485	2.00	22.3	CLEAR	NONE
1004	0.96	8.16	0.16	6.28	6.12	28.62	491	1.84	22.9	CLEAR	NONE
1007	0.48	8.64	0.16	6.28	6.12	28.67	492	1.80	22.0	CLEAR	NONE
1010	0.48	9.12	0.16	6.28	6.12	28.68	493	1.77	22.7	CLEAR	NONE
								AL 8/3/17			

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. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1010	SAMPLING ENDED AT: 1014
PUMP OR TUBING DEPTH IN WELL (feet): 15.94	TUBING MATERIAL CODE: T	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			
								~~952~~	AL 8/3/17
								952	(64.0)
								958	(65.2)
								1004	(66.5)
								1007	(67.8)
								1010	(68.5)

ORP (CTD.)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 924(61.7) 935(61.9) 946(61.1)

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)

Advanced Environmental Laboratories, Inc.

6681 Southpoint Parkway
Jacksonville, Florida 32216
Office (904) 363-9350
Fax (904) 363-9354

Queue: WCAt

Batch Number: 10213

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 T1713315015 for Chloride 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 Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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