



**Hillsborough
County Florida**

PUBLIC UTILITIES

PO Box 1110
Tampa, FL 33601-1110

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July 24, 2020

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

**DEPUTY COUNTY ADMINISTRATOR
DEVELOPMENT & INFRASTRUCTURE**

Lucia E. Garsys

**RE: Southeast County Landfill
Leachate Treatment Plant (WACS Testsite #19864)
Quarterly Effluent Report
Second Quarter 2020**

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), has prepared the quarterly effluent report for the SCLF leachate treatment plant (LTP), located at 15960 County Road 672 in Lithia, Florida.

Monthly sampling of the leachate treatment plant effluent and the daily recording of the plant pH was conducted as required by the referenced LMP. County personnel collected effluent samples from the designated sampling port at the treatment plant on April 1 and May 6, 2020 for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and field parameters. On June 3, 2020, the County collected the required semi-annual sample at the LTP for primary and secondary drinking water standards and priority pollutant metals. 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. In addition, daily pH for the effluent was recorded from 7.20 to 8.49 pH units by LTP personnel and the field logs are exhibited as part of the submittal.

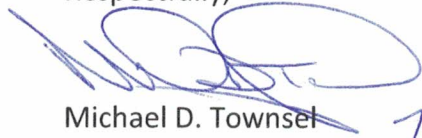
Mr. Steve Morgan

July 24, 2020

Page 2 of 2

Should you have any questions or comments concerning the information provided, please feel free to contact me at (813) 663-3222.

Respectfully,



Michael D. Townsel

Senior Hydrologist

Public Utilities Department

Environmental Services

7/24/2020

cc: Justin Chamberlain, P.G., FDEP
Kimberly Byer, P.G., Public Utilities Department
Larry Ruiz, Public Utilities Department
Ronald Wiesman, Public Utilities Department
Jeffrey Greenwell, P.E., Public Utilities Dept.
Ron Cope, Hillsborough County EPC

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	3.97	6.97	9.99	7.50	8.00	8.11
2	4.00	7.00	10.00	7.70	8.18	
3	4.01	6.99	10.00	7.85	7.98	
4						
5						
6	4.01	7.01	10.00	7.90	7.97	
7	4.01	6.98	10.00	7.72	7.82	
8	4.01	7.00	10.01	7.71	7.85	
9	4.00	6.98	10.00	7.78	8.17	
10	4.00	7.01	10.00	7.67	7.98	
11	4.01	7.00	10.01	7.97	8.02	
12						
13	4.00	7.00	10.00	7.71	8.07	
14	4.01	7.01	10.01	7.53	7.93	
15	3.98	7.00	10.01	7.74	7.65	8.50
16	4.01	7.00	10.00	7.58	7.90	
17	4.01	7.02	10.00	7.69	8.26	
18	4.02	7.01	10.00	7.56	8.21	8.46
19						
20	4.01	7.01	10.01	7.62	7.71	8.18
21	4.01	7.01	10.00	7.69	7.84	8.36
22	4.00	6.98	9.98	7.41	7.92	8.13
23	4.01	7.00	10.00	7.71	7.72	8.11
24	4.00	7.00	10.00	7.63	7.85	
25	4.00	7.00	10.01	7.92	8.24	
26						
27	4.01	7.00	10.00	8.02	8.36	8.50
28	4.00	7.00	10.01	8.19	8.29	8.50
29	4.00	7.01	10.00	8.05	8.09	8.12
30	4.01	7.02	10.01	8.12	7.83	
31						

Month	PH Calibration Log					
	May (20)					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	6.98	10.00	8.19	7.94	8.33
2				8.07	8.22	
3						
4	4.01	7.01	10.00	7.89	7.99	8.50
5	4.00	7.00	10.01	7.96	8.02	8.50
6	3.99	7.01	10.01	7.92	8.25	7.81
7	4.00	7.00	10.00	7.91	8.10	8.49
8	4.01	6.99	10.01	7.90	8.22	8.39
9	4.01	7.00	10.01	8.27		8.27
10						
11	4.00	6.99	10.00	7.62	7.92	8.24
12	4.01	6.98	10.00	7.75	8.31	8.17
13	4.00	7.00	10.00	7.99	8.26	8.50
14	4.01	7.00	10.01	7.64	8.28	8.47
15	4.00	7.00	10.00	7.57	8.28	8.49
16	4.00	7.00	10.00	8.19	8.14	
17						
18	4.01	7.02	10.02	7.96	8.07	8.29
19	4.01	7.00	9.99	7.86	7.64	8.31
20	4.00	7.00	10.01	7.61	7.75	8.24
21	4.00	7.00	10.00	7.69	7.20	8.44
22	4.02	7.0	10.01	7.54	7.88	
23	4.00	7.00	10.00		8.20	
24						
25	4.00	7.00	10.01			8.33
26	4.01	7.00	10.01	7.64	7.85	8.31
27	4.00	7.00	10.00	8.23	8.13	8.50
28	4.01	7.02	10.02	7.92	8.08	8.34
29	4.01	7.01	10.01	8.04	7.85	8.31
30	4.00	7.01	10.00			8.43
31						

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.02	7.01	10.00	7.93	8.09	8.42
2	4.01	7.00	10.00	7.74	7.93	8.41
3	4.00	7.00	10.01	7.77	8.03	
4	4.00	7.00	10.01	7.66	8.19	8.42
5	4.00	7.00	10.00	7.81	8.14	8.40
6						
7						
8	4.01	6.99	10.00	7.58	8.01	8.50
9	4.00	7.00	10.01	7.78	8.05	8.49
10	4.00	7.00	10.00	7.37	7.83	8.47
11	4.01	6.99	10.01	8.23	7.78	8.46
12	4.01	7.00	9.99	7.68	8.33	
13						8.44
14						8.49
15	4.00	7.00	10.01	7.85	8.00	8.48
16	4.00	7.00	10.00	7.97	8.44	8.50
17	4.00	6.99	10.00	7.70	8.36	8.40
18	4.01	7.01	10.02	7.88	8.29	8.43
19	4.00	7.00	10.01	7.53	7.95	8.33
20						
21						
22	4.00	6.99	10.00	7.60	7.96	8.19
23	4.01	7.01	10.01	7.83	8.13	8.46
24	4.00	7.00	10.00	7.55	8.28	8.38
25	4.01	7.00	10.00	7.86	8.43	8.34
26	4.01	7.00	10.00	7.85	8.38	8.50
27						8.49
28						
29	4.01	7.00	10.01	7.56	8.34	8.45
30	4.00	7.00	10.00	7.55	8.34	8.50
31						

April 17, 2020

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

RE: Workorder: T2006235 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, April 01, 2020. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,



Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: T2006235 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2006235001	Leachate Effluent	Water	4/1/2020 10:27	4/1/2020 11:35
T2006235002	Field Blank	Water	4/1/2020 10:21	4/1/2020 11:35

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ANALYTICAL RESULTS

Workorder: T2006235 SELF Plant Effluent

Lab ID: **T2006235001**
Sample ID: **Leachate Effluent**

Date Received: 04/01/20 11:35 Matrix: Water
Date Collected: 04/01/20 10:27

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	18616		umhos/cm	1			4/1/2020 10:27	....
Dissolved Oxygen	3.83		mg/L	1			4/1/2020 10:27	....
ORP-2580BW	77.7		mV	1			4/1/2020 10:27	....
Temperature	26.6		°C	1			4/1/2020 10:27	....
pH	7.82		SU	1			4/1/2020 10:27	....
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	1300		mg/L	1	50	24	4/13/2020 12:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	9900		mg/L	1	10	10	4/2/2020 10:00	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	88		mg/L	5	5.0	5.0	4/3/2020 13:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	1.3		mg/L	1	0.10	0.079	4/1/2020 15:44	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	190		mg/L	1	2.0	2.0	4/1/2020 20:15	T

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ANALYTICAL RESULTS

Workorder: T2006235 SELF Plant Effluent

Lab ID: **T2006235002**

Date Received: 04/01/20 11:35 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 04/01/20 10:21

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	24	U	mg/L	1	50	24	4/13/2020 12:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	10	U	mg/L	1	10	10	4/2/2020 12:00	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	1.0	U	mg/L	1	1.0	1.0	4/3/2020 13:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	4/1/2020 14:54	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	4/1/2020 20:21	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T2006235 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: T2006235 SELF Plant Effluent

QC Batch: WCAI/3034 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T2006235001, T2006235002

METHOD BLANK: 3434122

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.079	0.079 U

LABORATORY CONTROL SAMPLE: 3434123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	0.98	98	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3434124 3434125 Original: T2006203002

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	0.056	1	0.99	1.0	99	103	90-110	4	10	

QC Batch: WCAI/3063 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T2006235001, T2006235002

METHOD BLANK: 3435438

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: T2006235 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3435439

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	200	190	95	84.6-115.4	

SAMPLE DUPLICATE: 3435440

Original: T2006192001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	1600	1700	4	20	
QC Batch:	WCAI/3068		Analysis Method:	SM 2540 C		
QC Batch Method:	SM 2540 C		Prepared:			
Associated Lab Samples:	T2006235001					

METHOD BLANK: 3435762

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

LABORATORY CONTROL SAMPLE: 3435763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	660	680	104	85-115	

SAMPLE DUPLICATE: 3435764

Original: T2006108002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	260	280	6	10	

Report ID: 958558 - 2584438

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QUALITY CONTROL DATA

Workorder: T2006235 SELF Plant Effluent

QC Batch: WCAI/3079 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T2006235002

METHOD BLANK: 3436051

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

LABORATORY CONTROL SAMPLE: 3436052

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	750	113	85-115

SAMPLE DUPLICATE: 3440660 Original: T2006337006

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	600	600	0	10
QC Batch:	WCAI/3113	Analysis Method:		SM 2540D	
QC Batch Method:	SM 2540D	Prepared:			
Associated Lab Samples: T2006235001, T2006235002					

METHOD BLANK: 3437953

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

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QUALITY CONTROL DATA

Workorder: T2006235 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3437954

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: 3437955

Original: T2006225002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	1800	1700	5	10	
QC Batch:	WCAI/3262		Analysis Method:		EPA 410.4	
QC Batch Method:	EPA 410.4		Prepared:			
Associated Lab Samples:	T2006235001, T2006235002					

METHOD BLANK: 3446343

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chemical Oxygen Demand	mg/L	24	24 U

LABORATORY CONTROL SAMPLE: 3446344

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	470	94	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3446346

3446347

Original: T2006097001

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	660	500	1200	1200	99	99	90-110	0	10

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QUALITY CONTROL DATA

Workorder: T2006235 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3446350 3446351 Original: A2002896001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	560	500	1100	1100	107	107	90-110	0	10	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2006235 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2006235001	Leachate Effluent			SM 4500NO3-F	WCAt/3034
T2006235002	Field Blank			SM 4500NO3-F	WCAt/3034
T2006235001	Leachate Effluent			SM 5210B	WCAt/3063
T2006235002	Field Blank			SM 5210B	WCAt/3063
T2006235001	Leachate Effluent			SM 2540 C	WCAt/3068
T2006235002	Field Blank			SM 2540 C	WCAt/3079
T2006235001	Leachate Effluent			SM 2540D	WCAt/3113
T2006235002	Field Blank			SM 2540D	WCAt/3113
T2006235001	Leachate Effluent			EPA 410.4	WCAt/3262
T2006235002	Field Blank			EPA 410.4	WCAt/3262
T2006235001	Leachate Effluent	Field Measurements	FLDt/	Field Measurements	FLDt/

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☐ Altamonte S

☐ Fort Myers:

☐ Jacksonville

☐ Tallahassee:



T2006235

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☐ **Gainesville:** 4955 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: E62001

