Hsu, Benjamin

From: Townsel, Michael <TownselM@HillsboroughCounty.ORG>

Sent: Monday, October 30, 2017 2:01 PM

To: Morgan, Steve

Cc: Greenwell, Jeffry; Squitieri, Joe; Fuller, Josh; Aguilar, Tiffany; Byer, Kimberly; Ruiz, Larry; Pelley, Cindy;

Gormley, Thomas; Cope, Ronald; ADaPT EDD; SWD_Waste; Moore, Clark B.

Subject: Southeast County Landfill - 3rd Quarter 2017 Plant Effluent ADR and Adapt

Attachments: SELF2017-3rdQtrEffluent.pdf; 41193_20170717_SWzdd.zip; 41193_20170817_SWzdd.zip; 41193_

20170925_SWzdd.zip

Dear Mr. Morgan,

In accordance with Part 9.1.2 of the Southeast County Landfill Leachate Management Plan, attached please find an electronic copy of the 3rd Quarter 2017 Effluent Analytical Data Report. The AdaPT files for the three monthly reports are also provided, and I have copied Clark Moore and the AdaPT mailbox, as required. Should you have any questions or wish to discuss the information submitted, please do not hesitate to call me at (813) 663-3222.

Best Regards,

Michael D. Townsel

Senior Hydrogeologist

Public Utilities Department – Environmental Services

P: (813) 663-3222

E: townselm@HCFLGov.net

W: HCFLGov.net

Hillsborough County

332 N. Falkenburg Road, Tampa, FL 33619

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Please note: All correspondence to or from this office is subject to Florida's Public Records law.



PUBLIC UTILITIES PO Box 1110 Tampa, FL 33601-1110

October 20, 2017

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

RE: Southeast County Landfill

Leachate Treatment Plant (WACS Testsite #19864)

Quarterly Analytical Data Report Third Quarter (July – September, 2017)

Dear Mr. Morgan:

In accordance with Part 9.1.2 of the November 2015 Southeast County Landfill (SCLF) Leachate Management Plan (LMP), the Hillsborough County Public Utilities Department (County), is pleased to provide the quarterly laboratory analytical data for the sampling of effluent at the leachate treatment plant, located at the SCLF at 15960 County Road 672 in Lithia, Florida.

The referenced plan requires monthly sampling of the leachate treatment plant effluent and the daily recording of the plant pH values. Monthly effluent samples are collected by the County and analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and five (5) field parameters. County personnel collected effluent samples from the designated sampling port at the treatment plant on July 17, August 17, and September 25, 2017.

The daily pH values recorded by plant personnel ranged from 7.17 to 8.34 pH units, and the monthly analytical samples ranged from 7.47 to 7.99 pH units. These values are within the State of Florida Secondary Drinking Water Standard (SDWS), FAC Ch. 62-550.320 of 6.5 to 8.5 pH units. The monthly pH logs from the treatment plant are included within this submittal.

BOARD OF COUNTY COMMISSIONERS

Victor D. Crist Ken Hagan Al Higginbotham Pat Kemp Lesley "Les" Miller, Jr. Sandra L. Murman Stacy R. White

COUNTY ADMINISTRATOR
Michael S. Merrill
COUNTY ATTORNEY

Chip Fletcher
INTERNAL AUDITOR

Peggy Caskey

CHIEF DEVELOPMENT &
INFRASTRUCTURE SERVICES
ADMINISTRATOR

Lucia E. Garsys

Mr. Steve Morgan October 20, 2017 Page 2 of 2

All effluent samples collected were analyzed by our contract laboratory, Advanced Environmental Laboratories, Inc., and the complete results are provided for your technical review. Should you have any questions or comments concerning the information provided in this submittal, please feel free to contact me at (813) 663-3222.

Respectfully,

Michael D. Townsel

Senior Hydrologist

Public Utilities Department

Environmental Services

DSA/mdt

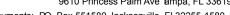
TSD\...\enviro\southeast\scanned reports-docs\Leachate plant\SELF2017-3rdQtrEffluent.pdf

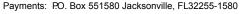
xc: Kimberly Byer, Solid Waste Division Director, Public Works Dept.
Larry Ruiz, GM III SCLF, Public Works, Dept.
Tom Gormley, Plant Operator SCLF, Public Works Dept.
Cindy Pelley, GM II SCLF, Public Works Dept.
Jeffry Greenwell, GMIII, Public Utilities
Joe Squitieri, Environmental Manager, Public Utilities
Ron Cope, Hillsborough County EPC

Month	JOLY 11		PH Calibra	ation Log		
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	1.00	7.00	10.01	7.61	7.78	
2						
3	3.99	7.01	10.03	7.52	7-93	8,17
4						
5	4.00	7.01	10.00	7.67	8.02	8.16
6	4.00	7.00	10.00	7-63	7.97	8.12
7	1	7.00	10.00	7.62	8.07	8.77
8	4.00	7.00	10.01	7.75	7,80	8.04
9						
10		7.00	10-00	7.71	7.88	2535
11	4.00	7.00	10.00	7.74	8-00	8.35 8.50
12		7.00	10.02	7.74	7.97	8.62
13	4.00	7.00	10.02	7.61	8.04	8.62
14	400	7.00	10.04	7.48	7.81	8.98
15		7:00	10.00	7.60	7.85	
16						
17	4.00	7.00	10.00	7.40	799	8.87
18	4.00	6.99	10.00	7.44	8.02	8.68
19		7-00	10.01	7.58	8.07	9.02
20	4.02	6.99	10.06	7.54	8.03	8.93
21	4.00	7.00	10.03	7.71	7.98	9.04
22	4.00	7.00	1001	7.53	7.73	8,98
23						
24	4.00	7.00	10.00	7.52	7.84	8.83
25	4.00	7.00	10.02	7.47	7.75	8.96
26	4.00	7.00	10.00	747	7.80	8.87
27	4.00	7,00	10.02	770	7.97	No Spray
28	4,00	7.00	10-00	7.56	7.87	8.45
29	4.00	6.99	10.00	7.60	7.69	8,47
30						
31	4.00	7.00	10.00	7.86	7.87	NoSPRAY

Month	AUG. 17					
Date 1	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
***		7.00	10.01	7.44	7.87	
2	 	7.00	10.00	7.32	7.99	8.10
3		7.00	10.00	7.60	7-70	7.9
4	1 0	7,00	10.00	7.30	7.86	8.10
5	Sept. Sept.	6,99	10,01	7.36	7.70	
6		7,00	10.01	7.42	7.72	
7		7.01	10-00	7.50	7.73	8.50
8		7.00	10.00	7.45	7.54	8.47
9		7.00	10.00	7.3 i	7.39	8,46
10		7.00	10.00	7.43	7.61	8.33
11	4.00	7.00	10.00	7.44	7.32	8.14
12	4.00	7.00	10.00	7.53	7.65	8.75
13			- mark			
14		7.00	10-00	7.44	7.80	8.30
15		6.99	10.00	7.39	7,81	2.23
16	· · · · · · · · · · · · · · · · · · ·	699	10.00	7.60	797	8.40
17	4.00	7.00	10.00	7.36	7.86	8.29
18		7,00	10.00	7,52	7.95	8.21
19	4.00	6,99	10.00	7.60	7.82	
20						
21	4.00	7.00	10.00	7.80	7.76	830
22	4.00	6.99	10.01	7.52	7.50	8.48
23	4.00	7.00	10.00	7.56	7.65	8.50
24	4.00	7.00	10.00	7.50	7.52	853
25	4.00	699	10.00	7.59	7.50	8.54
26	4.00	7.00	10,01	7.73	7.40	
27						
28	401	7.00	10.00	7.53	7.87	873
29	4,00	7,00	10.01	7.45	7.60	
30	13.01	7.04	10.02	7.59	7-69	
31	4.00	7.00	10.00	7.53	7.45	

SEPT 17 **PH Calibration Log** Month PH 4 Date PH 7 INF PH PH 10 EFF PH POND 7.56 4.00 7.00 10.01 7.53 4.00 2 7:04 7.43 7,49 10.01 4:00 7.00 3 7.27 7.54 10.00 7.01 4 4.01 122 834 10.01 4.00 7.00 10.00 7.31 8.35 5 4.00 7.00 7.23 6 10.00 7.58 8.14 7.18 7.48 4.00 7.00 7 10.00 811 8 4.00 6.99 10.00 7.34 9 10 11 4.00 12 7.00 10.00 7.33 7.43 4.00 6.99 7,03 10.00 13 4.00 14 10.00 7.00 7,07 7.33 7.05 4.01 7.28 8.00 10.00 15 4.01 7.00 7.71 7,23 10.00 16 7.00 7.70 4.00 7.35 17 10.01 4,00 10.00 7.34 18 7.00 7.67 400 7.00 7.00 19 10.00 4-00 20 10.00 725 7.64 7,00 4.00 7.00 10.00 7.29 7,56 21 4.01 6.97 7.18 7.53 10.06 22 4.00 7,06 7,60 19 23 10.01 4.01 7.00 24 10.01 7,58 4.00 10.00 7.23 25 7.00 4.00 10.01 7.00 7.37 7.21 26 7.00 4.00 7.35 794 27 10.00 7.00 4.00 7.32 28 10.00 4.00 7.53 7 00 10.00 29 7.44 4.00 7. 0<u>0</u> 7.69 30 0.01 -31







