



**Hillsborough  
County** Florida

**PUBLIC UTILITIES**  
PO Box 1110  
Tampa, FL 33601-1110

**Southeast County Landfill  
Leachate Treatment Plant  
WACS Testsite #19864  
Lithia, Florida**

**Effluent Quality  
July-September 2021**

**Hillsborough County  
Public Utilities Department  
Environmental Services Division  
332 North Falkenburg Road  
Tampa, Florida 33619**

*Michael D. Townsel*

**Michael D. Townsel** 11/30/21  
**Hydrologist**  
**Environmental Services Division**  
**Public Utilities Department**

### **Southeast Landfill Quarterly Results (July-September 2021)**

In accordance with Southeast County Landfill (SCLF) permit modification 35435-29-SO-MM, dated May 24, 2021, the Hillsborough County Public Utilities Department (County), has prepared the quarterly effluent results for the SCLF leachate treatment plant (LTP), located at 15960 County Road 672 in Lithia, Florida.

Monthly sampling of the LTP effluent and the daily recording of the plant pH was conducted as required by the leachate management plan (LMP) as part of the referenced permit. Plant pH for the dates of August 11-13, 2021 were not recorded due to the leachate pumps turned off for maintenance. County personnel collected effluent samples from the designated sampling port at the treatment plant on July 9, August 10, and September 20, 2021 for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and field parameters.

Each of the effluent samples were analyzed by our contract laboratory, Advanced Environmental Laboratories, Inc. and is consistent with the historical data over the period of record. Additionally, pH for the effluent exhibited a range from 7.00 to 7.55 pH units by LTP personnel and the field logs are exhibited as part of the submittal. The ADaPT EDD and quarterly report shall be uploaded to the FDEP Business Portal.

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.00	10.00	7.79	7.21	
2	4.00	7.00	10.00	7.82	7.55	
3						
4						
5	4.00	7.00	10.00	7.83	7.47	
6	4.00	7.00	10.00	7.65	7.11	
7	4.00	7.00	10.00	7.80	7.16	
8	4.00	7.00	10.00	7.63	7.15	
9	4.00	7.00	10.00	7.54	7.14	8.45
10						
11						
12	4.00	7.00	10.00	7.51	7.21	
13	4.00	7.00	10.00	7.48	7.18	
14	4.00	7.00	10.00			
15	4.00	7.00	10.00	7.43	7.25	
16	4.00	7.00	10.00	7.42	7.11	
17						
18						
19	4.00	7.00	10.00	7.38	7.12	
20	4.00	7.00	10.00	7.58	7.41	
21	4.00	7.00	10.00	7.44	7.21	
22	4.00	7.00	10.00	7.35	7.24	
23	4.00	7.00	10.00	7.44	7.19	
24						
25						
26	4.00	7.00	10.00	7.51	7.17	
27	4.00	7.00	10.00	7.32	7.14	
28	4.00	7.00	10.00	7.47	7.19	
29	4.00	7.00	10.00	7.54	7.25	
30	4.00	7.00	10.00	7.49	7.23	
31						

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1						
2	4.00	7.00	10.00	7.31	7.35	
3	4.00	7.00	10.00	7.24	7.31	
4	4.00	7.00	10.00	7.44	7.38	
5	4.00	7.00	10.00	7.26	7.25	
6	4.00	7.00	10.00	7.36	7.15	
7						
8						
9	4.00	7.00	10.00	7.27	7.37	7.73
10	4.00	7.00	10.00	7.44	7.21	
11	4.00	7.00	10.00	7.38		
12	4.00	7.00	10.00	7.49		
13	4.00	7.00	10.00	7.28		
14						
15						
16	4.00	7.00	10.00	7.33	7.18	7.90
17	4.00	7.00	10.00	7.34	7.17	8.15
18	4.00	7.00	10.00	7.37	7.15	8.10
19	4.00	7.00	10.00	7.50	7.13	8.13
20	4.00	7.00	10.00	7.42	7.19	8.25
21						
22						
23	4.00	7.00	10.00	7.14	7.00	7.61
24	4.00	7.00	10.00	7.24	7.01	7.53
25	4.00	7.00	10.00	7.14	7.01	7.49
26	4.00	7.00	10.00	7.42	7.11	
27	4.00	7.00	10.00	7.47	7.27	
28						
29						
30	4.00	7.00	10.00	7.49	7.13	
31	4.00	7.00	10.00	7.24	7.02	8.23



Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.00	10.00	7.28	7.01	
2	4.00	7.00	10.00	7.30	7.03	
3	4.00	7.00	10.00	7.45	7.00	
4						
5						
6						
7	4.00	7.00	10.00	7.20	7.12	
8	4.00	7.00	10.00	7.53	7.15	
9	4.00	7.00	10.00	7.51	7.40	7.89
10	4.00	7.00	10.00	7.52	7.40	7.41
11						
12						
13	4.00	7.00	10.00	7.54	7.52	
14	4.00	7.00	10.00	7.51	7.43	
15	4.00	7.00	10.00	7.63	7.28	
16	4.00	7.00	10.00	7.39	7.46	
17	4.00	7.00	10.00	7.27	7.41	
18						
19						
20	4.00	7.00	10.00	7.43	7.32	
21	4.00	7.00	10.00	7.33	7.10	7.46
22	4.00	7.00	10.00	7.46	7.25	
23	4.00	7.00	10.00	7.23	7.26	
24	4.00	7.00	10.00	7.27	7.24	
25	4.00	7.00	10.00	7.22	7.27	
26	4.00	7.00	10.00	7.20	7.25	
27	4.00	7.00	10.00	7.14	7.27	7.38
28	4.00	7.00	10.00	7.34	7.33	7.63
29	4.00	7.00	10.00	7.29	7.35	7.58
30	4.00	7.00	10.00	7.13	7.29	7.44
31						

August 4, 2021

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

RE: Workorder: T2112324 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, July 09, 2021. 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: T2112324 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2112324001	Leachate Effluent	Water	7/9/2021 09:53	7/9/2021 10:45
T2112324002	Field Blank	Water	7/9/2021 09:47	7/9/2021 10:45

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## ANALYTICAL RESULTS

Workorder: T2112324 SELF Plant Effluent

Lab ID: **T2112324001**  
Sample ID: **Leachate Effluent**

Date Received: 07/09/21 10:45 Matrix: Water  
Date Collected: 07/09/21 09:53

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	17823		umhos/cm	1			7/9/2021 09:53	
Dissolved Oxygen	4.71		mg/L	1			7/9/2021 09:53	
ORP-2580BW	28.1		mV	1			7/9/2021 09:53	
Temperature	30.1		°C	1			7/9/2021 09:53	
pH	7.13		SU	1			7/9/2021 09:53	
<b>WET CHEMISTRY</b>								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	670		mg/L	1	50	20	7/14/2021 13:50	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	11000		mg/L	1	10	10	7/14/2021 09:30	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	150		mg/L	10	10	10	7/15/2021 16:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	250		mg/L	250	25	23	7/9/2021 16:59	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	64		mg/L	1	2.0	2.0	7/9/2021 14:25	T

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## ANALYTICAL RESULTS

Workorder: T2112324 SELF Plant Effluent

Lab ID: **T2112324002**

Date Received: 07/09/21 10:45 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 07/09/21 09:47

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	<b>20</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	50	20	7/14/2021 13:50	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	<b>10</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	10	10	7/14/2021 09:30	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	<b>1.0</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	1.0	1.0	7/15/2021 16:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	<b>0.092</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	0.10	0.092	7/9/2021 16:57	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	<b>2.0</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	2.0	2.0	7/9/2021 14:42	T

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: T2112324 SELF Plant Effluent

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### PARAMETER QUALIFIERS

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

### LAB QUALIFIERS

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

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## QUALITY CONTROL DATA

Workorder: T2112324 SELF Plant Effluent

QC Batch: WCAI/5455 Analysis Method: SM 4500NO3-F  
QC Batch Method: SM 4500NO3-F Prepared:  
Associated Lab Samples: T2112324001, T2112324002

METHOD BLANK: 3950366

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.092	0.092 U

LABORATORY CONTROL SAMPLE: 3950367

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	0.96	96	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3950368 3950369 Original: T2112335001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1.6	1	2.6	2.6	100	95	90-110	2	10	

QC Batch: WCAI/5460 Analysis Method: SM 5210B  
QC Batch Method: SM 5210B Prepared:  
Associated Lab Samples: T2112324001, T2112324002

METHOD BLANK: 3950471

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

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## QUALITY CONTROL DATA

Workorder: T2112324 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3950472

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	200	190	94	84.6-115.4	

SAMPLE DUPLICATE: 3950473

Original: T2112382004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	2300	2100	11	20	
QC Batch:	WCAI/5536		Analysis Method:	EPA 410.4		
QC Batch Method:	EPA 410.4		Prepared:			
Associated Lab Samples:	T2112324001, T2112324002					

