Table 1 - Southeast County Landfill
Supplemental Site Assessment Data

General Parameters	Surficial Aquifer Wells				MCL Standard
	TH-66A	TH-67	TH-79	TH-83	
Sample Date	05/06/2020	05/06/2020	05/06/2020	05/06/2020	NS
conductivity (umhos/cm) (field)	248.0	691.0	417.3	1,666.0	NS
dissolved oxygen (mg/l) (field)	0.46	1.46	1.43	0.41	NS
ORP (mV) (field)	-75.8	-37.5	-0.5	-32.9	NS
temperature (°C) (field)	26.3	26.5	26.8	26.1	NS
turbidity (NTU) (field)	2.09	3.18	11.84	1.75	NS
pH (SU) (field)	**5.79**	**6.24**	**5.62**	**6.49**	(6.5 - 8.5)
total dissolved solids (mg/l)	190	360	170	**800**	500
chloride (mg/l)	11.0	94.0	29.0	**280.0**	250
ammonia nitrogen (mg/l as N)	0.850	1.400 J4	1.900	23.000	NS
Metals (mg/l)					MCL Standard
sodium	4.40	36.00	14.00	**180.00**	160

Notes: Reference Groundwater Guidance Concentrations, FDEP 2012

MCL Standards Derived from the Primary Drinking Water Standards as per Chapter 62-550.310, F.A.C., Secondary Drinking Water Standards as per Chapter 62-550.320, F.A.C., & Groundwater Cleanup Target Levels as per Chapter 62-777, FAC.

NS=No Standard

NS(1)=GCTL of 2.8 is no longer suitable toxilogical reference for evaluating the significance of ammonia concentrations in groundwater.

mg/l = Milligrams Per Liter

ug/l = Micrograms Per Liter

umhos/cm = Micromhos Per Centimeter

NTU=Nephelometric Turbidity Units

mV = millivolts

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

U = parameter was analyzed but not detected.

:Exceeds Primary or Secondary Drinking Water Standard, or Groundwater Cleanup Target Level

Southeast County Landfill
Surficial Aquifer Groundwater Elevations
May 6, 2020

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)
TH-20B	132.57	10.67	121.90
TH-38B	131.81	12.49	119.32
TH-66A	130.66	10.79	119.87
TH-67	129.51	6.79	122.72
TH-79	129.60	9.43	120.17
TH-80	129.52	10.09	119.43
TH-81	130.26	9.99	120.27
TH-82	131.24	11.97	119.27
TH-83	130.23	10.24	119.99
NGVD	**= National Geodetic Vertical Datum**		
T.O.C.	**= Top of Casing**		
B.T.O.C.	**= Below Top of Casing**		
W.L.	**= Water Level**		

SOUTHEAST COUNTY LANDFILL SUFICIAL AQUIFER GROUNDWATER CONTOUR MAP

MAY 6TH 2020

2020 AERIAL PHOTO

Hillsborough County Florida

EST. 1834 SM

TH-66A
119.87

TH-38B
119.32

TH-79
120.17

TH-80
119.43

122

120

TH-67
122.72

121

TH-81
120.27

TH-82
119.27

TH-83
119.99

TH-20B
121.90

Legend

Direction Of Flow

Existing Monitoring Wells

2020 Aerials

RGB

Red: Red

Green: Green

Blue: Blue

N

200 100 0 Feet

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

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

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

BSOC
332 N. Falkenburg Rd
Tampa,Fl 33619

Date: 06/26/2020 Path: U:\LANDFILL\Southeast Landfill Data\Southeast County Landfill_05_06_2020_2.mxd

Advanced Environmental Laboratories, Inc
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May 29, 2020

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

RE: Workorder: T2008664 SELF Supplemental Site Assess

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, May 06, 2020. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2008664001	TH-66A	Water	5/6/2020 10:58	5/6/2020 15:00
T2008664002	Field Blank	Water	5/6/2020 11:17	5/6/2020 15:00
T2008664003	TH-79	Water	5/6/2020 11:53	5/6/2020 15:00
T2008664004	TH-67	Water	5/6/2020 12:32	5/6/2020 15:00
T2008664005	TH-83	Water	5/6/2020 13:15	5/6/2020 15:00
T2008664006	Duplicate	Water	5/6/2020 00:00	5/6/2020 15:00