August 4, 2017

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

RE: Workorder: T1712024 SELF Plant Effluent

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, July 17, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

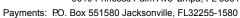
Sincerely,

Heidi Parker - Project Manager HParker@AELLab.com

Enclosures

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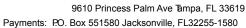
SAMPLE SUMMARY

Workorder: T1712024 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1712024001	Leachate	Water	7/17/2017 10:50	7/17/2017 13:30
T1712024002	Field Blank	Water	7/17/2017 10:38	7/17/2017 13:30

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ANALYTICAL RESULTS

Workorder: T1712024 SELF Plant Effluent

Date Received: 07/17/17 13:30 Lab ID: T1712024001 Matrix: Water

Leachate Date Collected: 07/17/17 10:50 Sample ID:

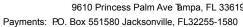
Sample Description: Location:

					Adjusted	Adjusted		
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Anal	ytical Me	thod: Field Me	asurements				
Conductivity	14393		umhos/cm	1			7/17/2017 10:50	
Dissolved Oxygen	3.28		mg/L	1			7/17/2017 10:50	
ORP-2580BW	147.6		mV	1			7/17/2017 10:50	
Temperature	34.38		°C	1			7/17/2017 10:50	
pH	7.99		SU	1			7/17/2017 10:50	
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Anal	ytical Me	thod: EPA 410	.4				
Chemical Oxygen Demand	4200		mg/L	5	250	120	7/25/2017 13:54	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	thod: SM 2540) C				
Total Dissolved Solids	7100		mg/L	1.25	12	12	7/19/2017 13:13	Т
Analysis Desc: TSS,SM2540D,Water	Anal	ytical Me	thod: SM 2540)D				
Total Suspended Solids	120		mg/L	10	10	10	7/21/2017 10:04	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Anal	ytical Me	ethod: SM 4500	NO3-F				
Nitrate	0.18	U	mg/L	1	0.20	0.18	7/18/2017 15:18	Т
Analysis Desc: BOD,SM5210B,Water	Anal	ytical Me	thod: SM 5210	В				
Biochemical Oxygen Demand	230		mg/L	1	2.0	2.0	7/17/2017 17:41	Т

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ANALYTICAL RESULTS

Workorder: T1712024 SELF Plant Effluent

Date Received: 07/17/17 13:30 Lab ID: T1712024002 Matrix: Water

Field Blank Date Collected: 07/17/17 10:38 Sample ID:

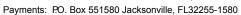
Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY	results	Quai	Office		1 &E	IVIDE	7 1101/200	
Analysis Desc: COD,E410.4,Water	Anal	ytical Me	ethod: EPA	A 410.4				
Chemical Oxygen Demand	24	U	mg/L	1	50	24	7/25/2017 13:54	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	ethod: SM	2540 C				
Total Dissolved Solids	12	U	mg/L	1.25	12	12	7/19/2017 13:13	Т
Analysis Desc: TSS,SM2540D,Water	Anal	ytical Me	ethod: SM	2540D				
Total Suspended Solids	0.50	U	mg/L	0.5	0.50	0.50	7/21/2017 10:04	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Anal	ytical Me	ethod: SM	4500NO3-F				
Nitrate	0.18	U	mg/L	1	0.20	0.18	7/18/2017 15:19	Т
Analysis Desc: BOD,SM5210B,Water	Anal	ytical Me	ethod: SM	5210B				
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	7/17/2017 17:44	Т

Report ID: 498426 - 979625 Page 4 of 11









ANALYTICAL RESULTS QUALIFIERS

Workorder: T1712024 SELF Plant Effluent

PARAMETER QUALIFIERS

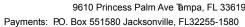
- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

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

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Environmental Laboratories, Inc.

Phone: (813)630-9616 Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1712024 SELF Plant Effluent

QC Batch: WCAt/9792 Analysis Method: SM 5210B

QC Batch Method: SM 5210B Prepared:

Associated Lab Samples: T1712024001, T1712024002

METHOD BLANK: 2411025

Blank Reporting Parameter Units Result Limit Qualifiers

WET CHEMISTRY

Biochemical Oxygen Demand 2.0 2.0 U mg/L

LABORATORY CONTROL SAMPLE: 2411026

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers WET CHEMISTRY Biochemical Oxygen mg/L 200 210 107 84.6-115.4 Demand

990

20

SM 4500NO3-F

3

SAMPLE DUPLICATE: 2411027 Original: T1711999002

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

Biochemical Oxygen

QC Batch:

1000 mg/L Demand

Analysis Method: QC Batch Method: SM 4500NO3-F Prepared:

Associated Lab Samples: T1712024001, T1712024002

WCAt/9798

METHOD BLANK: 2411095

Blank Reporting Limit Qualifiers Parameter Units Result

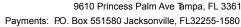
WET CHEMISTRY

Nitrate 0.18 0.18 U mg/L

Report ID: 498426 - 979625 Page 6 of 11









Total Dissolved Solids

Report ID: 498426 - 979625

mg/L

Phone: (813)630-9616 Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1712024 SELF Plant Effluent LABORATORY CONTROL SAMPLE: 2411096 Spike LCS LCS % Rec Units Conc. % Rec Limits Qualifiers Parameter Result WET CHEMISTRY Nitrate 1 0.99 99 90-110 mg/L MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2411097 Original: F1700433002 2411098 Spike MS MSD MS MSD Original % Rec Max Parameter Units Result Conc. Result Result % Rec % Rec Limit RPD RPD Qualifiers WET CHEMISTRY Nitrate mg/L 0.054 1 1.1 1.1 108 109 90-110 1 10 QC Batch: WCAt/9807 Analysis Method: SM 2540 C QC Batch Method: SM 2540 C Prepared: T1712024001, T1712024002 Associated Lab Samples: METHOD BLANK: 2411874 Blank Reporting Parameter Units Result Limit Qualifiers WET CHEMISTRY 10 U **Total Dissolved Solids** mg/L 10 LABORATORY CONTROL SAMPLE: 2411875 LCS LCS % Rec Spike Parameter Limits Qualifiers Units Conc. Result % Rec WET CHEMISTRY **Total Dissolved Solids** 660 550 83 75-125 mg/L SAMPLE DUPLICATE: 2411877 Original: T1711995001 DUP Original Max Parameter Units Result Result **RPD RPD Qualifiers** WET CHEMISTRY

CERTIFICATE OF ANALYSIS

57000

1

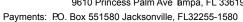
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56000

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QUALITY CONTROL DATA

Workorder: T1712024 SELF Plant Effluent

QC Batch: WCAt/9846 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Prepared:

T1712024001, T1712024002 Associated Lab Samples:

METHOD BLANK: 2414329

Blank Reporting Limit Qualifiers Parameter Units Result

WET CHEMISTRY

Total Suspended Solids 1.0 1.0 U mg/L

LABORATORY CONTROL SAMPLE: 2414330

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers WET CHEMISTRY

Total Suspended Solids mg/L 200 200 99 75-125

SAMPLE DUPLICATE: 2414332 Original: T1712021001

DUP Original Max Result RPD **RPD Qualifiers** Parameter Units Result

WET CHEMISTRY

140 Total Suspended Solids mg/L 150 8 10 QC Batch: WCAt/9905 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: T1712024001, T1712024002

METHOD BLANK: 2417274

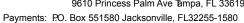
Blank Reporting Parameter Units Limit Qualifiers Result WET CHEMISTRY

Chemical Oxygen Demand 24 U mg/L 24

Report ID: 498426 - 979625 Page 8 of 11









QUALITY CONTROL DATA

Workorder: T1712024 SELF	Plant Efflo	uent										
LABORATORY CONTROL SA	AMPLE:	2417275										
Parameter	Units		oike onc.	LCS Result	_	.CS Rec	% Rec Limits C	Qualifiers				
WET CHEMISTRY Chemical Oxygen Demand	mg/L	,	500	480		96	90-110					
MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417277 2417278 Original: T1712007001												
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD (Qualifiers	
WET CHEMISTRY Chemical Oxygen Demand	mg/L	720	500	1300	1300	119	119	90-110	0	10 、	J4	
MATRIX SPIKE & MATRIX SI	PIKE DUF	PLICATE: 2417	281	2417	282	Orig	inal: T171	2024002				
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD (Qualifiers	
WET CHEMISTRY Chemical Oxygen Demand	mg/L	0	500	490	490	98	99	90-110	0	10		