METHOD BLANK: 3954788

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Chemical Oxygen Demand	mg/L	20	20 U	

LABORATORY CONTROL SAMPLE: 3954789

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Chemical Oxygen Demand	mg/L	500	500	100	90-110	
QC Batch:	WCAI/5578		Analysis Method:	SM 2540D		
QC Batch Method:	SM 2540D		Prepared:			
Associated Lab Samples:	T2112324001, T2112324002					

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## QUALITY CONTROL DATA

Workorder: T2112324 SELF Plant Effluent

METHOD BLANK: 3957923

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

LABORATORY CONTROL SAMPLE: 3957924

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	200	200	101	85-115

SAMPLE DUPLICATE: 3957925

Original: T2112499001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	140	130	7	10	
QC Batch:	WCAI/5605		Analysis Method:		SM 2540 C	
QC Batch Method:	SM 2540 C		Prepared:			
Associated Lab Samples:	T2112324001, T2112324002					

METHOD BLANK: 3959211

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

LABORATORY CONTROL SAMPLE: 3959212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	660	101	85-115

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## QUALITY CONTROL DATA

Workorder: T2112324 SELF Plant Effluent

SAMPLE DUPLICATE: 3959214

Original: T2112358001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	160	140	8	10

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2112324 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2112324001	Leachate Effluent			SM 4500NO3-F	WCA/t/5455
T2112324002	Field Blank			SM 4500NO3-F	WCA/t/5455
T2112324001	Leachate Effluent			SM 5210B	WCA/t/5460
T2112324002	Field Blank			SM 5210B	WCA/t/5460
T2112324001	Leachate Effluent			EPA 410.4	WCA/t/5536
T2112324002	Field Blank			EPA 410.4	WCA/t/5536
T2112324001	Leachate Effluent			SM 2540D	WCA/t/5578
T2112324002	Field Blank			SM 2540D	WCA/t/5578
T2112324001	Leachate Effluent			SM 2540 C	WCA/t/5605
T2112324002	Field Blank			SM 2540 C	WCA/t/5605
T2112324001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

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- **Altamonte Springs:** 380 Northlake Blvd., Ste. 104B, FL 32701 • 407.337.1594 • Lab ID: ES0076
- **Fort Myers:** 13100 Westlins Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: E84492
- **Jacksonville:** 6581 Southpoint Pkwy., FL 32216 • 904.363.9300 • Lab ID: E82574
- **Tallahassee:** 7639 North Monroe St., Suite 10, FL 32303 • 850.219.6274 • Lab ID: E811095

**FOR DRINKING WATER USE:**

When PWS information not otherwise supplied) PWS ID:

Contact Person:

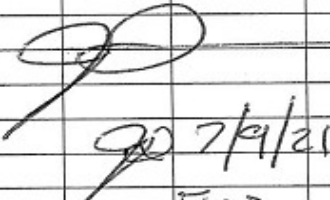
Supplier of Water:

Site-Address:

## Form FD 9000-24

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank		DATE: 7/9/21

## PURGING DATA

WELL		TUBING		WELL SCREEN INTERVAL		STATIC DEPTH		PURGE PUMP TYPE			
DIAMETER (inches): N/A		DIAMETER (inches): N/A		DEPTH: N/A ft to N/A ft		TO WATER (feet): N/A		OR BAILER: N/A			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( N/A feet - N/A feet) X N/A gallons/foot = N/A gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= N/A gallons + ( N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons											
INITIAL PUMP OR TUBING			FINAL PUMP OR TUBING			PURGING		TOTAL VOLUME			
DEPTH IN WELL (feet): N/A			DEPTH IN WELL (feet): N/A			INITIATED AT: N/A		ENDED AT: N/A			
PURGED (gallons):		CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) $\text{mg/L}$ or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<div style="text-align: center;">             7/9/21            FIELD            BLANK         </div>											
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

[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)

2. **STABILIZATION CRITERIA:** FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE TABLE FS 2200-2):

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







August 31, 2021

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

RE: Workorder: T2114641 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, August 10, 2021. 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: T2114641 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2114641001	Leachate Effluent	Water	8/10/2021 12:16	8/10/2021 13:40
T2114641002	Field Blank	Water	8/10/2021 12:05	8/10/2021 13:40