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664001** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **TH-66A** Date Collected: 05/06/20 10:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**248**		**umhos/cm**	**1**			5/6/2020 10:58	....
Dissolved Oxygen	**0.46**		**mg/L**	**1**			5/6/2020 10:58	....
ORP-2580BW	**-75.8**		**mV**	**1**			5/6/2020 10:58	....
Temperature	**26.3**		**°C**	**1**			5/6/2020 10:58	....
Turbidity	**2.09**		**NTU**	**1**			5/6/2020 10:58	....
pH	**5.79**		**SU**	**1**			5/6/2020 10:58	....
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**4.4**		**mg/L**	**1**	3.2	0.80	5/18/2020 21:11	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.85**		**mg/L**	**5**	0.15	0.075	5/11/2020 12:23	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**190**		**mg/L**	**1**	10	10	5/8/2020 11:32	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**11**		**mg/L**	**1**	5.0	2.6	5/14/2020 16:56	T

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664002** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **Field Blank** Date Collected: 05/06/20 11:17

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	**0.80**	**U**	**mg/L**	**1**	3.2	0.80	5/18/2020 21:15	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.015**	**U**	**mg/L**	**1**	0.030	0.015	5/11/2020 12:24	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	5/8/2020 11:32	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	5/14/2020 16:47	T

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664003** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **TH-79** Date Collected: 05/06/20 11:53

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	**417.3**		**umhos/cm**	**1**			5/6/2020 11:53	....
Dissolved Oxygen	**1.43**		**mg/L**	**1**			5/6/2020 11:53	....
ORP-2580BW	**-0.5**		**mV**	**1**			5/6/2020 11:53	....
Temperature	**26.8**		**°C**	**1**			5/6/2020 11:53	....
Turbidity	**11.84**		**NTU**	**1**			5/6/2020 11:53	....
pH	**5.62**		**SU**	**1**			5/6/2020 11:53	....
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**14**		**mg/L**	**1**	3.2	0.80	5/18/2020 21:19	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.9**		**mg/L**	**1**	0.030	0.015	5/11/2020 12:25	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**170**		**mg/L**	**1**	10	10	5/8/2020 11:32	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**29**		**mg/L**	**1**	5.0	2.6	5/14/2020 16:48	T

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664004** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **TH-67** Date Collected: 05/06/20 12:32

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**691**		**umhos/cm**	**1**			5/6/2020 12:32	....
Dissolved Oxygen	**1.46**		**mg/L**	**1**			5/6/2020 12:32	....
ORP-2580BW	**-37.5**		**mV**	**1**			5/6/2020 12:32	....
Temperature	**26.5**		**°C**	**1**			5/6/2020 12:32	....
Turbidity	**3.18**		**NTU**	**1**			5/6/2020 12:32	....
pH	**6.24**		**SU**	**1**			5/6/2020 12:32	....
METALS								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**1.4**	**J4**	**mg/L**	**1**	0.030	0.015	5/11/2020 12:25	T
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**36**		**mg/L**	**1**	3.2	0.80	5/18/2020 21:23	T
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**360**		**mg/L**	**1**	10	10	5/8/2020 11:32	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**94**		**mg/L**	**1**	5.0	2.6	5/14/2020 16:48	T

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664005** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **TH-83** Date Collected: 05/06/20 13:15

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	**1666**		**umhos/cm**	**1**			5/6/2020 13:15	....
Dissolved Oxygen	**0.41**		**mg/L**	**1**			5/6/2020 13:15	....
ORP-2580BW	**-32.9**		**mV**	**1**			5/6/2020 13:15	....
Temperature	**26.1**		**°C**	**1**			5/6/2020 13:15	....
Turbidity	**1.75**		**NTU**	**1**			5/6/2020 13:15	....
pH	**6.49**		**SU**	**1**			5/6/2020 13:15	....
METALS								
Analysis Desc: SW846 6010B Analysis,Water	Preparation Method: SW-846 3010A Analytical Method: SW-846 6010							
Sodium	**180**		**mg/L**	**1**	3.2	0.80	5/18/2020 21:30	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**23**		**mg/L**	**5**	0.15	0.075	5/11/2020 13:37	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**800**		**mg/L**	**1**	10	10	5/8/2020 11:32	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**280**		**mg/L**	**5**	25	13	5/14/2020 17:10	T