☐ **Miramar:** 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: E62535

☒ **Tampa:** 9510 Princess Palm Ave. FL 33619 • 813.630.9516 • Lab ID: E64589

FOR DRINKING WATER USE:

When PWS Information not otherwise supplied) PWS ID:

Contact Person:

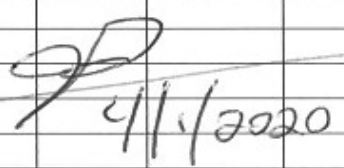
Supplier of Water:

Site-Address:

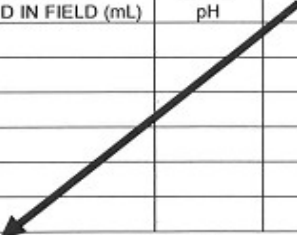
Form FD 9000-24

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Leachate Effluent	SAMPLE ID: Leachate Effluent	DATE: 4/1/2020	

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: Valve			
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 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)
1027	N/A	N/A	N/A	N/A	7.82	26.6	18616	3.83	N/A	Brown	Leachate
											
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: <i>Morales, Grayson</i>						SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: <i>10:27</i>		SAMPLING ENDED AT: <i>10:33</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 (replaced)</i>)								DUPLICATE: Y (<i>N</i>)							
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: <i>77.7</i>															
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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)															

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

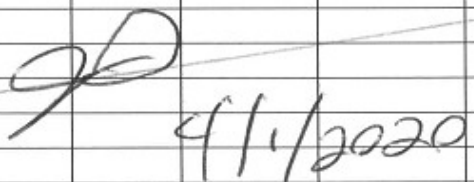
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

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

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: 4/1/2020

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) $= (\text{N/A feet} - \text{N/A feet}) \times \text{N/A gallons/foot} = \text{N/A gallons}$											
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) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
											
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: <i>Morales Grayson</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: <i>1021</i>	SAMPLING ENDED AT: <i>1025</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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

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

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

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

June 10, 2020

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

RE: Workorder: T2008665 SELF Plant Effluent

Dear Michael Townsel:

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

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

Sincerely,



Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: T2008665 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2008665001	Leachate Effluent	Water	5/6/2020 09:55	5/6/2020 15:00
T2008665002	Field Blank	Water	5/6/2020 09:50	5/6/2020 15:00

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ANALYTICAL RESULTS

Workorder: T2008665 SELF Plant Effluent

Lab ID: **T2008665001**
Sample ID: **Leachate Effluent**

Date Received: 05/06/20 15:00 Matrix: Water
Date Collected: 05/06/20 09:55

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	20018		umhos/cm	1			5/6/2020 09:55	....
Dissolved Oxygen	4.84		mg/L	1			5/6/2020 09:55	....
ORP-2580BW	148.4		mV	1			5/6/2020 09:55	....
Temperature	28.5		°C	1			5/6/2020 09:55	....
pH	7.66		SU	1			5/6/2020 09:55	....
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	1100		mg/L	1	50	24	5/8/2020 16:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	9000		mg/L	1	10	10	5/8/2020 11:32	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	15		mg/L	1	1.0	1.0	5/11/2020 12:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	45		mg/L	20	2.0	1.6	5/7/2020 15:08	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	58		mg/L	1	2.0	2.0	5/7/2020 19:45	T

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ANALYTICAL RESULTS

Workorder: T2008665 SELF Plant Effluent

Lab ID: **T2008665002**

Date Received: 05/06/20 15:00 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 05/06/20 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	24	U	mg/L	1	50	24	5/8/2020 16:00	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	10	U	mg/L	1	10	10	5/8/2020 11:32	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	1.0	U	mg/L	1	1.0	1.0	5/11/2020 12:30	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	5/7/2020 13:55	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	5/7/2020 19:42	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T2008665 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: T2008665 SELF Plant Effluent

QC Batch: WCAI/3791 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T2008665001, T2008665002

METHOD BLANK: 3473702

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	0.079	0.079 U

LABORATORY CONTROL SAMPLE: 3473703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate (as N)	mg/L	1	0.95	95	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3473704 3473705 Original: T2008656002

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	1.9	1	3.0	2.9	103	101	90-110	1	10	

QC Batch: WCAI/3806 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T2008665001, T2008665002

METHOD BLANK: 3475230

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: T2008665 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3475231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	200	220	110	84.6-115.4	

SAMPLE DUPLICATE: 3475232

Original: T2008760001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	1700	1700	2	20	
QC Batch:	WCAt/3829		Analysis Method:	SM 2540 C		
QC Batch Method:	SM 2540 C		Prepared:			
Associated Lab Samples:	T2008665001, T2008665002					

METHOD BLANK: 3475552

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

LABORATORY CONTROL SAMPLE: 3475553

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

SAMPLE DUPLICATE: 3475554

Original: T2008710001

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

Report ID: 966828 - 2817014

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QUALITY CONTROL DATA

Workorder: T2008665 SELF Plant Effluent

QC Batch: WCAI/3837 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T2008665001, T2008665002

METHOD BLANK: 3475804

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

LABORATORY CONTROL SAMPLE: 3475805

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	200	200	99	85-115

SAMPLE DUPLICATE: 3475806 Original: T2008561002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	740	740	0	10
QC Batch:	WCAI/3842	Analysis Method:		EPA 410.4	
QC Batch Method:	EPA 410.4	Prepared:			
Associated Lab Samples: T2008665001, T2008665002					

METHOD BLANK: 3476027

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Chemical Oxygen Demand	mg/L	24	24 U

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QUALITY CONTROL DATA

Workorder: T2008665 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 3476028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	470	95	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3476030 3476031 Original: A2003845001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	-0.44	500	500	500	101	101	90-110	0	10	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2008665 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2008665001	Leachate Effluent			SM 4500NO3-F	WCAI/3791
T2008665002	Field Blank			SM 4500NO3-F	WCAI/3791
T2008665001	Leachate Effluent			SM 5210B	WCAI/3806
T2008665002	Field Blank			SM 5210B	WCAI/3806
T2008665001	Leachate Effluent			SM 2540 C	WCAI/3829
T2008665002	Field Blank			SM 2540 C	WCAI/3829
T2008665001	Leachate Effluent			SM 2540D	WCAI/3837
T2008665002	Field Blank			SM 2540D	WCAI/3837
T2008665001	Leachate Effluent			EPA 410.4	WCAI/3842
T2008665002	Field Blank			EPA 410.4	WCAI/3842
T2008665001	Leachate Effluent	Field Measurements	FLDI/	Field Measurements	FLDI/

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Page 1 of

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☐ Miramar: 10200 USA Today Way, FL 33025 - 954.889.2288 - :sac ID ER5535

☐ Tampa: 9610 Princess Palm Ave., FL 33619 - 813.630.9616 - :sac ID ER4589

Page 1 of 1

[illegible]

Form FD 9000-24
GROUNDWATER SAMPLING LOG

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

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE 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** 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 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)
0955	N/A	N/A	N/A	N/A	7.66	28.5	2008	4.84	N/A	Brown	leachate

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Morales, Grayson	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0955	SAMPLING ENDED AT: 1000
---	--------------------------	------------------------------------	--------------------------------

PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y ☒ N ☐ 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: 148.4**

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

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

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

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

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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

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

PURGING DATA

WELL		TUBING		WELL SCREEN INTERVAL		MATIC 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		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) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
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: <i>Morales, Grayson</i>				SAMPLER(S) SIGNATURE(S): <i>M. Morales</i>			SAMPLING INITIATED AT: <i>0950</i>		SAMPLING ENDED AT: <i>0955</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 N TUBING Y N (replaced)							DUPLICATE: Y <i>(N)</i>				
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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

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

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

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



Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
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July 21, 2020

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

RE: Workorder: T2010429 SELF Plant Effluent Semi

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, June 03, 2020. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,

A handwritten signature in black ink that reads 'Heidi Parker'.

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

Report ID: 972770

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SAMPLE SUMMARY

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T2010429001	Leachate Effluent Semi Annual	Water	6/3/2020 10:45	6/3/2020 12:47
T2010429002	Field Blank	Water	6/3/2020 10:10	6/3/2020 12:47
T2010429003	Travel Blank	Water	6/3/2020 00:00	6/3/2020 12:47

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001** Date Received: 06/03/20 12:47 Matrix: Water
Sample ID: **Leachate Effluent Semi Annual** Date Collected: 06/03/20 10:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements			Analytical Method: Field Measurements					
Conductivity	21981		umhos/cm	1			6/3/2020 10:45	....
Dissolved Oxygen	1.67		mg/L	1			6/3/2020 10:45	....
ORP-2580BW	105.8		mV	1			6/3/2020 10:45	....
Temperature	30.1		°C	1			6/3/2020 10:45	....
pH	7.71		SU	1			6/3/2020 10:45	....

METALS

Analysis Desc: E200.7 Analysis,Waters			Preparation Method: EPA 200.7						
Analytical Method: EPA 200.7									
Aluminum	0.20	U	mg/L	1	0.80	0.20	6/15/2020 18:42	T	
Barium	0.062		mg/L	1	0.012	0.0030	6/15/2020 18:42	T	
Beryllium	0.0020	U	mg/L	1	0.0080	0.0020	6/15/2020 18:42	T	
Chromium	0.0064	I	mg/L	1	0.020	0.0050	6/15/2020 18:42	T	
Iron	2.0		mg/L	1	0.80	0.20	6/15/2020 18:42	T	
Nickel	0.029	I	mg/L	1	0.040	0.010	6/15/2020 18:42	T	
Sodium	3500		mg/L	100	320	80	6/17/2020 15:20	T	
Zinc	0.050	U	mg/L	1	0.20	0.050	6/15/2020 18:42	T	

Analysis Desc: E200.8 Analysis,Waters				Preparation Method: EPA 200.8				
Analytical Method: EPA 200.8								
Antimony	0.0027	I	mg/L	10	0.0070	0.0011	6/25/2020 18:43	J
Arsenic	0.0068	I	mg/L	10	0.010	0.00077	6/25/2020 18:43	J
Cadmium	0.00064	U	mg/L	10	0.0050	0.00064	6/25/2020 18:43	J
Copper	0.062		mg/L	10	0.0080	0.0035	6/25/2020 18:43	J
Lead	0.0024	U	mg/L	10	0.0070	0.0024	6/25/2020 18:43	J
Manganese	0.27		mg/L	10	0.040	0.0055	6/25/2020 18:43	J
Selenium	0.0058	U	mg/L	10	0.050	0.0058	6/25/2020 18:43	J
Silver	0.00068	U	mg/L	10	0.0050	0.00068	6/25/2020 18:43	J
Thallium	0.00057	U	mg/L	10	0.0020	0.00057	6/25/2020 18:43	J
Uranium	2.8		ug/L	10	2.0	0.70	6/25/2020 18:43	J

Analysis Desc: EPA 245.1 Analysis,Water				Preparation Method: EPA 245.1				
				Analytical Method: EPA 245.1				
Mercury	0.000064	I	mg/L	1	0.00010	0.000050	6/10/2020 14:15	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Leachate Effluent Semi Annual**

Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: E504.1 Analysis, Water		Preparation Method: EPA 504.1						
		Analytical Method: EPA 504.1						
1,2-Dibromo-3-Chloropropane	0.0097	U	ug/L	1	0.020	0.0097	6/5/2020 23:31	T
Ethylene Dibromide (EDB)	0.0069	U	ug/L	1	0.020	0.0069	6/5/2020 23:31	T
Tetrachloro-m-xylene (S)	60	J4	%	1	64-150		6/5/2020 23:31	
Analysis Desc: E508 Analysis, Water		Preparation Method: EPA 508						
		Analytical Method: EPA 508						
Chlordane (technical)	0.054	U	ug/L	1	0.20	0.054	6/5/2020 16:04	J
Endrin	0.0070	U	ug/L	1	0.020	0.0070	6/5/2020 16:04	J
Heptachlor	0.0061	U	ug/L	1	0.020	0.0061	6/5/2020 16:04	J
Heptachlor Epoxide	0.0053	U	ug/L	1	0.020	0.0053	6/5/2020 16:04	J
Hexachlorobenzene	0.0064	U	ug/L	1	0.020	0.0064	6/5/2020 16:04	J
Hexachlorocyclopentadiene	0.019	U	ug/L	1	0.020	0.019	6/5/2020 16:04	J
Methoxychlor	0.0069	U	ug/L	1	0.020	0.0069	6/5/2020 16:04	J
PCBs	0.095	U	ug/L	1	0.20	0.095	6/5/2020 16:04	J
Toxaphene	0.12	U	ug/L	1	0.20	0.12	6/5/2020 16:04	J
gamma-BHC (Lindane)	0.0072	U	ug/L	1	0.020	0.0072	6/5/2020 16:04	J
Decachlorobiphenyl (S)	78		%	1	70-130		6/5/2020 16:04	
Analysis Desc: E515.3 Analysis, Water		Preparation Method: EPA 515.3						
		Analytical Method: EPA 515.3						
2,4-D	0.095	U	ug/L	1	5.0	0.095	6/10/2020 23:50	J
Dalapon	0.90	U	ug/L	1	5.0	0.90	6/10/2020 23:50	J
Dinoseb	0.18	U	ug/L	1	2.5	0.18	6/10/2020 23:50	J
Pentachlorophenol	0.038	U	ug/L	1	0.50	0.038	6/10/2020 23:50	J
Picloram	0.090	U	ug/L	1	0.50	0.090	6/10/2020 23:50	J
Silvex (2,4,5-TP)	0.090	U	ug/L	1	1.0	0.090	6/10/2020 23:50	J
2,4-Dichlorophenylacetic acid (S)	27	J4	%	1	70-130		6/10/2020 23:50	
Analysis Desc: E525.2 Analysis, Water		Preparation Method: EPA 525.2						
		Analytical Method: EPA 525.2						
Alachlor	0.43	U	ug/L	1	1.4	0.43	6/17/2020 12:19	J
Atrazine	0.26	U	ug/L	1	1.4	0.26	6/17/2020 12:19	J
Benzo[a]pyrene	0.043	U	ug/L	1	1.4	0.043	6/17/2020 12:19	J
Di(2-ethylhexyl) adipate	1.4	U	ug/L	1	2.9	1.4	6/17/2020 12:19	J
Simazine	0.17	U	ug/L	1	1.4	0.17	6/17/2020 12:19	J
bis(2-Ethylhexyl) phthalate	1.4	U	ug/L	1	5.7	1.4	6/17/2020 12:19	J

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Leachate Effluent Semi Annual**

Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
p-Terphenyl-d14 (S)	102		%	1	70-130		6/17/2020 12:19	
Analysis Desc: E531.1 Analysis, Water		Analytical Method: EPA 531.1						
Carbofuran	0.28	U	ug/L	1	2.5	0.28	6/10/2020 10:26	J
Oxamyl	0.57	U	ug/L	1	2.5	0.57	6/10/2020 10:26	J
Analysis Desc: E547 Analysis, Water		Analytical Method: EPA 547						
Glyphosate	5.5	U	ug/L	1	50	5.5	6/9/2020 02:14	J
Analysis Desc: E548.1 Analysis, Water		Preparation Method: EPA 548.1						
		Analytical Method: EPA 548.1						
Endothall	1.8	U	ug/L	1	5.0	1.8	6/12/2020 17:48	J
Analysis Desc: E549.2 Analysis, Water		Preparation Method: EPA 549.2						
		Analytical Method: EPA 549.2						
Diquat	0.37	U	ug/L	1	5.0	0.37	6/11/2020 21:09	J
Analysis Desc: 552.2 Analysis, Water, HAA		Preparation Method: EPA 552.2						
		Analytical Method: EPA 552.2						
Bromoacetic Acid	0.54	U	ug/L	1	1.0	0.54	6/17/2020 03:13	T
Chloroacetic Acid	0.50	U	ug/L	1	1.0	0.50	6/17/2020 03:13	T
Dibromoacetic Acid	0.54	U	ug/L	1	1.0	0.54	6/17/2020 03:13	T
Dichloroacetic Acid	0.81	U	ug/L	1	1.0	0.81	6/17/2020 03:13	T
Total Haloacetic Acids (HAA5)	0.91	U	ug/L	1	1.0	0.91	6/17/2020 03:13	T
Trichloroacetic Acid	0.91	U	ug/L	1	1.0	0.91	6/17/2020 03:13	T
2,3-Dibromopropionic Acid (S)	112		%	1	70-130		6/17/2020 03:13	
Analysis Desc: 8081B Pesticide Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: EPA 8081						
4,4'-DDD	0.0054	U	ug/L	1	0.020	0.0054	6/11/2020 21:24	T
4,4'-DDE	0.0031	U	ug/L	1	0.020	0.0031	6/11/2020 21:24	T
4,4'-DDT	0.0060	U	ug/L	1	0.020	0.0060	6/11/2020 21:24	T
Aldrin	0.0028	U	ug/L	1	0.020	0.0028	6/11/2020 21:24	T
Dieldrin	0.0027	U	ug/L	1	0.020	0.0027	6/11/2020 21:24	T
Endosulfan I	0.0039	U	ug/L	1	0.020	0.0039	6/11/2020 21:24	T
Endosulfan II	0.0070	U	ug/L	1	0.020	0.0070	6/11/2020 21:24	T
Endosulfan Sulfate	0.010	U	ug/L	1	0.020	0.010	6/11/2020 21:24	T
Endrin Aldehyde	0.017	U	ug/L	1	0.020	0.017	6/11/2020 21:24	T
alpha-BHC	0.0022	U	ug/L	1	0.020	0.0022	6/11/2020 21:24	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**
Sample ID: **Leachate Effluent Semi Annual**

Date Received: 06/03/20 12:47 Matrix: Water
Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
beta-BHC	0.0083	U	ug/L	1	0.020	0.0083	6/11/2020 21:24	T
delta-BHC	0.0033	U	ug/L	1	0.020	0.0033	6/11/2020 21:24	T
Tetrachloro-m-xylene (S)	42	J4	%	1	44-124		6/11/2020 21:24	
Decachlorobiphenyl (S)	53		%	1	48-137		6/11/2020 21:24	
Analysis Desc: 8082A PCB Analysis, Water					Preparation Method: SW-846 3510C			
					Analytical Method: SW-846 8082A			
Aroclor 1016 (PCB-1016)	0.12	U	ug/L	1	0.20	0.12	6/11/2020 21:24	T
Aroclor 1221 (PCB-1221)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:24	T
Aroclor 1232 (PCB-1232)	0.11	U	ug/L	1	0.20	0.11	6/11/2020 21:24	T
Aroclor 1242 (PCB-1242)	0.11	U	ug/L	1	0.20	0.11	6/11/2020 21:24	T
Aroclor 1248 (PCB-1248)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:24	T
Aroclor 1254 (PCB-1254)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:24	T
Aroclor 1260 (PCB-1260)	0.098	U	ug/L	1	0.20	0.098	6/11/2020 21:24	T
Tetrachloro-m-xylene (S)	42	J4	%	1	61-119		6/11/2020 21:24	
Decachlorobiphenyl (S)	53		%	1	44-136		6/11/2020 21:24	
Analysis Desc: 8270C Analysis, Water					Preparation Method: SW-846 3510C			
					Analytical Method: SW-846 8270C			
1,2-Diphenylhydrazine	0.87	U	ug/L	1	5.0	0.87	6/11/2020 03:29	M
2,4,6-Trichlorophenol	0.99	U	ug/L	1	5.0	0.99	6/11/2020 03:29	M
2,4-Dichlorophenol	1.0	U	ug/L	1	5.0	1.0	6/11/2020 03:29	M
2,4-Dimethylphenol	0.54	U	ug/L	1	5.0	0.54	6/11/2020 03:29	M
2,4-Dinitrophenol	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
2,4-Dinitrotoluene (2,4-DNT)	0.68	U	ug/L	1	5.0	0.68	6/11/2020 03:29	M
2,6-Dinitrotoluene (2,6-DNT)	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
2-Chloronaphthalene	0.59	U	ug/L	1	5.0	0.59	6/11/2020 03:29	M
2-Chlorophenol	0.77	U	ug/L	1	5.0	0.77	6/11/2020 03:29	M
2-Methyl-4,6-dinitrophenol	0.76	U	ug/L	1	5.0	0.76	6/11/2020 03:29	M
2-Nitrophenol	1.2	U	ug/L	1	5.0	1.2	6/11/2020 03:29	M
3,3'-Dichlorobenzidine	0.72	U	ug/L	1	5.0	0.72	6/11/2020 03:29	M
4-Bromophenyl Phenyl Ether	0.64	U	ug/L	1	5.0	0.64	6/11/2020 03:29	M
4-Chloro-3-methylphenol	0.55	U	ug/L	1	5.0	0.55	6/11/2020 03:29	M
4-Chlorophenyl Phenyl Ether	0.52	U	ug/L	1	5.0	0.52	6/11/2020 03:29	M
4-Nitrophenol	1.3	U	ug/L	1	5.0	1.3	6/11/2020 03:29	M
Acenaphthene	0.088	I	ug/L	1	5.0	0.040	6/11/2020 03:29	M
Acenaphthylene	0.042	U	ug/L	1	5.0	0.042	6/11/2020 03:29	M
Anthracene	0.27	I	ug/L	1	5.0	0.035	6/11/2020 03:29	M
Benzidine	1.2	U	ug/L	1	5.0	1.2	6/11/2020 03:29	M
Benzo[a]anthracene	0.012	U	ug/L	1	5.0	0.012	6/11/2020 03:29	M

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**
Sample ID: **Leachate Effluent Semi Annual**

Date Received: 06/03/20 12:47 Matrix: Water
Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benzo[b]fluoranthene	0.012	U	ug/L	1	5.0	0.012	6/11/2020 03:29	M
Benzo[g,h,i]perylene	0.048	U	ug/L	1	5.0	0.048	6/11/2020 03:29	M
Benzo[k]fluoranthene	0.048	U	ug/L	1	5.0	0.048	6/11/2020 03:29	M
Butyl benzyl phthalate	1.4	U	ug/L	1	5.0	1.4	6/11/2020 03:29	M
Chrysene	0.033	U	ug/L	1	5.0	0.033	6/11/2020 03:29	M
Di-n-Butyl Phthalate	0.95	U	ug/L	1	5.0	0.95	6/11/2020 03:29	M
Di-n-octyl Phthalate	1.3	U	ug/L	1	5.0	1.3	6/11/2020 03:29	M
Dibenzo[a,h]anthracene	0.024	U	ug/L	1	5.0	0.024	6/11/2020 03:29	M
Diethyl phthalate	0.83	U	ug/L	1	5.0	0.83	6/11/2020 03:29	M
Dimethyl phthalate	0.83	U	ug/L	1	5.0	0.83	6/11/2020 03:29	M
Fluoranthene	0.037	U	ug/L	1	5.0	0.037	6/11/2020 03:29	M
Fluorene	0.081	I	ug/L	1	5.0	0.038	6/11/2020 03:29	M
Hexachlorobutadiene	1.4	U	ug/L	1	5.0	1.4	6/11/2020 03:29	M
Hexachloroethane	1.3	U	ug/L	1	5.0	1.3	6/11/2020 03:29	M
Indeno(1,2,3-cd)pyrene	0.011	U	ug/L	1	5.0	0.011	6/11/2020 03:29	M
Isophorone	1.2	U	ug/L	1	5.0	1.2	6/11/2020 03:29	M
N-Nitrosodi-n-propylamine	1.0	U	ug/L	1	5.0	1.0	6/11/2020 03:29	M
N-Nitrosodimethylamine	0.65	U	ug/L	1	5.0	0.65	6/11/2020 03:29	M
N-Nitrosodiphenylamine	0.65	U	ug/L	1	5.0	0.65	6/11/2020 03:29	M
Naphthalene	0.12	I	ug/L	1	5.0	0.048	6/11/2020 03:29	M
Nitrobenzene	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
Phenanthrene	0.040	U	ug/L	1	5.0	0.040	6/11/2020 03:29	M
Phenol	0.51	U	ug/L	1	5.0	0.51	6/11/2020 03:29	M
Pyrene	0.036	U	ug/L	1	5.0	0.036	6/11/2020 03:29	M
bis(2-Chloroethoxy)methane	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
bis(2-Chloroethyl)Ether	1.0	U	ug/L	1	5.0	1.0	6/11/2020 03:29	M
bis(2-Chloroisopropyl) Ether	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
bis(2-Ethylhexyl) phthalate	1.1	U	ug/L	1	5.0	1.1	6/11/2020 03:29	M
2-Fluorophenol (S)	18	J4	%	1	31-134		6/11/2020 03:29	
Phenol-d6 (S)	4	J4	%	1	24-120		6/11/2020 03:29	
Nitrobenzene-d5 (S)	67		%	1	38-139		6/11/2020 03:29	
2-Fluorobiphenyl (S)	68		%	1	42-138		6/11/2020 03:29	
2,4,6-Tribromophenol (S)	56		%	1	48-147		6/11/2020 03:29	
p-Terphenyl-d14 (S)	28	J4	%	1	61-154		6/11/2020 03:29	