QUALITY CONTROL DATA QUALIFIERS

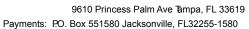
Workorder: T1712024 SELF Plant Effluent

QUALITY CONTROL PARAMETER QUALIFIERS

- U The compound was analyzed for but not detected.
- ı The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J4 **Estimated Result**

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1712024 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1712024001	Leachate			SM 5210B	WCAt/9792
T1712024002	Field Blank			SM 5210B	WCAt/9792
T1712024001	Leachate			SM 4500NO3-F	WCAt/9798
T1712024002	Field Blank			SM 4500NO3-F	WCAt/9798
T1712024001	Leachate			SM 2540 C	WCAt/9807
T1712024002	Field Blank			SM 2540 C	WCAt/9807
T1712024001	Leachate			SM 2540D	WCAt/9846
T1712024002	Field Blank			SM 2540D	WCAt/9846
T1712024001	Leachate			EPA 410.4	WCAt/9905
T1712024002	Field Blank			EPA 410.4	WCAt/9905
T1712024001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

Report ID: 498426 - 979625 Page 10 of 11







Advanced Environmental Laboratories, Inc. Vame: Hills, Co. Public Utilities Project Name	OFIES, INC.	□ Altamont □ Gainesvi □ Jackson □ Miramar: □ Tallahas: □ Tampa:	528 S. Northake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1594 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639 uthpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354 uday Way, Miramar, FL 33025 • 954.869.2283 • Fax 954.869.2281 far Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275 alm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327
vame: Hills, Co. Public Utilities	Project Name:	SELF Plant Effluent	TTLE E.E.a. PPE
s: 332 North Falkenburg Rd.	P.O. Number/Project N/A Number	a N/A	
oa, Florida 33619	Project Location:	Project Location: Southeast County Landfill	ED
(010) 660 0000		DEMARKS/SDECIAL INSTRUCTIONS:	

ώ k3	1 /	Relir	Form revised 09/19/2012	Received on Ice	Matrix Code: WW						0	SAMPLEID	Page: 1	um around Time: 🔀 S	iampled By: J.	Contact: Mic	AX: (813)	³ hone: (81:	「ampa, Flori	Address: 332	Sient Name:	
"	my co	Relinquished by:		DYes ONO E	WW = wastewater SW =				T	Lead	Co tight	SAMPI F	of:	STANDARD RUSH	FULLER/A.L	Michael Townse	3) 274-6801	813) 663-3222	Florida 33619	North Falkenburg	Hills, Co. Public Utilities	Environme
	7/17/17 1330	Date Time		Temp taken from sample	surface water		ł		Field Blank	Leachate Effluent	000000	DESCRIPTION			A.LAFON	31				nburg Rd.	olic Utilities	Environmental Laboratories, Inc.
1	1	(0.00			GW = ground water DW			+			Comp								Project Location:	P.O. Number/Project Number	Project Name:	ries, Inc.
	lect	Received by:	Device	Temp from blank	DW = drinking water 0 :				7/17/17 1038	7/17/17 1050	DATE TIME	SAMPLING						REMARKS/SPECIAL INSTRUCTIONS:	Southeast County Landfill	a N/A	SELF Plant Effluent	
	7/17/17	Date	Device used for measuring Temp by unique identifier (circle IR temp gun used)		= oil A = air S				10 8	WW O		MATRIX						STRUCTIONS:	nty Landfill		luent	□ Miramaı □ Tallahas □ Tampa:
	1330	Time	ing Temp by uni		SO = soil SL =							NO SER-	434		YSIS	2.0	FOI	LUID.	E0	B0'	TTLE	Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954,889,2285 • Fax 954,889,2281 Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850,219 6274 • Fax 855 Tampa: 9610 Princess Palm Ave. • Tampa, FL 33619 • 813,630,9616 • Fax 813,630,4327
Supplie	PV	70	que identifier (DWiner	SL = sludge	T	T		×	×	VA	TION	CC		I OI	3 1	LW	Oliv		T	ZE & YPE	oday Way, Min dar Center Dr Palm Ave. • Ta
Contact Person: Supplier of Water.	WS ID:	OR DRIN	circle IR temp	Mhere required, pH checked	Preservation Code:				×	×			вс	-								amar, FL 330 we, Tallahasi mpa, FL 336
		KING W	gun used)	H checked	on Code: 1	-			×	×			TS	-	_	_	_					19 + 813,630
		ATER US	J:9A G:17	Temper	ice H=(HCI)				×	×				rate	e							Wy - Jacksonville, Ft. 52/16 - 544, 350, 3500 - Fax 351 iriamar, Ft. 33025 - 954, 889, 2283 - Fax 954, 889, 2281 iriwe, Tallahassee, Ft. 32301 - 850, 219, 6274 - Fax 85 ampa, Ft. 33819 - 813,630, 9616 - Fax 813,630,4327
n north	Dinosa	FOR DRINKING WATER USE (when PWS Information not otherwise supplied)	G: LT-1 LT-2 (T: 104) A 3A	Temperature when received	I = ice H=(HCI) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)										_		_					Miramar: 10200 USA Today Way, Miramar, FL 33025 • 954,869,2288 • Fax 954,869,2281 Tallahassee: 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850,219,6274 • Fax 850,219,6275 Tampa: 9610 Princess Palm Ave. • Tampa, FL 33819 • 813,630,9616 • Fax 813,630,4327
		on not otherwise supplit	USA MITA SITV	b 5 (in degrees celcius)	O3) T = (Sodium Thio																	
		(d)		celcius)	sulfate)				202	8		LA	BOI	RA	TOF	RY	I.D	, NI	JM	BEI	₹	

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

SITE

SITE

NAME:	NAME: Southeast County Landfill - Plant Location: Lithia, Florida WELL NO: Leachate Effluent SAMPLE ID: Leachate Effluent DATE: 7/17/17												
WELL NO	: Leachat	te Efflue	nt	SAMPLE	ID: Lea	chate Et	fluent		DATE: 7/	17/17			
					PURC	SING DA			Y				
WELL	ER (inches): N/	TUBIN	IG ETER (inches)		L SCREEN	INTERVAL ft to N/A	STATIC			GE PUMP TYP			
1		i	,	ı			1 10 11/1	ER (feet): N/A WELL CAPACI		ailer: Val	ve		
(only fill o	ut if applicable)			N/A fee	t - N/A	Λ	v NI/A		NI/A				
EQUIPME	ENT VOLUME P	URGE: 1 EQ	= (UIPMENT VO				X N/A	gallons/foot UBING LENGTH)	= N//-N) + FLOW CEL	gallons L VOLUME			
(only fill o	ut if applicable)		=	N/A gallo	ns + (N /	A gallons/fo	oot X N/A	feet) + N	I/A gallons	= N/A g	jallons		
	UMP OR TUBIN I WELL (feet):	IG N/A		MP OR TUBINO I WELL (feet):	N/A	PURGIN INITIATE	IG ED AT: N/A	PURGING ENDED AT:	N/A	TOTAL VOLUI PURGED (gall	VIE ons): 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)		
1050	N/A	N/A	N/A	N/A	7.99	34.38	14393	3.28	N/A	BROWN	LEACHATE		
	_						- United the second						
WELLCA	PACITY (Gallon	s Per Foot\:	0.75" - 0.02	1" - 0.04:	4 25" - 0 06	6; 2 " = 0.1	a. 2" - 0.27.	4" = 0.65; !	5" = 1.02; 6	" = 1.47; 12	." = 5.88		
	NSIDE DIA. CAI				= 0.0014;	1/4" = 0.002	6; 5/16" = 0.	004; 3/8" = 0.			s" = 5.88 s" = 0.016		
PURGING	EQUIPMENT C	CODES: E	s = Bailer;	BP = Bladder P		SP = Electric LING DA	Submersible Pu	mp; PP = Pe	eristaltic Pump;	O = Othe	r (Specify)		
SAMPLED	BY (PRINT) / A	AFFILIATION:		SAMPLER(S)			NIA	SAMPLING		SAMPLING			
J.	FULLER	Z/A.L	AFON	Ä.	theyl	Ja		INITIATED AT	1050	ENDED AT:	1054		
PUMP OR	TUBING WELL (feet):	NA		TUBING MATERIAL CO	DDE: UN	/A		-FILTERED: Y on Equipment Typ	ne. N	FILTER SIZE	.: <u> </u>		
	CONTAMINATIO	ON: PUM	IP Y (<u> </u>	TUBING	Y N re	placed)	DUPLICATE:	Y	(N)			
SAM	PLE CONTAINE	ER SPECIFICA	ATION		SAMPLE PR	ESERVATIO	V	INTENDE ANALYSIS AN			AMPLE PUMP		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		OTAL VOL D IN FIELD (r	FINAL pH	METHO	_ Εωυ		FLOW RATE nL per minute)		
10 0002	GOTTINETTO	0001		0020	7,000	<i>- 114 1 1225 (1</i>							
REMARKS	SEE C.	O.C. FO	R SAMF	PLE ANA	LYSIS	OR	P: IOSI	0 (147.6	1				
MATERIA	L CODES:	AG = Amber	Glass; CG =	= Clear Glass;	PE = Polye			ene; S = Silicor		on; O = Othe	er (Specify)		
SAMPLING	G EQUIPMENT			eristaltic Pump; se Flow Peristalt	B = Baile ic Pump;		Bladder Pump; Method (Tubing		c Submersible O = Other (S				
NOTES: 1	The above	do not cons	titute all of	the informati	on require	d by Chant	er 62-160 E /						