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ANALYTICAL RESULTS

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID: **T2008664006** Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **Duplicate** Date Collected: 05/06/20 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	**180**		**mg/L**	**1**	3.2	0.80	5/18/2020 21:34	T
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**22**		**mg/L**	**5**	0.15	0.075	5/11/2020 13:43	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**910**		**mg/L**	**1**	10	10	5/8/2020 11:32	T
Analysis Desc: Chlorides,SM4500-Cl-E,Water	Analytical Method: SM 4500-Cl-E							
Chloride	**290**	**J4**	**mg/L**	**5**	25	13	5/14/2020 17:11	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T2008664 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.
J4	Estimated Result

LAB QUALIFIERS

T	DOH Certification #E84589(AEL-T)(FL NELAC Certification)
T^	Not Certified

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QUALITY CONTROL DATA

Workorder: T2008664 SELF Supplemental Site Assess

QC Batch: WCAt/3829 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T2008664001, T2008664002, T2008664003, T2008664004, T2008664005, T2008664006

METHOD BLANK: 3475552

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

LABORATORY CONTROL SAMPLE: 3475553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	650	98	85-115	

SAMPLE DUPLICATE: 3475554 Original: T2008710001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	490	500	0	10	

QC Batch: WCAt/3868 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: T2008664001, T2008664002, T2008664003, T2008664004, T2008664005, T2008664006

METHOD BLANK: 3476988

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.015	0.015	U

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QUALITY CONTROL DATA

Workorder: T2008664 SELF Supplemental Site Assess

LABORATORY CONTROL SAMPLE: 3476989

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.51	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3476990 3476991 Original: F2001886002

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	3.2	1	4.2	4.1	104	96	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3476992 3476993 Original: T2008664004

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	1.4	1	2.2	2.2	82	79	90-110	1	10	

QC Batch: WCAt/3969 Analysis Method: SM 4500-Cl-E
QC Batch Method: SM 4500-Cl-E Prepared:
Associated Lab Samples: T2008664005

METHOD BLANK: 3483061

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

LABORATORY CONTROL SAMPLE: 3483062

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	51	102	90-110	

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QUALITY CONTROL DATA

Workorder: T2008664 SELF Supplemental Site Assess

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3483065 3483066 Original: T2008488001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	130	50	180	180	101	104	90-110	1	10	

QC Batch: WCAt/3970 Analysis Method: SM 4500-Cl-E

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

Associated Lab Samples: T2008664001, T2008664002, T2008664003, T2008664004, T2008664006

METHOD BLANK: 3483068

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

LABORATORY CONTROL SAMPLE & LCSD: 3483069 3483070

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY										
Chloride	mg/L	50	51	53	102	106	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3483071 3483072 Original: T2008664006

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	290	50	320	330	68	81	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3483073 3483074 Original: T2008662008

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	3.8	50	53	54	98	101	90-110	2	10	

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QUALITY CONTROL DATA

Workorder: T2008664 SELF Supplemental Site Assess

QC Batch: DGMt/1708 Analysis Method: SW-846 6010
QC Batch Method: SW-846 3010A Prepared: 05/18/2020 08:30
Associated Lab Samples: T2008664001, T2008664002, T2008664003, T2008664004, T2008664005, T2008664006

METHOD BLANK: 3484559

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Sodium	mg/L	0.80	0.80	U

LABORATORY CONTROL SAMPLE: 3484560

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Sodium	mg/L	16	16	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3484561 3484562 Original: T2009091002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Sodium	mg/L	4.6	16	21	21	101	99	75-125	1	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2008664 SELF Supplemental Site Assess