VOLATILES

Analysis Desc: 524.2 Analysis, Water

Analytical Method: EPA 524.2

1,1,1-Trichloroethane	0.32	U	ug/L	1	1.0	0.32	6/8/2020 15:28	T
1,1,2-Trichloroethane	0.39	U	ug/L	1	1.0	0.39	6/8/2020 15:28	T
1,1-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	6/8/2020 15:28	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**
Sample ID: **Leachate Effluent Semi Annual**

Date Received: 06/03/20 12:47 Matrix: Water
Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2,4-Trichlorobenzene	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:28	T
1,2-Dichlorobenzene	0.26	U	ug/L	1	1.0	0.26	6/8/2020 15:28	T
1,2-Dichloroethane	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:28	T
1,2-Dichloropropane	0.46	U	ug/L	1	1.0	0.46	6/8/2020 15:28	T
1,4-Dichlorobenzene	0.19	U	ug/L	1	1.0	0.19	6/8/2020 15:28	T
Benzene	0.15	U	ug/L	1	1.0	0.15	6/8/2020 15:28	T
Bromodichloromethane	0.49	U	ug/L	1	1.0	0.49	6/15/2020 17:06	T
Bromoform	0.46	U	ug/L	1	1.0	0.46	6/15/2020 17:06	T
Carbon Tetrachloride	0.27	U	ug/L	1	1.0	0.27	6/8/2020 15:28	T
Chlorobenzene	0.35	U	ug/L	1	1.0	0.35	6/8/2020 15:28	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	6/15/2020 17:06	T
Dibromochloromethane	0.56	U	ug/L	1	1.0	0.56	6/15/2020 17:06	T
Ethylbenzene	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:28	T
Methylene Chloride	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:28	T
Styrene	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:28	T
Tetrachloroethylene (PCE)	0.25	U	ug/L	1	1.0	0.25	6/8/2020 15:28	T
Toluene	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:28	T
Total Trihalomethanes	0.56	U	ug/L	1	1.0	0.56	6/15/2020 17:06	T
Trichloroethene	0.25	U	ug/L	1	1.0	0.25	6/8/2020 15:28	T
Vinyl Chloride	0.32	U	ug/L	1	1.0	0.32	6/8/2020 15:28	T
Xylene (Total)	0.28	U	ug/L	1	2.0	0.28	6/8/2020 15:28	T
cis-1,2-Dichloroethylene	0.45	U	ug/L	1	1.0	0.45	6/8/2020 15:28	T
trans-1,2-Dichloroethylene	0.34	U	ug/L	1	1.0	0.34	6/8/2020 15:28	T
1,2-Dichloroethane-d4 (S)	111		%	1	70-130		6/8/2020 15:28	
1,2-Dichloroethane-d4 (S)	112		%	1	70-130		6/15/2020 17:06	
Toluene-d8 (S)	100		%	1	70-130		6/8/2020 15:28	
Toluene-d8 (S)	99		%	1	70-130		6/15/2020 17:06	
Bromofluorobenzene (S)	103		%	1	70-130		6/15/2020 17:06	
Bromofluorobenzene (S)	107		%	1	70-130		6/8/2020 15:28	

Analysis Desc: 8260B VOCs Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B

1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	6/15/2020 17:06	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	6/15/2020 17:06	T
1,3-Dichlorobenzene	0.43	U	ug/L	1	1.0	0.43	6/15/2020 17:06	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	6/15/2020 17:06	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	6/15/2020 17:06	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	6/15/2020 17:06	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	6/15/2020 17:06	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	6/15/2020 17:06	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**
Sample ID: **Leachate Effluent Semi Annual**

Date Received: 06/03/20 12:47 Matrix: Water
Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloromethane	0.53	U	ug/L	1	1.0	0.53	6/15/2020 17:06	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	6/15/2020 17:06	T
1,2-Dichloroethane-d4 (S)	111		%	1	70-128		6/15/2020 17:06	
Toluene-d8 (S)	99		%	1	77-119		6/15/2020 17:06	
Bromofluorobenzene (S)	105		%	1	86-123		6/15/2020 17:06	

WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	6600		mg/L	50	250	50	6/12/2020 09:24	T
Fluoride	5.0	U	mg/L	50	25	5.0	6/12/2020 09:24	T
Sulfate	61	I	mg/L	50	250	50	6/12/2020 09:24	T

Analysis Desc: COD,E410.4,Water		Analytical Method: EPA 410.4						
Chemical Oxygen Demand	2200		mg/L	5	250	120	6/11/2020 17:00	T

Analysis Desc: Color,SM2120B,Water		Analytical Method: SM 2120 B						
Color	500		PCU	5	25	14	6/4/2020 08:00	T
pH for Color Analysis	7.9		SU	5	5.0	0.10	6/4/2020 08:00	T

Analysis Desc: Odor,SM2150B,Water		Analytical Method: SM 2150 B						
Odor	1.0	U	TON @ 40°C	1	1.0	1.0	6/4/2020 08:20	T

Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	12000		mg/L	1	10	10	6/5/2020 10:31	T

Analysis Desc: TSS,SM2540D,Water		Analytical Method: SM 2540D						
Total Suspended Solids	1300		mg/L	100	100	100	6/8/2020 11:00	T

Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water		Analytical Method: SM 3500-CR D						
Hexavalent Chromium	0.0025	U	mg/L	1	0.040	0.0025	6/4/2020 09:45	T

Analysis Desc: Cyanide, SM4500-E, Water		Analytical Method: SM 4500-CN-E						
Cyanide	0.61		mg/L	20	0.20	0.097	6/11/2020 11:31	T

Analysis Desc: .PH,SM4500H+B, Water		Analytical Method: SM 4500H+B						
pH	8.1	Q	SU	1	0.1	0.1	6/5/2020 13:45	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429001**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Leachate Effluent Semi Annual**

Date Collected: 06/03/20 10:45

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	80		mg/L	30	3.0	2.4	6/4/2020 18:07	T
Nitrite (as N)	39		mg/L	30	3.0	2.3	6/4/2020 18:07	T
Analysis Desc: BOD,SM5210B,Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	350		mg/L	10	20	20	6/4/2020 17:40	T
Analysis Desc: SURFACT- MBAS,SM5540C,Aqueous		Analytical Method: SM 5540 C						
MBAS,as LAS,mol.wt.348	0.32		mg/L	1	0.20	0.040	6/4/2020 12:50	G

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: E200.7 Analysis,Waters			Preparation Method: EPA 200.7					
			Analytical Method: EPA 200.7					
Aluminum	0.20	U	mg/L	1	0.80	0.20	6/15/2020 18:47	T
Barium	0.0030	U	mg/L	1	0.012	0.0030	6/15/2020 18:47	T
Beryllium	0.0020	U	mg/L	1	0.0080	0.0020	6/15/2020 18:47	T
Chromium	0.0050	U	mg/L	1	0.020	0.0050	6/15/2020 18:47	T
Iron	0.20	U	mg/L	1	0.80	0.20	6/15/2020 18:47	T
Nickel	0.010	U	mg/L	1	0.040	0.010	6/15/2020 18:47	T
Sodium	0.80	U	mg/L	1	3.2	0.80	6/15/2020 18:47	T
Zinc	0.050	U	mg/L	1	0.20	0.050	6/15/2020 18:47	T
Analysis Desc: E200.8 Analysis,Waters			Preparation Method: EPA 200.8					
			Analytical Method: EPA 200.8					
Antimony	0.0011	U	mg/L	10	0.0070	0.0011	6/25/2020 18:49	J
Arsenic	0.00077	U	mg/L	10	0.010	0.00077	6/25/2020 18:49	J
Cadmium	0.00064	U	mg/L	10	0.0050	0.00064	6/25/2020 18:49	J
Copper	0.0035	U	mg/L	10	0.0080	0.0035	6/25/2020 18:49	J
Lead	0.0024	U	mg/L	10	0.0070	0.0024	6/25/2020 18:49	J
Manganese	0.0055	U	mg/L	10	0.040	0.0055	6/25/2020 18:49	J
Selenium	0.0058	U	mg/L	10	0.050	0.0058	6/25/2020 18:49	J
Silver	0.00068	U	mg/L	10	0.0050	0.00068	6/25/2020 18:49	J
Thallium	0.00057	U	mg/L	10	0.0020	0.00057	6/25/2020 18:49	J
Uranium	0.70	U	ug/L	10	2.0	0.70	6/25/2020 18:49	J
Analysis Desc: EPA 245.1 Analysis,Water			Preparation Method: EPA 245.1					
			Analytical Method: EPA 245.1					
Mercury	0.000050	U	mg/L	1	0.00010	0.000050	6/10/2020 14:12	T
SEMIVOLATILES								
Analysis Desc: E504.1 Analysis, Water			Preparation Method: EPA 504.1					
			Analytical Method: EPA 504.1					
1,2-Dibromo-3-Chloropropane	0.0096	U	ug/L	1	0.020	0.0096	6/5/2020 23:57	T
Ethylene Dibromide (EDB)	0.0068	U	ug/L	1	0.020	0.0068	6/5/2020 23:57	T
Tetrachloro-m-xylene (S)	117		%	1	64-150		6/5/2020 23:57	
Analysis Desc: E508 Analysis, Water			Preparation Method: EPA 508					
			Analytical Method: EPA 508					

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chlordane (technical)	0.058	U	ug/L	1	0.22	0.058	6/5/2020 16:26	J
Endrin	0.0075	U	ug/L	1	0.022	0.0075	6/5/2020 16:26	J
Heptachlor	0.0065	U	ug/L	1	0.022	0.0065	6/5/2020 16:26	J
Heptachlor Epoxide	0.0057	U	ug/L	1	0.022	0.0057	6/5/2020 16:26	J
Hexachlorobenzene	0.0068	U	ug/L	1	0.022	0.0068	6/5/2020 16:26	J
Hexachlorocyclopentadiene	0.021	U	ug/L	1	0.022	0.021	6/5/2020 16:26	J
Methoxychlor	0.0074	U	ug/L	1	0.022	0.0074	6/5/2020 16:26	J
PCBs	0.10	U	ug/L	1	0.22	0.10	6/5/2020 16:26	J
Toxaphene	0.13	U	ug/L	1	0.22	0.13	6/5/2020 16:26	J
gamma-BHC (Lindane)	0.0077	U	ug/L	1	0.022	0.0077	6/5/2020 16:26	J
Decachlorobiphenyl (S)	97		%	1	70-130		6/5/2020 16:26	