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## ANALYTICAL RESULTS

Workorder: T2114641 SELF Plant Effluent

Lab ID: **T2114641001**  
Sample ID: **Leachate Effluent**

Date Received: 08/10/21 13:40 Matrix: Water  
Date Collected: 08/10/21 12:16

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	15064		umhos/cm	1			8/10/2021 12:16	
Dissolved Oxygen	2.77		mg/L	1			8/10/2021 12:16	
ORP-2580BW	88.8		mV	1			8/10/2021 12:16	
Temperature	33.5		°C	1			8/10/2021 12:16	
pH	6.24		SU	1			8/10/2021 12:16	
<b>WET CHEMISTRY</b>								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	400		mg/L	1	50	20	8/16/2021 13:20	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	9500		mg/L	1	10	10	8/13/2021 15:00	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	110		mg/L	5	5.0	5.0	8/11/2021 15:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	190		mg/L	125	12	12	8/11/2021 12:34	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	3.5		mg/L	1	2.0	2.0	8/11/2021 13:30	T

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## ANALYTICAL RESULTS

Workorder: T2114641 SELF Plant Effluent

Lab ID: **T2114641002**

Date Received: 08/10/21 13:40 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 08/10/21 12:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>WET CHEMISTRY</b>								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	<b>20</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	50	20	8/16/2021 13:20	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	<b>10</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	10	10	8/13/2021 15:00	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	<b>1.0</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	1.0	1.0	8/11/2021 15:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	<b>0.092</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	0.10	0.092	8/11/2021 11:14	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	<b>2.0</b>	<b>U</b>	<b>mg/L</b>	<b>1</b>	2.0	2.0	8/11/2021 13:38	T

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: T2114641 SELF Plant Effluent

---

### 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: T2114641 SELF Plant Effluent

QC Batch: WCA/6152 Analysis Method: SM 2540D  
QC Batch Method: SM 2540D Prepared:  
Associated Lab Samples: T2114641001, T2114641002

METHOD BLANK: 3986331

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

LABORATORY CONTROL SAMPLE: 3986332

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	200	190	97	85-115

SAMPLE DUPLICATE: 3986333 Original: T2114644002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L		1200	8	10
QC Batch:	WCA/6162		Analysis Method:	SM 4500NO3-F	
QC Batch Method:	SM 4500NO3-F		Prepared:		
Associated Lab Samples: T2114641001, T2114641002					

METHOD BLANK: 3986390

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Nitrate (as N)	mg/L	0.092	0.092 U

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## QUALITY CONTROL DATA

Workorder: T2114641 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3986391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate (as N)	mg/L	1	1.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3986392 3986393 Original: T2114607002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Nitrate (as N)	mg/L	0.52	1	1.6	1.5	104	101	90-110	2	10	

QC Batch: WCAI/6196

Analysis Method: SM 5210B

QC Batch Method: SM 5210B

Prepared:

Associated Lab Samples: T2114641001, T2114641002

METHOD BLANK: 3987792

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

LABORATORY CONTROL SAMPLE: 3987793

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	180	89	84.6-115.4	

SAMPLE DUPLICATE: 3987794

Original: T2114725001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						

Report ID: 1075956 - 1406549

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## QUALITY CONTROL DATA

Workorder: T2114641 SELF Plant Effluent

SAMPLE DUPLICATE: 3987794

Original: T2114725001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
Biochemical Oxygen Demand	mg/L	2300	2100	8	20
QC Batch:	WCAI/6242		Analysis Method:	SM 2540 C	
QC Batch Method:	SM 2540 C		Prepared:		
Associated Lab Samples:	T2114641001, T2114641002				

METHOD BLANK: 3990065

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

LABORATORY CONTROL SAMPLE: 3990066

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	660	100	85-115

SAMPLE DUPLICATE: 3990067

Original: T2114584003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	170	170	4	10
QC Batch:	WCAI/6277		Analysis Method:	EPA 410.4	
QC Batch Method:	EPA 410.4		Prepared:		
Associated Lab Samples:	T2114641001, T2114641002				

METHOD BLANK: 3991739

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chemical Oxygen Demand	mg/L	20	20 U

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## QUALITY CONTROL DATA

Workorder: T2114641 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3991740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	500	101	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3991742 3991743 Original: A2106825001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	5.5	500	550	550	110	110	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3991746 3991747 Original: T2114738002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	73	500	550	550	96	96	90-110	0	10	