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)

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

Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE					-	ITE						
NAME: S	Southeast	County	Landfill	- Plant	L	ocation: L	_ithia,	Flori	ida			
WELL NO	Field Bla	ank		SAMPL	EID: Fiel	d Blank				DATE: 7	117/17	7
					PUR	GING DA	TA					
WELL		TUBIN			LL SCREEN			TATIC D		1	RGE PUMP T	
DIAMETE	R (inches): N	/A diami	ETER (inches)			ft to N/A	1 1	O WATE	R (feet): N/A		bailer: N	/A
	LUME PURGE: ut if applicable)	1 WELL VO	DLUME = (TO	TAL WELL DE	PTH - STA	ATIC DEPTH	TO WATE	ER) X	WELL CAPAC	ITY		
(Only in ot	ат п аррпсавіс)		= (N/A f	eet - 1	V/A	feet) X	1	V/A ga	allons/foot :	= N/A	gallons
	NT VOLUME P	URGE: 1 EQ	UIPMENT VO				ITY X	⟨ TU	JBING LENGTH) + FLOW CE	ELL VOLUME	
(only fill ou	ut if applicable)			_ N/A		Ν/Δ		~ N	V/A feet) +	NI/A	gallons = N	V/A gallons
INITIAL PI	UMP OR TUBIN	IG	FINAL PL	MP OR TUBIN		PURGIN			PURGING	1417	TOTAL VO	
	WELL (feet):	N/A		WELL (feet):	B 1 / A	1	ED AT: N	V/A	ENDED AT:	N/A	PURGED (gallons): N/A
		CUMUL.		DEPTH			CON	T	DISSOLVED		<u>' </u>	<u> </u>
TIME	VOLUME PURGED	VOLUME		ТО	pH (standard	TEMP.	(circle	units)	OXYGEN (circle units)	TURBIDIT		
	(gallons)	PURGED (gallons)	RATE (gpm)	WATER (feet)	units)	(°C)	μmhos or μS		mg/L <u>or</u> % saturation	(NTUs)	(descri	be) (describe)
									76 Saturation			
										-		
		-	1									
			-		V	\						
		 	-		CY'	1				\leftarrow		
		 /		+	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Dura	-			1		
1		/			1-/BL	+ "	\			1		
<u> </u>		{			-	A .	1					/
	\		-		/	AL				1		_/
	\ 		+			7/17/17					\	
						-						
MELLOA	PACITY (Gallon	Dor Footh:	0.75" - 0.00:	4" = 0.04:	4 25" - 0.0	06: 2" - 0.1	6: 2" -	- 0 27:	4" = 0.65;	5" = 1.02;	6" = 1.47;	12" = 5.88
	VSIDE DIA. CAI							- 0.37, 16" = 0.0			" = 0.010;	5/8" = 0.016
PURGING	EQUIPMENT C	ODES: I	3 = Bailer;	BP = Bladder		SP = Electric		ible Pum	np; PP = Pe	eristaltic Pum	np; O = C	other (Specify)
						LING DA	ATA		T			
	BY (PRINT) / A			SAMPLER(S	SIGNATUR	E(S):			SAMPLING INITIATED AT	1038	SAMPLIN	IG AT: 1042
PUMP OR	FULLER	JH.U	HON	TUBING	wy	16	-					
	WELL (feet):	N/A		MATERIAL C	ODE: N/A	4			FILTERED: Y		FILTERS	SIZE: μm
	CONTAMINATION		MP X 			¥ N (n	eplaced)	**	DUPLICATE:	Υ	(N)	
	PLE CONTAINE			-		RESERVATIO			INTENDE	T	SAMPLING	SAMPLE PUMP
SAMPLE	#	MATERIAL		PRESERVAT		TOTAL VOL		INAL	ANALYSIS AI	ND/OR E	QUIPMENT	FLOW RATE
ID CODE	CONTAINERS	CODE	VOLUME	USED	ADDE	D IN FIELD (mL)	рН	METHO	D	CODE	(mL per minute)
	· · · · · · · · · · · · · · · · · · ·											
REMARKS	SEE C.	O.C. FC	R SAMI	PLE ANA	LYSIS			FIF	LD BLA	NK		
MATERIAL	CODES	AG - Ambar	Glass: CC	= Clear Glass;	DE - Dal	yethylene;		-	ene; S = Silico		oflon: O = C	Other (Specify)
	G EQUIPMENT	AG = Amber		eristaltic Pump;			Bladder F		ESP = Electri			other (opecity)
O'MINIT LINK	CEGON MICHAI			se Flow Perista					Gravity Drain);	O = Other		

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

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)

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





Queue: WCAt

Batch Number: 9905

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 410.4

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 recoveries of COD for T1712007001 were outside control criteria due to

the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected sample is qualified to indicate matrix interference. MS recovery was 118.8% and MSD recovery was 118.6%,

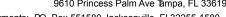
acceptable recoveries are 90-110%.

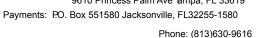
E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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





Fax: (813)630-4327



September 12, 2017

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

RE: Workorder: T1714149 SELF Plant Effluent

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, August 17, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these

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

Sincerely,

Heidi Parker - Project Manager

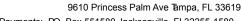
HParker@AELLab.com

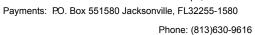
Enclosures

Report ID: 504670 - 1157170 Page 1 of 12



Fax: (813)630-4327







SAMPLE SUMMARY

Workorder: T1714149 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1714149001	Leachate	Water	8/17/2017 10:48	8/17/2017 12:15
T1714149002	Field Blank	Water	8/17/2017 10:40	8/17/2017 12:15

Report ID: 504670 - 1157170 Page 2 of 12



Payments: P.O. Box 551580 Jacksonville, FL32255-1580

Phone: (813)630-9616 Fax: (813)630-4327



ANALYTICAL RESULTS

Workorder: T1714149 SELF Plant Effluent

Date Received: 08/17/17 12:15 Lab ID: T1714149001 Matrix: Water

Leachate Date Collected: 08/17/17 10:48 Sample ID:

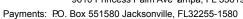
Location: Sample Description:

					Adjusted	Adjusted		
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Anal	ytical Me	ethod: Field Me	asurements				
Conductivity	14781		umhos/cm	1			8/17/2017 10:48	
Dissolved Oxygen	0.23		mg/L	1			8/17/2017 10:48	
ORP-2580BW	-31		mV	1			8/17/2017 10:48	
Temperature	34.21		°C	1			8/17/2017 10:48	
рН	7.7		SU	1			8/17/2017 10:48	
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Anal	ytical Me	ethod: EPA 410).4				
Chemical Oxygen Demand	780		mg/L	1	50	24	8/22/2017 16:51	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	ethod: SM 2540	C				
Total Dissolved Solids	7100		mg/L	1.25	12	12	8/22/2017 13:32	Т
Analysis Desc: TSS,SM2540D,Water	Anal	ytical Me	ethod: SM 2540)D				
Total Suspended Solids	200		mg/L	10	10	10	8/24/2017 10:01	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Anal	ytical Me	ethod: SM 4500	NO3-F				
Nitrate	0.18	U	mg/L	1	0.20	0.18	8/18/2017 11:22	Т
Analysis Desc: BOD,SM5210B,Water	Anal	ytical Me	ethod: SM 5210)B				
Biochemical Oxygen Demand	280		mg/L	1	2.0	2.0	8/18/2017 12:34	Т

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ANALYTICAL RESULTS

Workorder: T1714149 SELF Plant Effluent

Date Received: 08/17/17 12:15 Lab ID: T1714149002 Matrix: Water

Sample ID: Field Blank Date Collected: 08/17/17 10:40

Sample Description: Location:

					Adjusted	Adjusted		
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Anal	ytical Me	ethod: EPA	410.4				
Chemical Oxygen Demand	24	U	mg/L	1	50	24	8/22/2017 16:51	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	ethod: SM	2540 C				
Total Dissolved Solids	12	U	mg/L	1.25	12	12	8/22/2017 13:32	Т
Analysis Desc: TSS,SM2540D,Water	Anal	ytical Me	ethod: SM	2540D				
Total Suspended Solids	0.50	U	mg/L	0.5	0.50	0.50	8/24/2017 10:01	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Anal	ytical Me	ethod: SM	4500NO3-F				
Nitrate	0.18	U	mg/L	1	0.20	0.18	8/18/2017 11:03	Т
Analysis Desc: BOD,SM5210B,Water	Anal	ytical Me	ethod: SM	5210B				
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	8/18/2017 12:50	Т

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Payments: P.O. Box 551580 Jacksonville, FL32255-1580

Phone: (813)630-9616 Fax: (813)630-4327



ANALYTICAL RESULTS QUALIFIERS

Workorder: T1714149 SELF Plant Effluent

PARAMETER QUALIFIERS

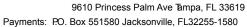
- J The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: T1714149 SELF Plant Effluent

QC Batch: WCAt/10370 Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F Prepared:

Associated Lab Samples: T1714149002

METHOD BLANK: 2440352

Blank Reporting Parameter Units Result Limit Qualifiers

WET CHEMISTRY

Nitrate 0.18 0.18 U mg/L

LABORATORY CONTROL SAMPLE: 2440353

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers

WET CHEMISTRY

Nitrate 1 1.0 105 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2441312 Original: T1714074001 2441313

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

Nitrate mg/L 0.085 1 1 1 10 110 104 90-110 5 10

QC Batch: WCAt/10385 Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F Prepared:

T1714149001 Associated Lab Samples:

METHOD BLANK: 2441314

Blank Reporting

Parameter Units Result Limit Qualifiers

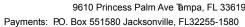
WET CHEMISTRY

Nitrate mg/L 0.18 0.18 U

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Environmental Laboratories, Inc.

Phone: (813)630-9616 Fax: (813)630-4327

QUALITY CONTROL DATA

vvorkoraer:	11/1	4149	SELF	Plant	Eπiuent	

LABORATORY CONTROL SAMPLE: 2441315

Spike LCS LCS % Rec Units Conc. Result % Rec Limits Qualifiers Parameter

WET CHEMISTRY

Nitrate 1 1.0 102 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2441316 Original: T1714133001 2441317

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

WET CHEMISTRY

Nitrate mg/L 2.6 1 3.7 3.6 106 102 90-110 1 10

QC Batch: WCAt/10404 Analysis Method: SM 5210B

QC Batch Method: SM 5210B Prepared:

T1714149001, T1714149002 Associated Lab Samples:

METHOD BLANK: 2442275

Blank Reporting Parameter Units Result

Limit Qualifiers

WET CHEMISTRY

2.0 U Biochemical Oxygen Demand mg/L 2.0

LABORATORY CONTROL SAMPLE: 2442276

% Rec Spike LCS LCS Parameter Limits Qualifiers Units Conc. Result % Rec WET CHEMISTRY Biochemical Oxygen 200 190 96 84.6-115.4 mg/L

Demand

Original: T1714149001 SAMPLE DUPLICATE: 2442277

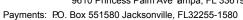
Original DUP Max

RPD Qualifiers **RPD** Parameter Units Result Result

WET CHEMISTRY

Report ID: 504670 - 1157170 Page 7 of 12







QUALITY CONTROL DATA

Workorder: T1714149 SELF Plant Effluent

SAMPLE DUPLICATE: 2442277 Original: T1714149001

Original DUP Max Parameter Result Result **RPD RPD Qualifiers** Units

Biochemical Oxygen 280 290 2 20 mg/L Demand

QC Batch: WCAt/10449 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T1714149001, T1714149002

METHOD BLANK: 2444220

Blank Reporting Parameter Units Result Limit Qualifiers

WET CHEMISTRY

Total Dissolved Solids mg/L 10 10 U

LABORATORY CONTROL SAMPLE: 2444221

Spike LCS LCS % Rec Units Parameter Conc. Result % Rec Limits Qualifiers WET CHEMISTRY

660 620 **Total Dissolved Solids** mg/L 94 75-125

SAMPLE DUPLICATE: 2444222 Original: T1714043001

Original DUP Max Parameter Units Result Result **RPD RPD Qualifiers**

WET CHEMISTRY **Total Dissolved Solids** mg/L 190 180 1 5

SAMPLE DUPLICATE: 2444223 Original: T1714166001

Original DUP Max Parameter Units Result Result **RPD RPD Qualifiers**

WET CHEMISTRY

Total Dissolved Solids 850 840 1 5 mg/L

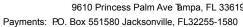
QC Batch: WCAt/10464 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

T1714149001, T1714149002 Associated Lab Samples:

Report ID: 504670 - 1157170 Page 8 of 12







QUALITY CONTROL DATA

METHOD BLANK: 2444698											
_			Blank	Reporting							
Parameter	Units	F	Result	Limit	Qualifiers						
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L		24	24	U						
LABORATORY CONTROL S	AMPLE: 2	444699									
		Sı	oike	LCS	L	CS	% Rec				
Parameter	Units		onc.	Result	% F		Limits C	ualifiers			
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L		500	480		96	90-110				
MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 2444	1701	2444	702	Origi	nal: T171:	3479001			
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
	mg/L	55	500	550	550	98	99	90-110	1	10	
WET CHEMISTRY Chemical Oxygen Demand MATRIX SPIKE & MATRIX S				550 2444			99 nal: T171		1	10	
Chemical Oxygen Demand		ICATE: 2444	1705						1	10 Max	
Chemical Oxygen Demand				2444	706	Origi	nal: T171	4149002 % Rec		Max	Qualifiers
Chemical Oxygen Demand MATRIX SPIKE & MATRIX S Parameter WET CHEMISTRY	PIKE DUPL Units	ICATE: 2444 Original Result	Spike Conc.	2444 MS Result	706 MSD Result	Origi MS % Rec	nal: T1714 MSD % Rec	4149002 % Rec Limit	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 2444 Original	1705 Spike	2444 ⁻ MS	706 MSD	Origi MS	nal: T171	4149002 % Rec		Max	Qualifiers
Chemical Oxygen Demand MATRIX SPIKE & MATRIX S Parameter WET CHEMISTRY Chemical Oxygen Demand	PIKE DUPL Units mg/L	ICATE: 2444 Original Result	Spike Conc.	2444 MS Result	MSD Result	Origi MS % Rec	nal: T171 MSD % Rec	4149002 % Rec Limit	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand MATRIX SPIKE & MATRIX S Parameter WET CHEMISTRY Chemical Oxygen Demand	PIKE DUPL Units mg/L	ICATE: 2444 Original Result	Spike Conc.	2444 MS Result	MSD Result	Origi MS % Rec	nal: T171 MSD % Rec	4149002 % Rec Limit	RPD	Max RPD	Qualifiers

Report ID: 504670 - 1157170 Page 9 of 12

0.50 U

Limit Qualifiers

Reporting

Blank

Result

0.50

Units

mg/L

Parameter

WET CHEMISTRY **Total Suspended Solids**

CERTIFICATE OF ANALYSIS

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Phone: (813)630-9616

Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1714149 SELF Plant Effluent

- Volkoldel. 11714149 OLL						
LABORATORY CONTROL	SAMPLE: 244	6381				
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers	
WET CHEMISTRY Total Suspended Solids	mg/L	200	190	96	75-125	
SAMPLE DUPLICATE: 24	46382		Original: T171	4133002		
Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers	
WET CHEMISTRY Total Suspended Solids	mg/L	3600	3700	2	10	
SAMPLE DUPLICATE: 24	46383		Original: T171	4193002		
Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers	
WET CHEMISTRY Total Suspended Solids	mg/L	2000	2000	3	10	

Report ID: 504670 - 1157170 Page 10 of 12





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1714149 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1714149002	Field Blank			SM 4500NO3-F	WCAt/10370
T1714149001	Leachate			SM 4500NO3-F	WCAt/10385
T1714149001	Leachate			SM 5210B	WCAt/10404
T1714149002	Field Blank			SM 5210B	WCAt/10404
T1714149001	Leachate			SM 2540 C	WCAt/10449
T1714149002	Field Blank			SM 2540 C	WCAt/10449
T1714149001	Leachate			EPA 410.4	WCAt/10464
T1714149002	Field Blank			EPA 410.4	WCAt/10464
T1714149001	Leachate			SM 2540D	WCAt/10497
T1714149002	Field Blank			SM 2540D	WCAt/10497
T1714149001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