Analysis Desc: E515.3 Analysis, Water Preparation Method: EPA 515.3

Analytical Method: EPA 515.3

2,4-D	0.095	U	ug/L	1	5.0	0.095	6/11/2020 00:21	J
Dalapon	0.90	U	ug/L	1	5.0	0.90	6/11/2020 00:21	J
Dinoseb	0.18	U	ug/L	1	2.5	0.18	6/11/2020 00:21	J
Pentachlorophenol	0.038	U	ug/L	1	0.50	0.038	6/11/2020 00:21	J
Picloram	0.090	U	ug/L	1	0.50	0.090	6/11/2020 00:21	J
Silvex (2,4,5-TP)	0.090	U	ug/L	1	1.0	0.090	6/11/2020 00:21	J
2,4-Dichlorophenylacetic acid (S)	113		%	1	70-130		6/11/2020 00:21	

Analysis Desc: E525.2 Analysis, Water Preparation Method: EPA 525.2

Analytical Method: EPA 525.2

Alachlor	0.15	U	ug/L	1	0.50	0.15	6/17/2020 12:44	J
Atrazine	0.090	U	ug/L	1	0.50	0.090	6/17/2020 12:44	J
Benzo[a]pyrene	0.015	U	ug/L	1	0.50	0.015	6/17/2020 12:44	J
Di(2-ethylhexyl) adipate	0.50	U	ug/L	1	1.0	0.50	6/17/2020 12:44	J
Simazine	0.060	U	ug/L	1	0.50	0.060	6/17/2020 12:44	J
bis(2-Ethylhexyl) phthalate	0.50	U	ug/L	1	2.0	0.50	6/17/2020 12:44	J
p-Terphenyl-d14 (S)	92		%	1	70-130		6/17/2020 12:44	

Analysis Desc: E531.1 Analysis, Water Analytical Method: EPA 531.1

Carbofuran	0.28	U	ug/L	1	2.5	0.28	6/10/2020 11:03	J
Oxamyl	0.57	U	ug/L	1	2.5	0.57	6/10/2020 11:03	J

Analysis Desc: E547 Analysis, Water Analytical Method: EPA 547

Glyphosate	5.5	U	ug/L	1	50	5.5	6/9/2020 02:36	J
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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: E548.1 Analysis, Water		Preparation Method: EPA 548.1						
		Analytical Method: EPA 548.1						
Endothall	1.8	U	ug/L	1	5.0	1.8	6/12/2020 16:07	J
Analysis Desc: E549.2 Analysis, Water		Preparation Method: EPA 549.2						
		Analytical Method: EPA 549.2						
Diquat	0.37	U	ug/L	1	5.0	0.37	6/11/2020 21:20	J
Analysis Desc: 552.2 Analysis, Water, HAA		Preparation Method: EPA 552.2						
		Analytical Method: EPA 552.2						
Bromoacetic Acid	0.54	U	ug/L	1	1.0	0.54	6/19/2020 00:52	T
Chloroacetic Acid	0.50	U	ug/L	1	1.0	0.50	6/19/2020 00:52	T
Dibromoacetic Acid	0.54	U	ug/L	1	1.0	0.54	6/19/2020 00:52	T
Dichloroacetic Acid	0.81	U	ug/L	1	1.0	0.81	6/19/2020 00:52	T
Total Haloacetic Acids (HAA5)	0.91	U	ug/L	1	1.0	0.91	6/19/2020 00:52	T
Trichloroacetic Acid	0.91	U	ug/L	1	1.0	0.91	6/19/2020 00:52	T
2,3-Dibromopropionic Acid (S)	116		%	1	70-130		6/19/2020 00:52	
Analysis Desc: 8081B Pesticide Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: EPA 8081						
4,4'-DDD	0.0053	U	ug/L	1	0.020	0.0053	6/11/2020 21:40	T
4,4'-DDE	0.0030	U	ug/L	1	0.020	0.0030	6/11/2020 21:40	T
4,4'-DDT	0.0059	U	ug/L	1	0.020	0.0059	6/11/2020 21:40	T
Aldrin	0.0028	U	ug/L	1	0.020	0.0028	6/11/2020 21:40	T
Dieldrin	0.0027	U	ug/L	1	0.020	0.0027	6/11/2020 21:40	T
Endosulfan I	0.0038	U	ug/L	1	0.020	0.0038	6/11/2020 21:40	T
Endosulfan II	0.0070	U	ug/L	1	0.020	0.0070	6/11/2020 21:40	T
Endosulfan Sulfate	0.0099	U	ug/L	1	0.020	0.0099	6/11/2020 21:40	T
Endrin Aldehyde	0.016	U	ug/L	1	0.020	0.016	6/11/2020 21:40	T
alpha-BHC	0.0022	U	ug/L	1	0.020	0.0022	6/11/2020 21:40	T
beta-BHC	0.0082	U	ug/L	1	0.020	0.0082	6/11/2020 21:40	T
delta-BHC	0.0033	U	ug/L	1	0.020	0.0033	6/11/2020 21:40	T
Tetrachloro-m-xylene (S)	91		%	1	44-124		6/11/2020 21:40	
Decachlorobiphenyl (S)	105		%	1	48-137		6/11/2020 21:40	
Analysis Desc: 8082A PCB Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: SW-846 8082A						
Aroclor 1016 (PCB-1016)	0.12	U	ug/L	1	0.20	0.12	6/11/2020 21:40	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Aroclor 1221 (PCB-1221)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:40	T
Aroclor 1232 (PCB-1232)	0.11	U	ug/L	1	0.20	0.11	6/11/2020 21:40	T
Aroclor 1242 (PCB-1242)	0.11	U	ug/L	1	0.20	0.11	6/11/2020 21:40	T
Aroclor 1248 (PCB-1248)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:40	T
Aroclor 1254 (PCB-1254)	0.13	U	ug/L	1	0.20	0.13	6/11/2020 21:40	T
Aroclor 1260 (PCB-1260)	0.098	U	ug/L	1	0.20	0.098	6/11/2020 21:40	T
Tetrachloro-m-xylene (S)	91		%	1	61-119		6/11/2020 21:40	
Decachlorobiphenyl (S)	105		%	1	44-136		6/11/2020 21:40	

Analysis Desc: 8270C Analysis, Water

Preparation Method: SW-846 3510C

Analytical Method: SW-846 8270C

1,2-Diphenylhydrazine	0.87	U	ug/L	1	5.0	0.87	6/11/2020 04:03	M
2,4,6-Trichlorophenol	0.99	U	ug/L	1	5.0	0.99	6/11/2020 04:03	M
2,4-Dichlorophenol	1.0	U	ug/L	1	5.0	1.0	6/11/2020 04:03	M
2,4-Dimethylphenol	0.54	U	ug/L	1	5.0	0.54	6/11/2020 04:03	M
2,4-Dinitrophenol	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
2,4-Dinitrotoluene (2,4-DNT)	0.68	U	ug/L	1	5.0	0.68	6/11/2020 04:03	M
2,6-Dinitrotoluene (2,6-DNT)	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
2-Chloronaphthalene	0.59	U	ug/L	1	5.0	0.59	6/11/2020 04:03	M
2-Chlorophenol	0.77	U	ug/L	1	5.0	0.77	6/11/2020 04:03	M
2-Methyl-4,6-dinitrophenol	0.76	U	ug/L	1	5.0	0.76	6/11/2020 04:03	M
2-Nitrophenol	1.2	U	ug/L	1	5.0	1.2	6/11/2020 04:03	M
3,3'-Dichlorobenzidine	0.72	U	ug/L	1	5.0	0.72	6/11/2020 04:03	M
4-Bromophenyl Phenyl Ether	0.64	U	ug/L	1	5.0	0.64	6/11/2020 04:03	M
4-Chloro-3-methylphenol	0.55	U	ug/L	1	5.0	0.55	6/11/2020 04:03	M
4-Chlorophenyl Phenyl Ether	0.52	U	ug/L	1	5.0	0.52	6/11/2020 04:03	M
4-Nitrophenol	1.3	U	ug/L	1	5.0	1.3	6/11/2020 04:03	M
Acenaphthene	0.040	U	ug/L	1	5.0	0.040	6/11/2020 04:03	M
Acenaphthylene	0.042	U	ug/L	1	5.0	0.042	6/11/2020 04:03	M
Anthracene	0.035	U	ug/L	1	5.0	0.035	6/11/2020 04:03	M
Benzidine	1.2	U	ug/L	1	5.0	1.2	6/11/2020 04:03	M
Benzo[a]anthracene	0.012	U	ug/L	1	5.0	0.012	6/11/2020 04:03	M
Benzo[b]fluoranthene	0.012	U	ug/L	1	5.0	0.012	6/11/2020 04:03	M
Benzo[g,h,i]perylene	0.048	U	ug/L	1	5.0	0.048	6/11/2020 04:03	M
Benzo[k]fluoranthene	0.048	U	ug/L	1	5.0	0.048	6/11/2020 04:03	M
Butyl benzyl phthalate	1.4	U	ug/L	1	5.0	1.4	6/11/2020 04:03	M
Chrysene	0.033	U	ug/L	1	5.0	0.033	6/11/2020 04:03	M
Di-n-Butyl Phthalate	0.95	U	ug/L	1	5.0	0.95	6/11/2020 04:03	M
Di-n-octyl Phthalate	1.3	U	ug/L	1	5.0	1.3	6/11/2020 04:03	M
Dibenzo[a,h]anthracene	0.024	U	ug/L	1	5.0	0.024	6/11/2020 04:03	M

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Diethyl phthalate	0.83	U	ug/L	1	5.0	0.83	6/11/2020 04:03	M
Dimethyl phthalate	0.83	U	ug/L	1	5.0	0.83	6/11/2020 04:03	M
Fluoranthene	0.037	U	ug/L	1	5.0	0.037	6/11/2020 04:03	M
Fluorene	0.038	U	ug/L	1	5.0	0.038	6/11/2020 04:03	M
Hexachlorobutadiene	1.4	U	ug/L	1	5.0	1.4	6/11/2020 04:03	M
Hexachloroethane	1.3	U	ug/L	1	5.0	1.3	6/11/2020 04:03	M
Indeno(1,2,3-cd)pyrene	0.011	U	ug/L	1	5.0	0.011	6/11/2020 04:03	M
Isophorone	1.2	U	ug/L	1	5.0	1.2	6/11/2020 04:03	M
N-Nitrosodi-n-propylamine	1.0	U	ug/L	1	5.0	1.0	6/11/2020 04:03	M
N-Nitrosodimethylamine	0.65	U	ug/L	1	5.0	0.65	6/11/2020 04:03	M
N-Nitrosodiphenylamine	0.65	U	ug/L	1	5.0	0.65	6/11/2020 04:03	M
Naphthalene	0.048	U	ug/L	1	5.0	0.048	6/11/2020 04:03	M
Nitrobenzene	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
Phenanthrene	0.040	U	ug/L	1	5.0	0.040	6/11/2020 04:03	M
Phenol	0.51	U	ug/L	1	5.0	0.51	6/11/2020 04:03	M
Pyrene	0.036	U	ug/L	1	5.0	0.036	6/11/2020 04:03	M
bis(2-Chloroethoxy)methane	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
bis(2-Chloroethyl)Ether	1.0	U	ug/L	1	5.0	1.0	6/11/2020 04:03	M
bis(2-Chloroisopropyl) Ether	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
bis(2-Ethylhexyl) phthalate	1.1	U	ug/L	1	5.0	1.1	6/11/2020 04:03	M
2-Fluorophenol (S)	36		%	1	31-134		6/11/2020 04:03	
Phenol-d6 (S)	27		%	1	24-120		6/11/2020 04:03	
Nitrobenzene-d5 (S)	69		%	1	38-139		6/11/2020 04:03	
2-Fluorobiphenyl (S)	70		%	1	42-138		6/11/2020 04:03	
2,4,6-Tribromophenol (S)	65		%	1	48-147		6/11/2020 04:03	
p-Terphenyl-d14 (S)	82		%	1	61-154		6/11/2020 04:03	