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2008664001	TH-66A			SM 2540 C	WCAt/3829
T2008664002	Field Blank			SM 2540 C	WCAt/3829
T2008664003	TH-79			SM 2540 C	WCAt/3829
T2008664004	TH-67			SM 2540 C	WCAt/3829
T2008664005	TH-83			SM 2540 C	WCAt/3829
T2008664006	Duplicate			SM 2540 C	WCAt/3829
T2008664001	TH-66A			EPA 350.1	WCAt/3868
T2008664002	Field Blank			EPA 350.1	WCAt/3868
T2008664003	TH-79			EPA 350.1	WCAt/3868
T2008664004	TH-67			EPA 350.1	WCAt/3868
T2008664005	TH-83			EPA 350.1	WCAt/3868
T2008664006	Duplicate			EPA 350.1	WCAt/3868
T2008664005	TH-83			SM 4500-Cl-E	WCAt/3969
T2008664001	TH-66A			SM 4500-Cl-E	WCAt/3970
T2008664002	Field Blank			SM 4500-Cl-E	WCAt/3970
T2008664003	TH-79			SM 4500-Cl-E	WCAt/3970
T2008664004	TH-67			SM 4500-Cl-E	WCAt/3970
T2008664006	Duplicate			SM 4500-Cl-E	WCAt/3970
T2008664001	TH-66A	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664002	Field Blank	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664003	TH-79	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664004	TH-67	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664005	TH-83	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664006	Duplicate	SW-846 3010A	DGMt/1708	SW-846 6010	ICPt/1433
T2008664001	TH-66A	Field Measurements	FLDt/	Field Measurements	FLDt/
T2008664003	TH-79	Field Measurements	FLDt/	Field Measurements	FLDt/
T2008664004	TH-67	Field Measurements	FLDt/	Field Measurements	FLDt/
T2008664005	TH-83	Field Measurements	FLDt/	Field Measurements	FLDt/

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	Project Name: SELF Supplemental Site Assessment	BOTTLE SIZE & TYPE	
Address: 332 North Falkenburg Rd.	P.O. Number/Project Number: N/A	ANALYSIS REQUIRED	
Tampa, Florida 33619	Project Location: Southeast County Landfill		
Phone: (813) 663-3222	REMARKS/SPECIAL INSTRUCTIONS:		
FAX: (813) 274-6801			
Contact: Michael Townsel			
Sampled By: Grayson, Morales			
Turn Around Time: ☑ STANDARD ☐ RUSH			
Page: 1 of: 1			

T2008664

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-66A	G	5/6/20	1058	GW	3		X	X	X	X							27
	Field Blank	G	5/6/20	1117	GW	3		X	X	X	X							32
	TH-79	G	5/6/20	1153	GW	3		X	X	X	X							33
	TH-67	G	5/6/20	1232	GW	3		X	X	X	X							34
	TH 83	G	5/6/20	1315	GW	3		X	X	X	X							35
	Duplicate	G	5/6/20	—	GW	3		X	X	X	X							36

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 = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice: ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received: 6 (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		5/6/20			5/6/2020	1430
2						
3						
4						

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

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME	SITE LOCATION	
Southeast County Landfill	Lithia, Florida	
WELL NO: TH-83	SAMPLE ID: TH-83	DATE: 5/6/2020

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	1/2	5.47 ft to 15.47 Ft	10.24	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (15.47 feet − 10.24 feet) X 0.16 gallons/foot = 0.84 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.47	14.47	1302	1315	1.3

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)
1311	0.9	0.9	0.1	10.24	6.49	25.9	1641	0.50	5.41	clear	None
1313	0.2	1.1	0.1	10.24	6.49	26.1	1640	0.47	2.48	clear	None
1315	0.2	1.3	0.1	10.24	6.49	26.1	1666	0.41	1.75	clear	None

5/6/2020

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION	SAMPLER(S) SIGNATURE(S)	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Grayson, Morales		1315	1318

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED Y (N) Filtration Equipment Type:	FILTER SIZE: µm
14.47	T		

FIELD DECONTAMINATION PUMP Y (N) TUBING Y N(replaced) DUPLICATE Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS ORP: 1311 (-31.0) 1313 (~~2.48~~ 9.2) 1315 (-32.9) 5/6/20

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: 5/6/2020

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): 10.79	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 – 10.79 feet) X 0.16 gallons/foot = 0.73 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.37	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.37	PURGING INITIATED AT: 1029	PURGING ENDED AT: 1058	TOTAL VOLUME PURGED (gallons): 0.87