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Device used for measuring Temp by unique identifier (circle IR temp gun used) J. 9A. G. LT-1 LT/2 T. 30A. A. 3A. M. 1A. S. 1V Date Time FOR DRINKING WATER USE (when PWS Information not otherwise supplied)
mp by unique iden
. □ Where
SO = soil SL = sludge
<u> </u>
×
×
PRESER- VATION
AN.
ALY
/SIS
S RE
EQU
JIRI
ED
BOT SIZ TY
TLE E & PE

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

NAME S	outheast	County	Landfill -	· Plant		LOC	: ation: L	ithia.	Flor	ida				
	Leachate						nate Eff				DATE:	8/17	/17	
							NG DA							
WELL DIAMETER	t (inches): N/A	TUBIN A DIAME	G TER (inches):	I	WELL SCF	REEN IN		S	TATIC [DEPTH ER (feet): N/A	1		E PUMP TYPILER: Va	_
	UME PURGE: if applicable)	1 WELL VO								WELL CAPACI	TY			
ÉOLIPMEN	IT VOLUME PU	IRGE: 1 FO	= (= PUMP	feet –	N/A - (TUBIN	feet)	X TY >	N/A	gallons/foot : UBING LENGTH)	= IN/ + FLOW	V CELL	gallons VOLUME	
	if applicable)						gallons/fo		N/A	•				gallons
l .	MP OR TUBIN WELL (feet):	G N/A	FINAL PUI DEPTH IN	MP OR TUE WELL (fee		/A	PURGING INITIATE	G DAT: √	N/A	PURGING ENDED AT:	N/	A T	OTAL VOLU URGED (ga	ME (lons): N/A
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPT TO WATE (feet)	R (stan	ts)	TEMP. (°C)	CON circle) µmho or (us	units) s/cm 5/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	(NT	·	COLOR (describe	ODOR (describe)
1048	NIA	N/A	N/A	N/F	1 7	70 3	4.21	147	81	0.23	N	<u> </u>	BROW	N NASTY
ļ														
	A/ 8/17/17													
	AL 8/17/17													
				-								No. of Concession, Name of Street, or other Designation, or other		
WELL CAP	ACITY (Gallon SIDE DIA. CAF	L s Per Foot): PACITY (Gal./	0.75" = 0.02; (Ft.): 1/8" = 0	1" = 0.04 .0006; 3		= 0.06; 014; 1		6; 3"	= 0.37; 16" = 0.] 5" = 1.02 .006;			2" = 5.88 8" = 0.016
PURGING I	EQUIPMENT C	ODES: E	3 = Bailer;	BP = Blado			= Electric :		sible Pu	mp; PP = Pe	eristaltic I	Pump;	O = Oth	er (Specify)
044451.55	DV (DDINT) (A	EFILIATION:		CAMPLE	SA R(S) SIGNA		ING DA	<u>TA</u>						
J. 1	BY (PRINT) / A FULLER ,				AND					SAMPLING INITIATED AT			SAMPLING ENDED AT	
PUMP OR T	TUBING WELL (feet):			TUBING MATERIA		N/				-FILTERED: Y on Equipment Typ	pe:			E:μm
	ONTAMINATIO		-	ני	TUB			placed)		DUPLICATE:	Y	T	<u>N)</u>	
SAMPLE	LE CONTAINE # CONTAINERS	MATERIAL CODE	ATION VOLUME	PRESERV USE	VATIVE	TO	SERVATIOI TAL VOL IN FIELD (n		FINAL	ANALYSIS AN	ND/OR	EQUI	PMENT	SAMPLE PUMP FLOW RATE (mL per minute)
ID CODE	CONTAINERS	CODE		USE	ر د.	ADDED	114 1 ILLU (II	··-/	pH					
REMARKS:	SEE C.	O.C. FC	R SAME	PLE AI	VALYS	SIS	ORP	: 10	48	(-31.0)				
MATERIAL	CODES:	AG = Amber	Glass; CG	= Clear Gla	ss; PE	= Polyet	hylene;	PP = Po	lypropy	lene; S = Silico	ne; T	= Teflor	n; O = Oth	ner (Specify)
	EQUIPMENT	I	APP = After Pe RFPP = Rever	se Flow Per	istaltic Pun		M = Straw I		(Tubing	ESP = Electri Gravity Drain);		ersible P Other (Sp		

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)

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)

Form FD 9000-24 GROUNDWATER SAMPLING LOG

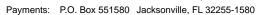
SITE					1 -	ITE							
NAME: S	outheast	County	Landfill	- Plant	Lo	OCATION: L	₋ithia,	Flor	ida				
WELL NO:	Field Bla	ank		SAMPLE	ID: Field	d Blank				DATE:	8/17	117	
					PUR	GING DA	TA						
WELL		TUBIN		1	L SCREEN		i i	ATIC E		1		PUMP T	
DIAMETER	(inches): N	/A DIAMI	ETER (inches):	1 411 7		ft to N/A	, , ,	WATE	R (feet): N/A		OR BAI	LER: N	<u>/A</u>
	.UME PURGE: t if applicable)	1 WELL VO	DLUME = (10	TAL WELL DEP	TH - STA	ATIC DEPTH	IO WATE	.R) X	WELL CAPACI	ΙY			
			= (1/A 1	eet) X		N/A ga	illons/foc		N/A	gallons
	NT VOLUME P if applicable)	URGE: 1 EQ	UIPMENT VO	= PUMP VOL	UME + (TUE	BING CAPAC	ITY X	Tl	JBING LENGTH)	+ FLOV	V CELL V	VOLUME	
(Omy mi out	· ii applicable)			= N/A d	allons + (N/A gallo	ons/foot	х	N/A feet) +	N/A	aallo	ns = N	I/A gallons
INITIAL PU	MP OR TUBIN		1	MP OR TUBING	;	PURGIN	IG	**************************************	PURGING		TO	OTAL VOI	UME
DEPTH IN	WELL (feet):	N/A	DEPTH IN	WELL (feet):	N/A	INITIATI	ED AT: N	I/A	ENDED AT:	N/A	PI	URGED (gallons): N/A
	VOLUME	CUMUL.	PURGE	DEPTH	pН		CON		DISSOLVED OXYGEN				_
TIME	PURGED	VOLUME PURGED		TO WATER	(standard	TEMP. (°C)	(circle u µmhos	′ 1	(circle units)		BIDITY 'Us)	COLO (descrit	
	(galions)	(gallons)	(gpm)	(feet)	units)		<u>or</u> μS/		mg/L <u>or</u> % saturation	`	,	,	, (
(
						,			/				
				\		14			\				
1			7	21		1/2							
1		/			87								
South States													
					\ AL	8/17/17							
	1												
				1" = 0.04; .0006; 3/16"				: 0.37; 6" = 0.0		5" = 1.02 006:	2; 6" = 1/2" = 0	= 1.47;).010:	12" = 5.88 5/8" = 0.016
	EQUIPMENT C			BP = Bladder P		SP = Electric							ther (Specify)
						LING DA	ATA		,				
	BY (PRINT) / A			SAMPLER(S)					SAMPLING	106		SAMPLIN	
PUMP OR T	FLLE	R/A.L	AFON	TUBING	they.	Li			INITIATED AT			ENDED A	
I	NELL (feet):	N/A		MATERIAL CO	DE NA				FILTERED: Y on Equipment Typ		I	FILTER S	IZE: μm
	ONTAMINATION		//P Y			Y N (re			DUPLICATE:			N)	***************************************
	LE CONTAINE					RESERVATIO			INTENDE			PLING	SAMPLE PUM
SAMPLE	#	MATERIAL		PRESERVATI		OTAL VOL		INAL	ANALYSIS AN	ID/OR	EQUIF	PMENT	FLOW RATE
ID CODE	CONTAINERS	CODE	VOLUME	USED		D IN FIELD (I		рН	METHO)	CC	DE	(mL per minut
													THE PARTY OF THE P
						N-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1							
						-				-	***		****
	<u> </u>		D 0 4 8 5		l Voic						***************************************		
REMARKS:	SEE C.	U.C. FO	K SAMF	PLE ANA	LYSIS	FIE	ELD	BLA	NK				
MATERIAL	CODES:	AG = Amber	Glass; CG =	Clear Glass;	PE = Poly	ethylene;	PP = Poly	/propyle	ene; S = Silico	ne; T =	= Teflon;	O = 0	ther (Specify)
SAMPLING	EQUIPMENT		APP = After Pe		B = Bail	er; BP =	Bladder P	ump:	ESP = Electric	Subme	rsible Pu	ump;	
1		F	RFPP = Revers	e Flow Peristalt	ic Pump;	SM = Straw	Method (T	Fubing (Gravity Drain);	0 = 0	ther (Spe	ecify)	