VOLATILES

Analysis Desc: 524.2 Analysis, Water

Analytical Method: EPA 524.2

1,1,1-Trichloroethane	0.32	U	ug/L	1	1.0	0.32	6/8/2020 15:54	T
1,1,2-Trichloroethane	0.39	U	ug/L	1	1.0	0.39	6/8/2020 15:54	T
1,1-Dichloroethylene	0.24	U	ug/L	1	1.0	0.24	6/8/2020 15:54	T
1,2,4-Trichlorobenzene	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:54	T
1,2-Dichlorobenzene	0.26	U	ug/L	1	1.0	0.26	6/8/2020 15:54	T
1,2-Dichloroethane	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:54	T
1,2-Dichloropropane	0.46	U	ug/L	1	1.0	0.46	6/8/2020 15:54	T
1,4-Dichlorobenzene	0.19	U	ug/L	1	1.0	0.19	6/8/2020 15:54	T
Benzene	0.15	U	ug/L	1	1.0	0.15	6/8/2020 15:54	T
Bromodichloromethane	0.49	U	ug/L	1	1.0	0.49	6/15/2020 17:32	T
Bromoform	0.46	U	ug/L	1	1.0	0.46	6/15/2020 17:32	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Tetrachloride	0.27	U	ug/L	1	1.0	0.27	6/8/2020 15:54	T
Chlorobenzene	0.35	U	ug/L	1	1.0	0.35	6/8/2020 15:54	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	6/15/2020 17:32	T
Dibromochloromethane	0.56	U	ug/L	1	1.0	0.56	6/15/2020 17:32	T
Ethylbenzene	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:54	T
Methylene Chloride	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:54	T
Styrene	0.21	U	ug/L	1	1.0	0.21	6/8/2020 15:54	T
Tetrachloroethylene (PCE)	1.0		ug/L	1	1.0	0.25	6/8/2020 15:54	T
Toluene	0.20	U	ug/L	1	1.0	0.20	6/8/2020 15:54	T
Total Trihalomethanes	0.56	U	ug/L	1	1.0	0.56	6/15/2020 17:32	T
Trichloroethene	0.25	U	ug/L	1	1.0	0.25	6/8/2020 15:54	T
Vinyl Chloride	0.32	U	ug/L	1	1.0	0.32	6/8/2020 15:54	T
Xylene (Total)	0.28	U	ug/L	1	2.0	0.28	6/8/2020 15:54	T
cis-1,2-Dichloroethylene	0.45	U	ug/L	1	1.0	0.45	6/8/2020 15:54	T
trans-1,2-Dichloroethylene	0.34	U	ug/L	1	1.0	0.34	6/8/2020 15:54	T
1,2-Dichloroethane-d4 (S)	108		%	1	70-130		6/15/2020 17:32	
1,2-Dichloroethane-d4 (S)	113		%	1	70-130		6/8/2020 15:54	
Toluene-d8 (S)	101		%	1	70-130		6/15/2020 17:32	
Toluene-d8 (S)	100		%	1	70-130		6/8/2020 15:54	
Bromofluorobenzene (S)	101		%	1	70-130		6/8/2020 15:54	
Bromofluorobenzene (S)	104		%	1	70-130		6/15/2020 17:32	

Analysis Desc: 8260B VOCs Analysis,
Water

Preparation Method: SW-846 5030B

Analytical Method: SW-846 8260B

1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	6/15/2020 17:32	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	6/15/2020 17:32	T
1,3-Dichlorobenzene	0.43	U	ug/L	1	1.0	0.43	6/15/2020 17:32	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	6/15/2020 17:32	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	6/15/2020 17:32	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	6/15/2020 17:32	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	6/15/2020 17:32	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	6/15/2020 17:32	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	6/15/2020 17:32	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	6/15/2020 17:32	T
1,2-Dichloroethane-d4 (S)	107		%	1	70-128		6/15/2020 17:32	
Toluene-d8 (S)	101		%	1	77-119		6/15/2020 17:32	
Bromofluorobenzene (S)	106		%	1	86-123		6/15/2020 17:32	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	10	U	mg/L	10	50	10	6/12/2020 09:39	T
Fluoride	1.3	I	mg/L	10	5.0	1.0	6/12/2020 09:39	T
Analysis Desc: COD,E410.4,Water		Analytical Method: EPA 410.4						
Chemical Oxygen Demand	24	U	mg/L	1	50	24	6/11/2020 17:00	T
Analysis Desc: Color,SM2120B,Water		Analytical Method: SM 2120 B						
Color	2.7	U	PCU	1	5.0	2.7	6/4/2020 08:00	T
pH for Color Analysis	7.6		SU	1	5.0	0.10	6/4/2020 08:00	T
Analysis Desc: Odor,SM2150B,Water		Analytical Method: SM 2150 B						
Odor	1.0	U	TON @ 40°C	1	1.0	1.0	6/4/2020 08:20	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	10	U	mg/L	1	10	10	6/5/2020 10:31	T
Analysis Desc: TSS,SM2540D,Water		Analytical Method: SM 2540D						
Total Suspended Solids	1.0	U	mg/L	1	1.0	1.0	6/8/2020 11:00	T
Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water		Analytical Method: SM 3500-CR D						
Hexavalent Chromium	0.0025	U	mg/L	1	0.040	0.0025	6/4/2020 09:45	T
Analysis Desc: Cyanide, SM4500-E, Water		Analytical Method: SM 4500-CN-E						
Cyanide	0.0048	U	mg/L	1	0.010	0.0048	6/11/2020 10:06	T
Analysis Desc: .PH,SM4500H+B, Water		Analytical Method: SM 4500H+B						
pH	7.9	Q	SU	1	0.1	0.1	6/5/2020 13:45	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate (as N)	0.079	U	mg/L	1	0.10	0.079	6/4/2020 16:35	T
Nitrite (as N)	0.077	U	mg/L	1	0.10	0.077	6/4/2020 16:35	T
Analysis Desc: BOD,SM5210B,Water		Analytical Method: SM 5210B						
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	6/4/2020 17:43	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429002**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 06/03/20 10:10

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous Analytical Method: SM 5540 C								
MBAS,as LAS,mol.wt.348	0.040	U	mg/L	1	0.20	0.040	6/4/2020 12:50	G

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429003**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Travel Blank**

Date Collected: 06/03/20 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B VOCs Analysis, Water			Preparation Method: SW-846 5030B					
			Analytical Method: SW-846 8260B					
1,1,1-Trichloroethane	0.44	U	ug/L	1	1.0	0.44	6/16/2020 17:25	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	6/16/2020 17:25	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	6/16/2020 17:25	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	6/16/2020 17:25	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	6/16/2020 17:25	T
1,2,4-Trimethylbenzene	0.54	U	ug/L	1	1.0	0.54	6/16/2020 17:25	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	6/16/2020 17:25	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	6/16/2020 17:25	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	6/16/2020 17:25	T
1,3,5-Trimethylbenzene	0.68	U	ug/L	1	1.0	0.68	6/16/2020 17:25	T
1,3-Dichlorobenzene	0.43	U	ug/L	1	1.0	0.43	6/16/2020 17:25	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	6/16/2020 17:25	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	6/16/2020 17:25	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	6/16/2020 17:25	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	6/16/2020 17:25	T
Benzene	0.20	U	ug/L	1	1.0	0.20	6/16/2020 17:25	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	6/16/2020 17:25	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	6/16/2020 17:25	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	6/16/2020 17:25	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	6/16/2020 17:25	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	6/16/2020 17:25	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	6/16/2020 17:25	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	6/16/2020 17:25	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	6/16/2020 17:25	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	6/16/2020 17:25	T
Dichlorodifluoromethane	0.36	U	ug/L	1	1.0	0.36	6/16/2020 17:25	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	6/16/2020 17:25	T
Isopropylbenzene	0.80	U	ug/L	1	1.0	0.80	6/16/2020 17:25	T
Methyl tert-butyl Ether (MTBE)	0.41	U	ug/L	1	1.0	0.41	6/16/2020 17:25	T
Methylene Chloride	1.0	U	ug/L	1	1.0	1.0	6/16/2020 17:25	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	6/16/2020 17:25	T
Toluene	0.45	U	ug/L	1	1.0	0.45	6/16/2020 17:25	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	6/16/2020 17:25	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	6/16/2020 17:25	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	6/16/2020 17:25	T
Xylene (Total)	0.74	U	ug/L	1	3.0	0.74	6/16/2020 17:25	T

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ANALYTICAL RESULTS

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID: **T2010429003**

Date Received: 06/03/20 12:47 Matrix: Water

Sample ID: **Travel Blank**

Date Collected: 06/03/20 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	6/16/2020 17:25	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	6/16/2020 17:25	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	6/16/2020 17:25	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	6/16/2020 17:25	T
1,2-Dichloroethane-d4 (S)	104		%	1	70-128		6/16/2020 17:25	
Toluene-d8 (S)	98		%	1	77-119		6/16/2020 17:25	
Bromofluorobenzene (S)	103		%	1	86-123		6/16/2020 17:25	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T2010429 SELF Plant Effluent Semi

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.
- Q Missed Hold Time
- J4 Estimated Result

LAB QUALIFIERS

- G DOH Certification #E82001(AEL-G)(FL NELAC Certification)
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
- J^ Not Certified
- M DOH Certification #E82535(AEL-M)(FL NELAC Certification)
- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)
- T^ Not Certified

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch: WCAI/4347 Analysis Method: SM 2120 B
QC Batch Method: SM 2120 B Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3503610

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
pH for Color Analysis	SU	0.10	0.10 U
Color	PCU	2.7	2.7 U

LABORATORY CONTROL SAMPLE: 3503611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
pH for Color Analysis	SU		0.10		
Color	PCU	30	32	106	90-110

SAMPLE DUPLICATE: 3503613

Original: T2010331001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
pH for Color Analysis	SU	7.3	7.3	0	10
Color	PCU	7.4	7.4	0	20

QC Batch: WCAI/4348 Analysis Method: SM 3500-CR D
QC Batch Method: SM 3500-CR D Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3503615

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Hexavalent Chromium	mg/L	0.0025	0.0025 U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 3503617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Hexavalent Chromium	mg/L	0.1	0.099	99	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3503618 3503619 Original: T2010429001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD Qualifiers
WET CHEMISTRY										
Hexavalent Chromium	mg/L	0	0.1	0.11	0.10	106	104	85-115	2	20

QC Batch: EXTt/1587

Analysis Method: EPA 504.1

QC Batch Method: EPA 504.1

Prepared: 06/04/2020 17:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3503624

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Ethylene Dibromide (EDB)	ug/L	0.0069	0.0069 U
1,2-Dibromo-3-Chloropropane	ug/L	0.0097	0.0097 U
Tetrachloro-m-xylene (S)	%	122	64-150

LABORATORY CONTROL SAMPLE & LCSD: 3503625 3503626

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Ethylene Dibromide (EDB)	ug/L	0.25	0.31	0.31	124	124	70-130	0	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.25	0.27	0.29	108	116	70-130	7	30	
Tetrachloro-m-xylene (S)	%				114	117	64-150	3		