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2114641 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2114641001	Leachate Effluent			SM 2540D	WCAt/6152
T2114641002	Field Blank			SM 2540D	WCAt/6152
T2114641001	Leachate Effluent			SM 4500NO3-F	WCAt/6162
T2114641002	Field Blank			SM 4500NO3-F	WCAt/6162
T2114641001	Leachate Effluent			SM 5210B	WCAt/6196
T2114641002	Field Blank			SM 5210B	WCAt/6196
T2114641001	Leachate Effluent			SM 2540 C	WCAt/6242
T2114641002	Field Blank			SM 2540 C	WCAt/6242
T2114641001	Leachate Effluent			EPA 410.4	WCAt/6277
T2114641002	Field Blank			EPA 410.4	WCAt/6277
T2114641001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

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☐ Fort Myers: 13100 Westlakes Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: ES4492  
☐ Jacksonville: 6681 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: ES2574  
☐ Tallahassee: 2039 North Monroe St., Suite D, FL 32303 • 900.219.6274 • Lab ID: ES11095

☐ Gainesville: 4965 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: ES2001  
☐ Miramar: 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: ES2535  
☒ Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: ES4559

Client Name: Hills, Co. Public Utilities

Project Name: SELF Plant Effluent

Address: 332 North Falkenburg Rd

Project Number: N/A

Tampa, FL 33619

PO Number: N/A

Phone: (813) 663-3222

FDEP Facility No:

FAX: (813) 274-6801

FDEP Facility Addr: 15960 CR 672

Contact: Michael Townsend

Sampled By: T. Aguilar

Special Instructions:

Turn Around Time: Standard Rush

AEL Profile #:

ADAPT

EQUIS

Other

SAMPLE ID

SAMPLE DESCRIPTION

Grab Comp

SAMPLING DATE

MATRIX

NO. COUNT

Preservation Fails?

ANALYSIS REQUIRED

COD

BOD

TDS

TSS

Nitrate

LABORATORY I.D. NUM

Leachate Effluent

G

8/10/21 1216

WW

S

X

X

X

X

X

X

X

X

Field Blank

-

8/10/21 205

DI

S

X

X

X

X

X

X

X

X

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

Preservation Code: I = Ice H = HCl S = H<sub>2</sub>SO<sub>4</sub> N = HNO<sub>3</sub> T = (Sodium Thiosulfate)

Received on Ice ☒ Yes ☐ No ☐ Temp taken from sample

☐ Temp from blank ☐ Where required, pH checked

Temp. when received (observed) \_\_\_\_\_ °C Temp. when received (corrected) \_\_\_\_\_ °C

DCN: AD-0051web Form last revised 08/07/2019

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: IV F: 1A

Relinquished by:

Date

Time

Received by:

Date

Time

FOR DRINKING WATER USE:

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

1 *[Signature]* 8/10/21 1341

Date

Time

Received by:

Date

Time

Contact Person:

Supplier of Water:

Site Address:

Site Address:

Site Address:

Site Address:



*[Signature]*

## PURGING DATA

8 | 10 | 2 |

SIGNATURE(S):

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

Page 12 of 13

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

SITE NAME: <b>Southeast County Landfill - Plant</b>	SITE LOCATION: <b>Lithia, Florida</b>
WELL NO: <b>Field Blank</b>	SAMPLE ID: <b>Field Blank</b> DATE: <b>8/10/21</b>

**PURGING DATA**

WELL DIAMETER (inches): <b>N/A</b>	TUBING DIAMETER (inches): <b>N/A</b>	WELL SCREEN INTERVAL DEPTH: <b>N/A</b> ft to <b>N/A</b> ft	STATIC DEPTH TO WATER (feet): <b>N/A</b>	PURGE PUMP TYPE OR BAILER: <b>N/A</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>N/A</b> feet - <b>N/A</b> feet ) X <b>N/A</b> gallons/foot = <b>N/A</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <b>N/A</b> gallons + ( <b>N/A</b> gallons/foot X <b>N/A</b> feet ) + <b>N/A</b> gallons = <b>N/A</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>N/A</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>N/A</b>	PURGING INITIATED AT: <b>N/A</b>	PURGING ENDED AT: <b>N/A</b>	TOTAL VOLUME PURGED (gallons): <b>N/A</b>

