

July 27, 2016

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

RE: Workorder: T1604489 SELF Semi-Annual

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, April 05, 2016. 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 Brooks
HBrooks@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: T1604489 SELF Semi-Annual

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1604489001	Field Blank	Water	4/5/2016 11:15	4/5/2016 13:20
T1604489002	TH-67	Water	4/5/2016 11:41	4/5/2016 13:20

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ANALYTICAL RESULTS

Workorder: T1604489 SELF Semi-Annual

Lab ID: **T1604489001**

Date Received: 04/05/16 13:20 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 04/05/16 11:15

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis, Water			Analytical Method: SW-846 6010					
Sodium	0.042	U	mg/L	1	0.20	0.042	4/8/2016 20:37	T
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids, SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	10	U	mg/L	1	10	10	4/6/2016 09:41	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	4/6/2016 12:53	T

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ANALYTICAL RESULTS

Workorder: T1604489 SELF Semi-Annual

Lab ID: **T1604489002**
Sample ID: **TH-67**

Date Received: 04/05/16 13:20 Matrix: Water
Date Collected: 04/05/16 11:41

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	3932		umhos/cm	1			4/5/2016 11:41	
Dissolved Oxygen	0.49		mg/L	1			4/5/2016 11:41	
Temperature	22.73		°C	1			4/5/2016 11:41	
Turbidity	2.32		NTU	1			4/5/2016 11:41	
pH	5.99		SU	1			4/5/2016 11:41	
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Sodium	440		mg/L	10	2.0	0.42	4/8/2016 21:37	T
WET CHEMISTRY								
Analysis Desc: Tot Dissolved Solids, SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	2400		mg/L	1	10	10	4/6/2016 09:41	T
Analysis Desc: Chlorides, SM4500-Cl-E, Water			Analytical Method: SM 4500-Cl-E					
Chloride	1100		mg/L	25	120	64	4/6/2016 12:53	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1604489 SELF Semi-Annual

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

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QUALITY CONTROL DATA

Workorder: T1604489 SELF Semi-Annual

QC Batch: WCAI/2339 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1604489001, T1604489002

METHOD BLANK: 2013377

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

LABORATORY CONTROL SAMPLE: 2013378

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	660	100	75-125

SAMPLE DUPLICATE: 2013379 Original: T1604256001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	540	530	1	10
QC Batch:	WCAI/2343				
QC Batch Method:	SM 4500-Cl-E				
Analysis Method: SM 4500-Cl-E					
Prepared:					
Associated Lab Samples: T1604489001, T1604489002					

METHOD BLANK: 2013436

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

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QUALITY CONTROL DATA

Workorder: T1604489 SELF Semi-Annual

LABORATORY CONTROL SAMPLE: 2013437

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chloride	mg/L	50	52	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2014114 2014115 Original: T1604489001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	0.78	50	51	51	102	102	90-110	0	10	

QC Batch: DGM/1208

Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A

Prepared: 04/07/2016 12:00

Associated Lab Samples: T1604489001, T1604489002

METHOD BLANK: 2015461

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Sodium	mg/L	0.042	0.042	U

LABORATORY CONTROL SAMPLE: 2015462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Sodium	mg/L	50	53	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2015463 2015464 Original: T1604582009

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
METALS											
Sodium	mg/L	11	50	63	62	103	101	75-125	1	20	

Report ID: 418688 - 7210088

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QUALITY CONTROL DATA

Workorder: T1604489 SELF Semi-Annual

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1604489 SELF Semi-Annual

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1604489001	Field Blank			SM 2540 C	WCAt/2339
T1604489002	TH-67			SM 2540 C	WCAt/2339
T1604489001	Field Blank			SM 4500-CI-E	WCAt/2343
T1604489002	TH-67			SM 4500-CI-E	WCAt/2343
T1604489001	Field Blank	SW-846 3010A	DGMt/1208	SW-846 6010	ICPt/1143
T1604489002	TH-67	SW-846 3010A	DGMt/1208	SW-846 6010	ICPt/1143
T1604489002	TH-67	Field Measurements	FLDt/	Field Measurements	FLDt/

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77664489

Relinquished by:		Date	Time	Received by:	Date	Time
1		4/5/16	13:20		4/5/16	13:20
2						
3						
4						

Form FD 9000-24

SITE NAME: Southeast Landfill		SITE LOCATION: Lithia, FL	
WELL NO: TH-67	SAMPLE ID: TH-67	DATE: 4/5/2011	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

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

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

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

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: Southernst Landfill

SITE LOCATION: LITHIA, FL

WELL NO: Field Blower

SAMPLE ID:

DATE: 4/6/16

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 4	WELL SCREEN INTERVAL DEPTH: 10 feet to 15 feet	STATIC DEPTH TO WATER (feet): 12	PURGE PUMP TYPE OR BAILER: 1/2" BAILER
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (\text{ } \text{feet} - \text{ } \text{feet}) \times \text{ } \text{gallons/foot} = \text{ } \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

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)

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	OXYGEN (circle units) mg/L <u>or</u> %	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
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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:

M. Townsel / A. Bauw

SAMPLER(S) SIGNATURE(S):

SAMPLING
INITIATED AT: 11:45

SAMPLING
ENDED AT: 11:17

PUMP OR TUBING
DEPTH IN WELL (feet):

TUBING
MATERIAL CODE:

FIELD-FILTERED: Y N
Filtration Equipment Type:

FILTER SIZE: μm

FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)
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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	ANALYSIS AND/OR METHOD	EQUIPMENT CODE	FLOW RATE (mL per minute)
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REMARKS: SEE C.O.C. FOR 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:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009