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 3503627

Original: T2010478001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.25	0.26	104	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.25	0.28	116	70-130	
Tetrachloro-m-xylene (S)	%	86			103	64-150	

QC Batch: EXTj/1837

Analysis Method: EPA 508

QC Batch Method: EPA 508

Prepared: 06/04/2020 08:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3503640

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Hexachlorocyclopentadiene	ug/L	0.019	0.019	U
Hexachlorobenzene	ug/L	0.0063	0.0063	U
gamma-BHC (Lindane)	ug/L	0.0071	0.0071	U
Heptachlor	ug/L	0.0060	0.0060	U
Heptachlor Epoxide	ug/L	0.0052	0.0052	U
Endrin	ug/L	0.0069	0.0069	U
Methoxychlor	ug/L	0.0068	0.0068	U
PCBs	ug/L	0.093	0.093	U
Chlordane (technical)	ug/L	0.053	0.053	U
Toxaphene	ug/L	0.12	0.12	U
Decachlorobiphenyl (S)	%	104	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3503641 3503642

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Hexachlorocyclopentadiene	ug/L	0.1	0.11	0.095	109	95	70-130	14	20	
Hexachlorobenzene	ug/L	0.1	0.10	0.093	100	93	70-130	7	20	
gamma-BHC (Lindane)	ug/L	0.1	0.10	0.095	100	95	70-130	5	20	
Heptachlor	ug/L	0.1	0.11	0.10	109	103	70-130	6	20	
Heptachlor Epoxide	ug/L	0.1	0.11	0.10	110	104	70-130	6	20	
Endrin	ug/L	0.1	0.11	0.10	109	104	70-130	5	20	
Methoxychlor	ug/L	0.1	0.11	0.098	105	98	70-130	7	20	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3503641 3503642

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
PCBs	ug/L		0.093	0.093U				0		
Chlordane (technical)	ug/L		0.053	0.053U				0		
Toxaphene	ug/L		0.12	0.12U				0		
Decachlorobiphenyl (S)	%				111	105	70-130	6		

MATRIX SPIKE SAMPLE: 3503961 Original: J2007593001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.1	0.098	98	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.098	98	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.099	99	65-135	
Heptachlor	ug/L	0	0.1	0.11	111	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.10	100	65-135	
Endrin	ug/L	0	0.1	0.11	110	65-135	
Methoxychlor	ug/L	0	0.1	0.10	101	65-135	
PCBs	ug/L			0.093			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Decachlorobiphenyl (S)	%				112	70-130	

MATRIX SPIKE SAMPLE: 3505497 Original: J2007717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.1	0.13	130	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.075	75	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.099	99	65-135	
Heptachlor	ug/L	0	0.1	0.095	95	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.13	129	65-135	
Endrin	ug/L	0	0.1	0.075	75	65-135	
Methoxychlor	ug/L	0	0.1	0.13	128	65-135	
PCBs	ug/L			0.093			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Decachlorobiphenyl (S)	%				113	70-130	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch: EXTj/1837 Analysis Method: EPA 508
QC Batch Method: EPA 508 Prepared: 06/05/2020 07:15
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3503640

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Hexachlorocyclopentadiene	ug/L	0.019	0.019 U
Hexachlorobenzene	ug/L	0.0063	0.0063 U
gamma-BHC (Lindane)	ug/L	0.0071	0.0071 U
Heptachlor	ug/L	0.0060	0.0060 U
Heptachlor Epoxide	ug/L	0.0052	0.0052 U
Endrin	ug/L	0.0069	0.0069 U
Methoxychlor	ug/L	0.0068	0.0068 U
PCBs	ug/L	0.093	0.093 U
Chlordane (technical)	ug/L	0.053	0.053 U
Toxaphene	ug/L	0.12	0.12 U
Decachlorobiphenyl (S)	%	104	70-130

LABORATORY CONTROL SAMPLE & LCSD: 3503641 3503642

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Hexachlorocyclopentadiene	ug/L	0.1	0.11	0.095	109	95	70-130	14	20
Hexachlorobenzene	ug/L	0.1	0.10	0.093	100	93	70-130	7	20
gamma-BHC (Lindane)	ug/L	0.1	0.10	0.095	100	95	70-130	5	20
Heptachlor	ug/L	0.1	0.11	0.10	109	103	70-130	6	20
Heptachlor Epoxide	ug/L	0.1	0.11	0.10	110	104	70-130	6	20
Endrin	ug/L	0.1	0.11	0.10	109	104	70-130	5	20
Methoxychlor	ug/L	0.1	0.11	0.098	105	98	70-130	7	20
PCBs	ug/L		0.093	0.093U				0	
Chlordane (technical)	ug/L		0.053	0.053U				0	
Toxaphene	ug/L		0.12	0.12U				0	
Decachlorobiphenyl (S)	%				111	105	70-130	6	

MATRIX SPIKE SAMPLE: 3503961 Original: J2007593001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 3503961

Original: J2007593001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Hexachlorocyclopentadiene	ug/L	0	0.1	0.098	98	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.098	98	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.099	99	65-135	
Heptachlor	ug/L	0	0.1	0.11	111	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.10	100	65-135	
Endrin	ug/L	0	0.1	0.11	110	65-135	
Methoxychlor	ug/L	0	0.1	0.10	101	65-135	
PCBs	ug/L			0.093			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Decachlorobiphenyl (S)	%				112	70-130	

MATRIX SPIKE SAMPLE: 3505497

Original: J2007717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.1	0.13	130	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.075	75	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.099	99	65-135	
Heptachlor	ug/L	0	0.1	0.095	95	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.13	129	65-135	
Endrin	ug/L	0	0.1	0.075	75	65-135	
Methoxychlor	ug/L	0	0.1	0.13	128	65-135	
PCBs	ug/L			0.093			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Decachlorobiphenyl (S)	%				113	70-130	

QC Batch: WCAI/4350

Analysis Method: SM 2150 B

QC Batch Method: SM 2150 B

Prepared:

Associated Lab Samples: T2010429001, T2010429002

SAMPLE DUPLICATE: 3503648

Original: T2010541001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Odor	TON @	1.0U	1.0	0		

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch: WCAI/4382 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3505206

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Nitrate (as N)	mg/L	0.079	0.079 U
Nitrite (as N)	mg/L	0.077	0.077 U

LABORATORY CONTROL SAMPLE: 3505207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Nitrate (as N)	mg/L	1	1.0	101	90-110
Nitrite (as N)	mg/L	1	1.1	107	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3505208 3505209 Original: T2010570001

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	1.3	1	2.3	2.4	98	108	90-110	4	10	
Nitrite (as N)	mg/L	0	1	0.077	0.077U	0	0	90-110	0	10	

QC Batch: WCAI/4388 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3505410

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: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 3505411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	200	190	95	84.6-115.4	

SAMPLE DUPLICATE: 3505412

Original: T2010588001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	1400	1300	1	20	
QC Batch:	WCAI/4390		Analysis Method:	SM 2540 C		
QC Batch Method:	SM 2540 C		Prepared:			
Associated Lab Samples:	T2010429001, T2010429002					

METHOD BLANK: 3505635

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

LABORATORY CONTROL SAMPLE: 3505636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	660	750	114	85-115	

SAMPLE DUPLICATE: 3505637

Original: T2010218001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY Total Dissolved Solids	mg/L	19000	17000	10	10	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch: WCAg/2796 Analysis Method: SM 5540 C
QC Batch Method: SM 5540 C Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3506363

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY MBAS,as LAS,mol.wt.348	mg/L	0.040	0.040 U

LABORATORY CONTROL SAMPLE: 3506364

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY MBAS,as LAS,mol.wt.348	mg/L	0.4	0.45	112	75-125

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3506367 3506368 Original: A2004846001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY MBAS,as LAS,mol.wt.348	mg/L	16	10	28	28	122	118	40-139	2	20	

QC Batch: WCAI/4421 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3506850

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

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 3506851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	200	190	94	85-115

SAMPLE DUPLICATE: 3506852

Original: A2004823001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	220	200	8	10
QC Batch:	EXTt/1601		Analysis Method:	EPA 8081	
QC Batch Method:	SW-846 3510C		Prepared:	06/08/2020 12:30	
Associated Lab Samples: T2010429001, T2010429002					

METHOD BLANK: 3507211

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
alpha-BHC	ug/L	0.0022	0.0022 U
beta-BHC	ug/L	0.0081	0.0081 U
delta-BHC	ug/L	0.0033	0.0033 U
Aldrin	ug/L	0.0028	0.0028 U
Endosulfan I	ug/L	0.0038	0.0038 U
4,4'-DDE	ug/L	0.0030	0.0030 U
Dieldrin	ug/L	0.0027	0.0027 U
4,4'-DDD	ug/L	0.0053	0.0053 U
Endosulfan II	ug/L	0.0069	0.0069 U
Endrin Aldehyde	ug/L	0.016	0.016 U
4,4'-DDT	ug/L	0.0059	0.0059 U
Endosulfan Sulfate	ug/L	0.0098	0.0098 U
Tetrachloro-m-xylene (S)	%	87	44-124
Decachlorobiphenyl (S)	%	115	48-137

LABORATORY CONTROL SAMPLE & LCSD: 3507212 3507213

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3507212 3507213

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
alpha-BHC	ug/L	0.1	0.094	0.084	94	84	54-138	11	30	
beta-BHC	ug/L	0.1	0.10	0.12	103	125	56-136	19	30	
delta-BHC	ug/L	0.1	0.10	0.11	103	109	52-142	6	30	
Aldrin	ug/L	0.1	0.088	0.066	88	66	45-134	29	30	
Endosulfan I	ug/L	0.1	0.11	0.10	107	101	62-126	6	30	
4,4'-DDE	ug/L	0.1	0.097	0.097	97	97	57-135	1	30	
Dieldrin	ug/L	0.1	0.12	0.10	116	103	60-136	12	30	
4,4'-DDD	ug/L	0.1	0.10	0.10	103	101	56-143	2	30	
Endosulfan II	ug/L	0.1	0.11	0.10	109	105	52-135	4	30	
Endrin Aldehyde	ug/L	0.1	0.11	0.10	108	103	51-132	5	30	
4,4'-DDT	ug/L	0.1	0.12	0.12	115	115	51-143	0	30	
Endosulfan Sulfate	ug/L	0.1	0.12	0.12	117	118	62-133	1	30	
Tetrachloro-m-xylene (S)	%				79	67	44-124	16		
Decachlorobiphenyl (S)	%				105	99	48-137	6		

MATRIX SPIKE SAMPLE: 3507214

Original: T2010574013

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
alpha-BHC	ug/L	0	0.1	0.093	92	54-138	
beta-BHC	ug/L	0	0.1	0.12	115	56-136	
delta-BHC	ug/L	0	0.1	0.10	99	52-142	
Aldrin	ug/L	0	0.1	0.083	82	45-134	
Endosulfan I	ug/L	0	0.1	0.091	90	62-126	
4,4'-DDE	ug/L	0	0.1	0.10	100	57-135	
Dieldrin	ug/L	0	0.1	0.10	100	60-136	
4,4'-DDD	ug/L	0	0.1	0.10	100	56-143	
Endosulfan II	ug/L	0	0.1	0.13	127	52-135	
Endrin Aldehyde	ug/L	0	0.1	0.097	96	51-132	
4,4'-DDT	ug/L	0	0.1	0.11	109	51-143	
Endosulfan Sulfate	ug/L	0	0.1	0.13	126	62-133	
Tetrachloro-m-xylene (S)	%	66			71	44-124	
Decachlorobiphenyl (S)	%	102			100	48-137	