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) µmhos/cm or (S/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1054	0.75	0.75	0.03	11.94	5.76	26.1	252	0.42	1.44	clear	None
1056	0.06	0.81	0.03	11.94	5.79	26.2	246.6	0.45	1.21	Clear	None
1058	0.06	0.87	0.03	11.94	5.79	26.3	248.0	0.46	2.09	Clear	None

5/6/2020

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: Morales, Grayson	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1058	SAMPLING ENDED AT: 1101
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: 1054 (-72.2) 1056 (-73.8) 1058 (-75.8)

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: Field Blank	SAMPLE ID: Field Blank	DATE: 5/6/2020

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)

5/6/2020

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: Morales, Grayson	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1117	SAMPLING ENDED AT: 1129
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					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS

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: 5/6/2020

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): 9.43	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (17.80 feet - 9.43 feet) X 0.16 gallons/foot = 1.34 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 16.80	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 16.80	PURGING INITIATED AT: 1115	PURGING ENDED AT: 1153	TOTAL VOLUME PURGED (gallons): 1.52

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 mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1149	1.36	1.36	0.04	10.54	5.61	26.7	415.4	1.49	5 10	clear	None
1151	0.08	1.44	0.04	10.54	5.61	26 8	4166	1.42	5 10	clear	None
1153	0.08	1.52	0.04	10.54	5.62	26.8	4173	1.43	11.84	clear	None

5/6/2020

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

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Morales, Grayson	SAMPLER(S) SIGNATURE(S): W Morales	SAMPLING INITIATED AT: 1153	SAMPLING ENDED AT: 1156
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					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS ORP: 1149 (-1.2) 1151 (-0.9) 1153 (-0.5)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill	SITE LOCATION: Lithia, Florida	
WELL NO: TH-67	SAMPLE ID: TH-67	DATE: 5/6/2020

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): 6.79	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 – 6.79 feet) X 0.16 gallons/foot = 1.35 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	PURGING INITIATED AT: 1203	PURGING ENDED AT: 1232	TOTAL VOLUME PURGED (gallons): 1.595

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)
1228	1.375	1.375	0.055	8.41	6.23	26.4	691	1.46	3.62	Clear	None
1230	0.110	1.485	0.055	8.41	6.24	26.4	691	1.58	4.10	Clear	None
1232	0.110	1.595	0.055	8.41	6.24	26.5	691	1.46	3.18	Clear	None

5/6/2020

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: Morales, Grayson	SAMPLER(S) SIGNATURE(S): M. Morales	SAMPLING INITIATED AT: 1232	SAMPLING ENDED AT: 1235
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					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** **ORP:** 1228 (-382) 1230 (-377) 1232 (-375)

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: 5/6/2020

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 mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

5/6/2020

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: Morales, Grayson	SAMPLER(S) SIGNATURE(S):	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**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

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

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

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

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

Advanced Environmental Laboratories, Inc.

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

Project No.: T2008664

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Supplemental Site Assess

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 350.1

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recovery of Ammonia (N) for T2008664004 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The effected sample is qualified to indicate matrix interference.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T2008664

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Supplemental Site Assess

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 4500-Cl-E

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The control criteria for matrix spike recoveries of Chloride for T2008664006 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:

Table 2 - Southeast County Landfill
Surficial Aquifer Groundwater Elevations
05/06/20

Measuring Point I.D.	T.O.C.Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)
TH-20B	**132.57**	10.67	121.90
Th-38B	**131.81**	12.49	119.32
TH-66A	**130.66**	10.79	119.87
TH-67	**129.51**	6.79	122.72
TH-79	**129.60**	9.43	120.17
TH-80	**129.52**	10.09	119.43
TH-81	**130.26**	9.99	120.27
TH-82	**131.26**	11.97	119.29
TH-83	**130.23**	10.24	119.99

NGVD = National Geodetic Vertical Datum
T.O.C. = Top of Casing
B.T.O.C. = Below Top of Casing
ND = No Data (3B2B - Gage no longer in stream)
W.L. = Water Level