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

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)

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







October 16, 2017

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

RE: Workorder: T1716246 SELF Plant Effluent

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, September 25, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these

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

Sincerely,

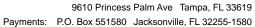
Heidi Parker - Project Manager

HParker@AELLab.com

Enclosures

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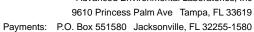
SAMPLE SUMMARY

Workorder: T1716246 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1716246001	Leachate	Water	9/25/2017 09:57	9/25/2017 11:14
T1716246002	Field Blank	Water	9/25/2017 09:50	9/25/2017 11:14

Report ID: 510834 - 1335514 Page 2 of 11







ANALYTICAL RESULTS

Workorder: T1716246 SELF Plant Effluent

Date Received: 09/25/17 11:14 Lab ID: T1716246001 Matrix: Water

Leachate Date Collected: 09/25/17 09:57 Sample ID:

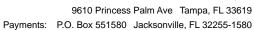
Sample Description: Location:

					Adjusted	Adjusted		
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab ———
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analy	tical Me	thod: Field Me	asurements				
Conductivity Dissolved Oxygen ORP-2580BW Temperature pH	10499 5.67 180.3 29.69 7.47		umhos/cm mg/L mV °C SU	1 1 1 1			9/25/174 09:57 9/25/174 09:57 9/25/174 09:57 9/25/174 09:57 9/25/174 09:57	
WET CHEMISTRY	Anah	tical Ma	sthad, EDA 440	4				
Analysis Desc: COD,E410.4,Water		/lical ivie	thod: EPA 410					
Chemical Oxygen Demand	880		mg/L	10	500	240	10/2/2017 14:58	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Analy	tical Me	ethod: SM 2540) C				
Total Dissolved Solids	5900		mg/L	1	10	10	9/26/2017 09:06	Т
Analysis Desc: TSS,SM2540D,Water	Analy	tical Me	thod: SM 2540)D				
Total Suspended Solids	12		mg/L	2	2.0	2.0	9/26/2017 09:06	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Analy	/tical Me	ethod: SM 4500	NO3-F				
Nitrate	120		mg/L	20	4.0	3.5	9/26/2017 10:22	Т
Analysis Desc: BOD,SM5210B,Water	Analy	tical Me	thod: SM 5210)B				
Biochemical Oxygen Demand	4.0		mg/L	1	2.0	2.0	9/26/2017 17:35	Т

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ANALYTICAL RESULTS

Workorder: T1716246 SELF Plant Effluent

Date Received: 09/25/17 11:14 Lab ID: T1716246002 Matrix: Water

Field Blank Date Collected: 09/25/17 09:50 Sample ID:

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
- raidifieters	Nesuits	Quai	UTILIS		FQL	IVIDL	Analyzeu	
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Anal	ytical Me	ethod: EP	A 410.4				
Chemical Oxygen Demand	24	U	mg/L	1	50	24	10/2/2017 14:58	Т
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	ethod: SM	2540 C				
Total Dissolved Solids	10	U	mg/L	1	10	10	9/26/2017 09:06	Т
Analysis Desc: TSS,SM2540D,Water	Anal	ytical Me	ethod: SM	2540D				
Total Suspended Solids	0.50	U	mg/L	0.5	0.50	0.50	9/26/2017 09:06	Т
Analysis Desc: Nitrate, Nitrite SM4500NO3F, Water	Anal	ytical Me	ethod: SM	4500NO3-F				
Nitrate	0.18	U	mg/L	1	0.20	0.18	9/26/2017 10:23	Т
Analysis Desc: BOD,SM5210B,Water	Anal	ytical Me	ethod: SM	5210B				
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	9/26/2017 17:38	Т

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1716246 SELF Plant Effluent

PARAMETER QUALIFIERS

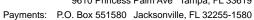
- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: T1716246 SELF Plant Effluent

QC Batch: WCAt/11040 Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F Prepared:

Associated Lab Samples: T1716246001, T1716246002

METHOD BLANK: 2476421

Blank Reporting Parameter Units Result Limit Qualifiers

WET CHEMISTRY

Nitrate 0.18 0.18 U mg/L

LABORATORY CONTROL SAMPLE: 2476422

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers WET CHEMISTRY

Nitrate 1 1.0 101 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2476423 2476424 Original: T1716235001

Original Spike MS MSD MS MSD % Rec Max Limit RPD RPD Qualifiers Parameter Units Result Conc. Result Result % Rec % Rec WET CHEMISTRY Nitrate mg/L 0 1 0.93 0.91 93 91 90-110 2 10

QC Batch: WCAt/11047 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Prepared:

T1716246001, T1716246002 Associated Lab Samples:

METHOD BLANK: 2476482

Blank Reporting Parameter Units Result Limit Qualifiers WET CHEMISTRY **Total Suspended Solids** mg/L 0.50 0.50 U

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QUALITY CONTROL DATA

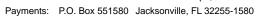
LABORATORY CONTROL	SAMPLE: 2476	483			
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	200	180	92	75-125
SAMPLE DUPLICATE: 24	76484		Original: T171	6209003	
Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
	mg/L At/11050 2540 C	4200	4000 Analysis Meth Prepared:	5 nod: \$	10 SM 2540 C
Associated Lab Samples:	T1716246001,	T1716246002	i roparcu.		
METHOD BLANK: 247650	2				
Parameter	Units	Reporting Limit Qu			
WET CHEMISTRY Total Dissolved Solids	mg/L	10	10 U		
LABORATORY CONTROL	SAMPLE: 2476	503			
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	660	580	88	75-125
SAMPLE DUPLICATE: 24		Original: T171	6246002		
Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	10U	10	0	5

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CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA

Workorder: T1716246 SELF Plant Effluent

QC Batch: WCAt/11073 Analysis Method: SM 5210B

QC Batch Method: SM 5210B Prepared:

Associated Lab Samples: T1716246001, T1716246002

METHOD BLANK: 2477685

Blank Reporting

Parameter Units Result Limit Qualifiers

WET CHEMISTRY

Biochemical Oxygen Demand 2.0 2.0 U mg/L

LABORATORY CONTROL SAMPLE: 2477686

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers WET CHEMISTRY

Biochemical Oxygen mg/L 200 230 115 84.6-115.4 Demand

SAMPLE DUPLICATE: 2477687 Original: T1716328001

DUP Original Max RPD **RPD** Qualifiers Parameter Units Result Result

WET CHEMISTRY

Biochemical Oxygen 3000 20 2900 3 mg/L

Demand

QC Batch: WCAt/11161 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: T1716246001, T1716246002

METHOD BLANK: 2484437

Blank Reporting Limit Qualifiers Parameter Units Result

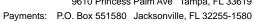
WET CHEMISTRY

Chemical Oxygen Demand 24 24 U mg/L

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QUALITY CONTROL DATA

Workorder: T1716246 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2484438

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers

WET CHEMISTRY

Chemical Oxygen Demand

Chemical Oxygen Demand mg/L 500 480 96 90-110

7

mg/L

500

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2484440 Original: S1701481007 2484441 Original Spike MS MSD MS MSD % Rec Max % Rec Parameter Units Result Conc. Result Result % Rec Limit RPD RPD Qualifiers WET CHEMISTRY

490

98

98

90-110

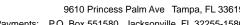
0 10

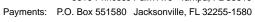
490

Report ID: 510834 - 1335514 Page 9 of 11











QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1716246 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1716246001	Leachate			SM 4500NO3-F	WCAt/11040
T1716246002	Field Blank			SM 4500NO3-F	WCAt/11040
T1716246001	Leachate			SM 2540D	WCAt/11047
T1716246002	Field Blank			SM 2540D	WCAt/11047
T1716246001	Leachate			SM 2540 C	WCAt/11050
T1716246002	Field Blank			SM 2540 C	WCAt/11050
T1716246001	Leachate			SM 5210B	WCAt/11073
T1716246002	Field Blank			SM 5210B	WCAt/11073
T1716246001	Leachate			EPA 410.4	WCAt/11161
T1716246002	Field Blank			EPA 410.4	WCAt/11161
T1716246001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