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)
<div style="font-size: 2em; font-family: cursive;">Field Blank</div> <div style="font-size: 2em; font-family: cursive;">8/10/21</div> <div style="font-size: 2em; font-family: cursive;">OK</div>											

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: <b>T. Aguilar</b>				SAMPLER(S) SIGNATURE(S): 				SAMPLING INITIATED AT: <b>1205</b>		SAMPLING ENDED AT: <b>1207</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>N/A</b>				TUBING MATERIAL CODE: <b>N/A</b>				FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N <input type="radio"/> TUBING Y <input checked="" type="radio"/> N <input type="radio"/> (replaced)				DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/>							

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  
9610 Princess Palm Ave Tampa, FL 33619  
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580  
Phone: (813) 630-9616  
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**FINAL**

**Workorder: SELF Plant Effluent (T2117391)**

October 26, 2021

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

RE: Workorder: T2117391 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday September 20, 2021. 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  
HParker@aellab.com

### Certificate of Analysis

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FINAL

Workorder: SELF Plant Effluent (T2117391)

## Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported
T2117391001	Leachate Effluent	WA	EPA 410.4	09/20/2021 09:28	09/20/2021 10:30	1
T2117391001	Leachate Effluent	WA	Field Measurements	09/20/2021 09:28	09/20/2021 10:30	5
T2117391001	Leachate Effluent	WA	SM 2540 C	09/20/2021 09:28	09/20/2021 10:30	1
T2117391001	Leachate Effluent	WA	SM 2540D	09/20/2021 09:28	09/20/2021 10:30	1
T2117391001	Leachate Effluent	WA	SM 4500NO3-F	09/20/2021 09:28	09/20/2021 10:30	1
T2117391001	Leachate Effluent	WA	SM 5210B	09/20/2021 09:28	09/20/2021 10:30	1
T2117391002	Field Blank	WA	EPA 410.4	09/20/2021 09:23	09/20/2021 10:30	1
T2117391002	Field Blank	WA	SM 2540 C	09/20/2021 09:23	09/20/2021 10:30	1
T2117391002	Field Blank	WA	SM 2540D	09/20/2021 09:23	09/20/2021 10:30	1
T2117391002	Field Blank	WA	SM 4500NO3-F	09/20/2021 09:23	09/20/2021 10:30	1
T2117391002	Field Blank	WA	SM 5210B	09/20/2021 09:23	09/20/2021 10:30	1

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**FINAL**

**Workorder:** SELF Plant Effluent (T2117391)

## Analytical Results Qualifiers

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

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FINAL

Workorder: SELF Plant Effluent (T2117391)

## Analytical Results

Lab ID: T2117391001  
Sample ID: Leachate Effluent

Date Collected: 9/20/2021  
Date Received: 9/20/2021

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
<b>Field Parameters (Field Measurements)</b>								
Conductivity	13296	umhos			1	09/20/2021 09:28	09/20/2021 09:28	
Dissolved Oxygen	3.09	mg/L			1	09/20/2021 09:28	09/20/2021 09:28	
ORP-2580BW	126.9	mV			1	09/20/2021 09:28	09/20/2021 09:28	
Temperature	29.4	°C			1	09/20/2021 09:28	09/20/2021 09:28	
pH	6.52	SU			1	09/20/2021 09:28	09/20/2021 09:28	
<b>Wet Chemistry (EPA 410.4)</b>								
Chemical Oxygen Demand	360	mg/L	50	20	1	09/28/2021 09:15	09/28/2021 09:15	T
<b>Wet Chemistry (SM 2540 C)</b>								
Total Dissolved Solids	6300	mg/L	10	10	1	09/23/2021 16:00	09/23/2021 16:00	T
<b>Wet Chemistry (SM 2540D)</b>								
Total Suspended Solids	34	mg/L	10	10	10	09/23/2021 14:00	09/23/2021 14:00	T
<b>Wet Chemistry (SM 4500NO3-F)</b>								
Nitrate (as N)	170	mg/L	12	12	125	09/20/2021 18:45	09/20/2021 18:45	T
<b>Wet Chemistry (SM 5210B)</b>								
Biochemical Oxygen Demand	15	mg/L	2	2.0	1	09/20/2021 14:39	09/20/2021 14:39	T

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FINAL

Workorder: SELF Plant Effluent (T2117391)