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Coloren Name: Hills, Co. Public Utilities Self-Bank Effloant England Coloren Name:	Contact Person:
Itemes: Hills. Co. Public Utilities Poject Name: SELF Plant Effluent	Come
Iteme: Hills. Co. Public Utilities Priget Name: SELF Plant Effluent By S	Community Comm
Items: Hills. Co. Public Utilities Project Name: SELF Plant Effluent Email of the project Name: Self-Plant Effluent Email of the project Name: Southeast County Landfill	GW= ground water DW=drinking water O=oil A=air SO=soil SL=sludge Preservation Code:
Items: Hills, Co. Public Utilities Pages Name: SELF Plant Effluent Items: SELF Plant Effluent Items: Self Plant Effluent Items: Southeast County Landfill Items: Southeast County L	Slank 9/26/07 5 X X X X X X X X X
Items Hills, Co. Public Utilities Project Name SELF Plant Effluent Self Plant	
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Iame: Hills. Co. Public Utilities Project Name: SELF Plant Effluent S: 332 North Falkenburg Rd. Po. Number/Project N/A Ia, Florida 33619 Project Location: Southeast County Landfill (813) 663-3222 REMARKS/SPECIAL INSTRUCTIONS: (813) 274-6801 It: Michael Townsel STANDARD □ RUSH A Time: □ STANDARD □ RUSH A Time: □ STANDARD □ RUSH A Time: □ SELF Plant Effluent □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Constitution of the state of th
Iame: Hills. Co. Public Utilities Project Name: SELF Plant Effluent S: 332 North Falkenburg Rd. P.O. Number/Project N/A Ia, Florida 33619 Project Location: Southeast County Landfill (813) 663-3222 REMARKS/SPECIAL INSTRUCTIONS: (813) 274-6801 It: Michael Townsel S: Michael Townsel S: Michael Townsel	DD DD DS
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lame: Hills. Co. Public Utilities Project Name: SELF Plant Effluent Effluen	S RI
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me: Hills, Co. Public Utilities Project Name: SELF Plant Effluent ☐ ₩ 332 North Falkenburg Rd. P.O. Number/Project N/A	Southeast County Landfill
Hills. Co. Public Utilities Project Name: SELF Plant Effluent	P.O. Number/Project N/A
	Project Name: SELF Plant Effluent

Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE SITE											
NAME: Southeast County Landfill - Plant LOCATION: Lithia, Florida											
well no: Leachate Effluent sample id: Leachate Effluent DATE: 1/25/17											
PURGING DATA											
WELL	WELL TUBING WELL SCREEN INTERVAL STATIC DEPTH PURGE PUMP TYPE										Ξ
DIAMETER (inches): N/A DIAMETER (inches): N/A DEPTH: N/A ft to N/A ft TOWATER (feet): N/A OR BAILER: Valve											
	WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY										
(only fill out if applicable) $= (N/A \text{ feet} - N/A \text{ feet}) \times N/A \text{ gallons/foot} = N/A \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME											
(only fill out if applicable) $= N/A \text{gallons} + (N/A \text{gallons/foot} \ X N/A \text{feet)} + N/A \text{gallons} = N/A \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): DEPTH IN WELL (feet): DIA FINAL PUMP OR TUBING DEPTH IN WELL (feet): DIA PURGING INITIATED AT: DIA PURGING ENDED AT: DIA PURGED (gallons): DIA PURGED (gallons											
DEPININ	I VVELL (leet).	1	DEFININ	-T			COND.	DISSOLVED		TOROLD (gain	1
TIME	VOLUME PURGED (gallons)	VOLUME PURGED	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard	TEMP.	(circle units) μmhos/cm or μS/cm	OXYGEN (circle units) mg/L or	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
CUCO	NIA	(gallons)	253	-	7.10	28 (0		% saturation	WIA	B	SEMINE
9:57	1,4167	2/2	10/2	MA	1.41	29.69	10499	5.67	1°-/A	BOWA	ESHant
-				-							<u></u>
				_							
			Property of the Control of the Contr			5					
***************************************		*									
		}									
WELL CA TUBING II	PACITY (Gallori NSIDE DIA. CAI	s Per Foot): PACITY (Gal.	0.75" = 0.02; /Ft.): 1/8" = 0.	1" = 0.04; 0006; 3/1	1.25" = 0 6" = 0.0014;	.06; 2" = 0.1 1/4" = 0.002	6; 3" = 0.37; 26; 5/16" = 0				" = 5.88 " = 0.016
PURGING	EQUIPMENT C	ODES: E	3 = Bailer;	BP = Bladde			Submersible Pu	ımp; PP = P	eristaltic Pump	o; O = Othe	r (Specify)
						PLING DA	ATA				
SAMPLED Jush F	BY (PRINT) / A	·P A	wa	SAMPLER(SYSIGNATU	RE(S):	12	SAMPLING INITIATED A	т: 9:57	SAMPLING ENDED AT:	10:01
PUMP OR	TUBING WELL (feet):	NIA	ogra	TUBING MATERIAL	CODE.	NA		D-FILTERED: Y		FILTER SIZE	i: μm
	CONTAMINATION	ON: PU	MP Y (N		TUBING		eplaced)	DUPLICATE		N	
SAM	PLE CONTAINE	ER SPECIFIC	ATION		SAMPLE I	PRESERVATIO)N	INTEND ANALYSIS A	ND/OD OF	AMPLING S	AMPLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVA USED		TOTAL VOL DED IN FIELD (mL) FINAL	METHO	'L EC		FLOW RATE mL per minute)
15 5052	30	3355			7,50	(, , , , , , , , , , , , , , , , , , ,				

REMARKS	SFFC	O.C. FC	R SAME	PLEAN	ALYSIS	00	\ -				
I VEIN VIVI	REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS (957) 180,3										
MATERIA	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.

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)

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

Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE												
NAME: Southeast County Landfill - Plant LOCATION: Lithia, Florida												
WELL NO: Field Blank SAMPLE ID: Field Blank DATE: 9/25/17)			
PURGING DATA												
WELL	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 or	ENT VOLUME I ut if applicable)	PURGE: 1 E	QUIPMENT VO					UBING LENGTH) + FLOW CE	LL VOLUME		
= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons INITIAL PUMP OR TUBING PURGING PURGING PURGING TOTAL YOURSE												
		N/A	1		TOTOMAG					TOTAL VOLUME		
DEPTHIN	WELL (feet):			N WELL (feet):	IN/A	INITIATE		ENDED AT:	N/A	PURGED ((gallons): N/A	
TIME	VOLUME PURGED (gallons)	VOLUMI PURGEI	E PURGE D RATE	WATER	pH (standard units)	andard FEMP. (COND. (circle units) µmhos/cm	OXYGEN (circle units) mg/L or (NTUs)		Y COLO		
	(gallono)	(gallons) (gpm)	(feet)			or μS/cm	% saturation				
-												
	-											
					eld pl							
				1	000	1						
					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+						
	1											
										-		

WELL CAP	I PACITY (Gallor	l ns Per Foot):	0.75" = 0.02;	1" = 0.04;	1.25" = 0.06	1 2" = 0.16	3" = 0.37·	4" = 0.65;	5" = 1.02: /	3" = 1 A7:	12" = 5.88	
TUBING IN	ISIDE DIA. CA EQUIPMENT (PACITY (Gal	l./Ft.): 1/8" = 0	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	
PORGING	EQUIPMENT	ODES:	B = Bailer;	BP = Bladder P		SP = Electric S LING DA	ubmersible Pu	mp; PP = Pe	ristaltic Pump	; O = O	ther (Specify)	
SAMPLED	BY (PRINT) / A	FFILIATION		SAMPLER(S)	SIGNATURE	LING DA E(S):	IA			T		
Josht	ullerTil	tauxy F	tauclas			Con	122	SAMPLING INITIATED AT	9:50	SAMPLIN ENDED A	IG 9:53	
PUMP OR	TUBING	-D	0	TUBING		· I ft ,	FIELD	-FILTERED: Y	ND -		/	
	WELL (feet):			MATERIAL CO	DDE: N/A		Filtration	on Equipment Typ			д	
	ONTAMINATIO			6	TUBING	Y N(rep		DUPLICATE:	Υ	Ø		
SAMF SAMPLE	PLE CONTAINE		1			ESERVATION		INTENDE ANALYSIS AN		MPLING	SAMPLE PUMP	
ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATI USED		OTAL VOL D IN FIELD (m	FINAL L) pH	METHOE		UIPMENT CODE	FLOW RATE (mL per minute)	
					,							
											1	
REMARKS:	SEE C.	O.C. FC	R SAMF	PLE ANA	LYSIS '				, , , , , , , , , , , , , , , , , , ,			
MATERIAL	CODES:	AG = Amber	Glass; CG	= Clear Glass;	PE = Polye	ethylene: P	P = Polypropyle	ene; S = Silicor	ie; T = Teflo	n: 0 - 0	thor (Specific)	
SAMPLING	EQUIPMENT	CODES:	APP = After Pe	eristaltic Pump:	B = Baile	er; BP = BI	adder Pump:	ESP = Flectric	Submersible	Pump:	ther (Specify)	
			RFPP = Rever	se Flow Peristalt	ic Pump;	SM = Straw M	ethod (Tubing	Gravity Drain);	O = Other (Specify)		

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