## Analytical Results

Lab ID:	T2117391002	Date Collected:	9/20/2021				Matrix:	Water		
Sample ID:	Field Blank	Date Received:	9/20/2021							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab		
Wet Chemistry (EPA 410.4)										
Chemical Oxygen Demand	20U	mg/L	50	20	1	09/28/2021 09:15	09/28/2021 09:15	T		
Wet Chemistry (SM 2540 C)										
Total Dissolved Solids	10U	mg/L	10	10	1	09/23/2021 16:00	09/23/2021 16:00	T		
Wet Chemistry (SM 2540D)										
Total Suspended Solids	2.0U	mg/L	2	2.0	2	09/23/2021 14:00	09/23/2021 14:00	T		
Wet Chemistry (SM 4500NO3-F)										
Nitrate (as N)	0.092U	mg/L	0.1	0.092	1	09/20/2021 18:44	09/20/2021 18:44	T		
Wet Chemistry (SM 5210B)										
Biochemical Oxygen Demand	2.0U	mg/L	2	2.0	1	09/20/2021 14:44	09/20/2021 14:44	T		

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Workorder: SELF Plant Effluent (T2117391)

## QC Results

QC Batch: WCAI/7030  
Preparation Method: SM 5210B  
Associated Lab IDs: T2117391001, T2117391002

Analysis Method: SM 5210B

### Method Blank(4032976)

Parameter	Results	Units	PQL	MDL	Lab
Biochemical Oxygen Demand	2.0U	mg/L	2.0	2.0	T

### Lab Control Sample (4032977)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Biochemical Oxygen Demand	mg/L	198	188	95	84.60 - 115.40	T

### Sample Duplicate (4032978)

Parameter	Original	Duplicate	Units	RPD	RPD Limit	Lab
Biochemical Oxygen Demand	2717.8	2664.14	mg/L	2	20	T

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FINAL

Workorder: SELF Plant Effluent (T2117391)

## QC Results

QC Batch: WCA17034  
Preparation Method: SM 4500NO3-F  
Associated Lab IDs: T2117391001, T2117391002

Analysis Method: SM 4500NO3-F

### Method Blank(4033099)

Parameter	Results	Units	PQL	MDL	Lab
Nitrate (as N)	0.092U	mg/L	0.10	0.092	T

### Lab Control Sample (4033100)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrate (as N)	mg/L	1	1	103	90 - 110	T

### Matrix Spike (4033101); Matrix Spike Duplicate (4033102)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nitrate (as N)	mg/L	1	2.2	98	90 - 110	2.2	102	2	10	T

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**FINAL**

**Workorder:** SELF Plant Effluent (T2117391)

**QC Results**

**QC Batch:** WCA/7114  
**Preparation Method:** SM 2540D  
**Associated Lab IDs:** T2117391001, T2117391002

**Analysis Method:** SM 2540D

**Method Blank(4036908)**

Parameter	Results	Units	PQL	MDL	Lab
Total Suspended Solids	1.0U	mg/L	1.0	1.0	T

**Lab Control Sample (4036909)**

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Total Suspended Solids	mg/L	200	200	98	85 - 115	T

**Sample Duplicate (4039040)**

Parameter	Original	Duplicate	Units	RPD	RPD Limit	Lab
Total Suspended Solids	174	180	mg/L	3	10	T

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**FINAL**

**Workorder:** SELF Plant Effluent (T2117391)

**QC Results**

**QC Batch:** WCA/7118  
**Preparation Method:** SM 2540 C  
**Associated Lab IDs:** T2117391001, T2117391002

**Analysis Method:** SM 2540 C

**Method Blank(4036923)**

Parameter	Results	Units	PQL	MDL	Lab
Total Dissolved Solids	10U	mg/L	10	10	T

**Lab Control Sample (4036924)**

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Total Dissolved Solids	mg/L	660	660	100	85 - 115	T

**Sample Duplicate (4036925)**

Parameter	Original	Duplicate	Units	RPD	RPD Limit	Lab
Total Dissolved Solids	686	746	mg/L	8	10	T

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FINAL

Workorder: SELF Plant Effluent (T2117391)

QC Results

QC Batch: WCA/7211  
Preparation Method: EPA 410.4  
Associated Lab IDs: T2117391001, T2117391002

Analysis Method: EPA 410.4

Method Blank(4041653)

Parameter	Results	Units	PQL	MDL	Lab
Chemical Oxygen Demand	20U	mg/L	50	20	T

Lab Control Sample (4041654)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Chemical Oxygen Demand	mg/L	500	510	101	90 - 110	T

Matrix Spike (4041656); Matrix Spike Duplicate (4041657)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Chemical Oxygen Demand	mg/L	500	600	110	90 - 110	600	110	0	10	T

Matrix Spike (4041660); Matrix Spike Duplicate (4041661)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Chemical Oxygen Demand	mg/L	500	530	106	90 - 110	530	106	0	10	T

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FINAL

Workorder: SELF Plant Effluent (T2117391)

### QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
<b>WCAI/7030 - SM 5210B</b>			
T2117391001	Leachate Effluent		
T2117391002	Field Blank		
<b>WCAI/7034 - SM 4500NO3-F</b>			
T2117391001	Leachate Effluent		
T2117391002	Field Blank		
<b>WCAI/7114 - SM 2540D</b>			
T2117391001	Leachate Effluent		
T2117391002	Field Blank		
<b>WCAI/7118 - SM 2540 C</b>			
T2117391001	Leachate Effluent		
T2117391002	Field Blank		
<b>WCAI/7211 - EPA 410.4</b>			
T2117391001	Leachate Effluent		
T2117391002	Field Blank		

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**Callhassae** 2630 North Monroe St Suite D El 32303 • 850 219 6274 • | ab ID: E811095

[illegible]

☐ **Miramar:** 10200 | SA Today Way | 33025 • 954 889 2288 • Lab ID: E82535

**Tampa:** 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

[illegible]

## Form FD 9000-24

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Leachate Effluent	SAMPLE ID: Leachate Effluent		DATE: 09/20/2021

## PURGING DATA

WELL DIAMETER (inches): <b>N/A</b>	TUBING DIAMETER (inches): <b>N/A</b>	WELL SCREEN INTERVAL DEPTH: <b>N/A</b> ft to <b>N/A</b> ft	STATIC DEPTH TO WATER (feet): <b>N/A</b>	PURGE PUMP TYPE OR BAILER: <b>Valve</b>
---------------------------------------	---	---	---	--

**WELL VOLUME PURGE:** 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

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

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

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

INITIAL PUMP OR TUBING	FINAL PUMP OR TUBING	PURGING	PURGING	TOTAL VOLUME
DEPTH IN WELL (feet): N/A	DEPTH IN WELL (feet): N/A	INITIATED AT: N/A	ENDED AT: N/A	PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) $\text{mg/l}$ or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0928	N/A	N/A	N/A	N/A	6.52	29.4	13296	3.09	N/A	Brown	Effluent

M.M  
09/20/2021

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. Morales	SAMPLER(S) SIGNATURE(S): M. Morales	SAMPLING INITIATED AT: 8928	SAMPLING ENDED AT: 0931
---	--	-----------------------------	-------------------------

PUMP OR TUBING DEPTH IN WELL (feet): <b>N/A</b>	TUBING MATERIAL CODE: <b>N/A</b>	FIELD-FILTERED: <b>Y</b>  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: 0928 (126-9)

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

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

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 09/20/2021	

## PURGING DATA

PURGING DATA											
WELL DIAMETER (inches): N/A		TUBING DIAMETER (inches): N/A		WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft		STATIC DEPTH TO WATER (feet): N/A		PURGE PUMP TYPE OR BAILER: N/A			
<b>WELL VOLUME PURGE:</b> 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( N/A feet - N/A feet) X N/A gallons/foot = N/A gallons											
<b>EQUIPMENT VOLUME PURGE:</b> 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 9/20/2021											
<b>WELL CAPACITY</b> (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 <b>TUBING INSIDE DIA. CAPACITY</b> (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											
<b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

## SAMPLING DATA

SAMPLING DATA									
SAMPLED BY (PRINT) / AFFILIATION: <i>M. Morales</i>		SAMPLER(S) SIGNATURE(S): <i>M. Morales</i>		SAMPLING INITIATED AT: <i>0923</i>	SAMPLING ENDED AT: <i>0926</i>				
PUMP OR TUBING DEPTH IN WELL (feet): <i>N/A</i>		TUBING MATERIAL CODE: <i>N/A</i>		FIELD-FILTERED: Y ( <i>N</i> ) Filtration Equipment Type:		FILTER SIZE: _____ µm			
FIELD DECONTAMINATION: PUMP Y ( <i>N</i> ) TUBING Y ( <i>N</i> ) (replaced)				DUPLICATE: Y ( <i>N</i> )					
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)

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