QC Batch: EXTt/1602

Analysis Method: SW-846 8082A

QC Batch Method: SW-846 3510C

Prepared: 06/08/2020 12:30

Associated Lab Samples: T2010429001, T2010429002

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3507238

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Aroclor 1016 (PCB-1016)	ug/L	0.11	0.11	U
Aroclor 1221 (PCB-1221)	ug/L	0.12	0.12	U
Aroclor 1232 (PCB-1232)	ug/L	0.11	0.11	U
Aroclor 1242 (PCB-1242)	ug/L	0.11	0.11	U
Aroclor 1248 (PCB-1248)	ug/L	0.12	0.12	U
Aroclor 1254 (PCB-1254)	ug/L	0.12	0.12	U
Aroclor 1260 (PCB-1260)	ug/L	0.097	0.097	U
Tetrachloro-m-xylene (S)	%	87	61-119	
Decachlorobiphenyl (S)	%	115	44-136	

LABORATORY CONTROL SAMPLE & LCSD: 3507239 3507240

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Aroclor 1016 (PCB-1016)	ug/L	1	1.3	1.1	127	114	46-129	12		
Aroclor 1221 (PCB-1221)	ug/L		0.12	0.12U				0		
Aroclor 1232 (PCB-1232)	ug/L		0.11	0.11U				0		
Aroclor 1242 (PCB-1242)	ug/L		0.11	0.11U				0		
Aroclor 1248 (PCB-1248)	ug/L		0.12	0.12U				0		
Aroclor 1254 (PCB-1254)	ug/L		0.12	0.12U				0		
Aroclor 1260 (PCB-1260)	ug/L	1	1.3	1.2	126	116	45-134	9		
Tetrachloro-m-xylene (S)	%				65	69	61-119	6		
Decachlorobiphenyl (S)	%				93	90	44-136	3		

QC Batch: HPLj/1102

Analysis Method: EPA 547

QC Batch Method: EPA 547

Prepared:

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3507280

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Glyphosate	ug/L	5.5	5.5	U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3507281 3507282

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Glyphosate	ug/L	200	180	200	92	98	70-130	6	30	

MATRIX SPIKE SAMPLE: 3507284 Original: J2007593001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Glyphosate	ug/L	0	200	210	103	70-130	

QC Batch: EXTm/1657

Analysis Method: SW-846 8270C

QC Batch Method: SW-846 3510C

Prepared: 06/08/2020 11:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3507495

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Phenol	ug/L	0.51	0.51	U
2-Chlorophenol	ug/L	0.77	0.77	U
2-Nitrophenol	ug/L	1.2	1.2	U
2,4-Dimethylphenol	ug/L	0.54	0.54	U
2,4-Dichlorophenol	ug/L	1.0	1.0	U
4-Chloro-3-methylphenol	ug/L	0.55	0.55	U
2,4,6-Trichlorophenol	ug/L	0.99	0.99	U
2,4-Dinitrophenol	ug/L	1.1	1.1	U
4-Nitrophenol	ug/L	1.3	1.3	U
2-Methyl-4,6-dinitrophenol	ug/L	0.76	0.76	U
N-Nitrosodimethylamine	ug/L	0.65	0.65	U
bis(2-Chloroethyl)Ether	ug/L	1.0	1.0	U
bis(2-Chloroisopropyl) Ether	ug/L	1.1	1.1	U
N-Nitrosodi-n-propylamine	ug/L	1.0	1.0	U
Hexachloroethane	ug/L	1.3	1.3	U
Nitrobenzene	ug/L	1.1	1.1	U
Isophorone	ug/L	1.2	1.2	U
bis(2-Chloroethoxy)methane	ug/L	1.1	1.1	U
Naphthalene	ug/L	0.048	0.048	U
Hexachlorobutadiene	ug/L	1.4	1.4	U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3507495

Parameter	Units	Blank Result	Reporting Limit Qualifiers
2-Chloronaphthalene	ug/L	0.59	0.59 U
Dimethyl phthalate	ug/L	0.83	0.83 U
2,6-Dinitrotoluene (2,6-DNT)	ug/L	1.1	1.1 U
Acenaphthylene	ug/L	0.042	0.042 U
Acenaphthene	ug/L	0.040	0.040 U
2,4-Dinitrotoluene (2,4-DNT)	ug/L	0.68	0.68 U
Diethyl phthalate	ug/L	0.83	0.83 U
Fluorene	ug/L	0.038	0.038 U
4-Chlorophenyl Phenyl Ether	ug/L	0.52	0.52 U
1,2-Diphenylhydrazine	ug/L	0.87	0.87 U
4-Bromophenyl Phenyl Ether	ug/L	0.64	0.64 U
Phenanthrene	ug/L	0.040	0.040 U
Anthracene	ug/L	0.035	0.035 U
Di-n-Butyl Phthalate	ug/L	0.95	0.95 U
Fluoranthene	ug/L	0.037	0.037 U
Benidine	ug/L	1.2	1.2 U
Pyrene	ug/L	0.036	0.036 U
Butyl benzyl phthalate	ug/L	1.4	1.4 U
Benzo[a]anthracene	ug/L	0.012	0.012 U
3,3'-Dichlorobenzidine	ug/L	0.72	0.72 U
Chrysene	ug/L	0.033	0.033 U
bis(2-Ethylhexyl) phthalate	ug/L	1.1	1.1 U
Di-n-octyl Phthalate	ug/L	1.3	1.3 U
Benzo[b]fluoranthene	ug/L	0.012	0.012 U
Benzo[k]fluoranthene	ug/L	0.048	0.048 U
Indeno(1,2,3-cd)pyrene	ug/L	0.011	0.011 U
Dibenzo[a,h]anthracene	ug/L	0.024	0.024 U
Benzo[g,h,i]perylene	ug/L	0.048	0.048 U
N-Nitrosodiphenylamine	ug/L	0.65	0.65 U
2-Fluorophenol (S)	%	43	31-134
Phenol-d6 (S)	%	30	24-120
Nitrobenzene-d5 (S)	%	70	38-139
2-Fluorobiphenyl (S)	%	73	42-138
2,4,6-Tribromophenol (S)	%	70	48-147
p-Terphenyl-d14 (S)	%	91	61-154

LABORATORY CONTROL SAMPLE & LCSD: 3507496 3507497

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
N-Nitrosodimethylamine	ug/L	40	14	13	36	33		8	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3507496 3507497

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Phenol	ug/L	40	11	11	29	27	19-106	4	20	
bis(2-Chloroethyl)Ether	ug/L	40	27	26	67	64		4		
2-Chlorophenol	ug/L	40	22	21	55	53		4		
bis(2-Chloroisopropyl) Ether	ug/L	40	24	22	60	56		6		
N-Nitrosodi-n-propylamine	ug/L	40	26	25	66	62		6		
Hexachloroethane	ug/L	40	23	21	56	53	21-115	5	20	
Nitrobenzene	ug/L	40	24	24	60	59	45-121	2	20	
Isophorone	ug/L	40	26	25	64	63		2		
2-Nitrophenol	ug/L	40	21	22	53	55		3		
2,4-Dimethylphenol	ug/L	40	25	24	62	60		2		
bis(2-Chloroethoxy)methane	ug/L	40	26	26	65	64		2		
2,4-Dichlorophenol	ug/L	40	24	23	59	59	47-121	2	20	
Naphthalene	ug/L	40	24	23	60	58		3		
Hexachlorobutadiene	ug/L	40	25	25	63	61	22-124	2	20	
4-Chloro-3-methylphenol	ug/L	40	24	24	61	60	52-119	2	20	
2,4,6-Trichlorophenol	ug/L	40	25	27	64	67	50-125	5	20	
2-Chloronaphthalene	ug/L	40	21	23	52	57		9		
Dimethyl phthalate	ug/L	40	26	27	66	68		3		
2,6-Dinitrotoluene (2,6-DNT)	ug/L	40	23	24	57	60		4		
Acenaphthylene	ug/L	40	25	26	63	64		1		
Acenaphthene	ug/L	40	24	24	60	60	47-122	0	20	
2,4-Dinitrophenol	ug/L	40	14	15	35	38		9		
2,4-Dinitrotoluene (2,4-DNT)	ug/L	40	24	24	60	61	57-128	2	20	
4-Nitrophenol	ug/L	40	12	13	30	32		5		
Diethyl phthalate	ug/L	40	26	27	65	67		3		
Fluorene	ug/L	40	24	25	61	62	52-124	2	20	
4-Chlorophenyl Phenyl Ether	ug/L	40	25	25	62	63		1		
2-Methyl-4,6-dinitrophenol	ug/L	40	18	19	45	48		7		
N-Nitrosodiphenylamine	ug/L	40	21	21	53	53		0		
1,2-Diphenylhydrazine	ug/L	40	23	23	59	57		2		
4-Bromophenyl Phenyl Ether	ug/L	40	25	25	63	63		0		
Phenanthrene	ug/L	40	25	24	63	61		3		
Anthracene	ug/L	40	24	24	61	60		2		
Di-n-Butyl Phthalate	ug/L	40	26	25	65	63		2		
Fluoranthene	ug/L	40	26	25	65	62	57-128	4	20	
Pyrene	ug/L	40	27	28	69	69		1		
Butyl benzyl phthalate	ug/L	40	27	27	66	67		0		
Benzo[a]anthracene	ug/L	40	25	26	62	65		5		
Chrysene	ug/L	40	26	27	65	68		5		
bis(2-Ethylhexyl) phthalate	ug/L	40	26	27	65	67	55-135	2	20	
Di-n-octyl Phthalate	ug/L	40	26	26	64	66		3		
Benzo[b]fluoranthene	ug/L	40	25	23	62	58		6		
Benzo[k]fluoranthene	ug/L	40	25	25	63	64		1		
Indeno(1,2,3-cd)pyrene	ug/L	40	26	26	65	65		0		

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3507496 3507497

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Dibenzo[a,h]anthracene	ug/L	40	25	26	63	64		2		
Benzo[g,h,i]perylene	ug/L	40	26	25	64	64		1		
Benzidine	ug/L	40	9.4	13	24	31		29		
3,3'-Dichlorobenzidine	ug/L	40	23	25	58	62		7		
2-Fluorophenol (S)	%				37	34	31-134	6		
Phenol-d6 (S)	%				28	27	24-120	3		
Nitrobenzene-d5 (S)	%				64	64	38-139	0		
2-Fluorobiphenyl (S)	%				62	66	42-138	5		
2,4,6-Tribromophenol (S)	%				58	60	48-147	4		
p-Terphenyl-d14 (S)	%				71	72	61-154	2		

QC Batch: MSVt/1925

Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2

Prepared:

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3508624

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Vinyl Chloride	ug/L	0.32	0.32	U
1,1-Dichloroethylene	ug/L	0.24	0.24	U
Methylene Chloride	ug/L	0.20	0.20	U
trans-1,2-Dichloroethylene	ug/L	0.34	0.34	U
cis-1,2-Dichloroethylene	ug/L	0.45	0.45	U
1,2-Dichloroethane	ug/L	0.21	0.21	U
1,1,1-Trichloroethane	ug/L	0.32	0.32	U
Carbon Tetrachloride	ug/L	0.27	0.27	U
Benzene	ug/L	0.15	0.15	U
1,2-Dichloropropane	ug/L	0.46	0.46	U
Trichloroethene	ug/L	0.25	0.25	U
1,1,2-Trichloroethane	ug/L	0.39	0.39	U
Toluene	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.25	0.25	U
Chlorobenzene	ug/L	0.35	0.35	U
Ethylbenzene	ug/L	0.20	0.20	U
Styrene	ug/L	0.21	0.21	U
1,4-Dichlorobenzene	ug/L	0.19	0.19	U
1,2-Dichlorobenzene	ug/L	0.26	0.26	U
1,2,4-Trichlorobenzene	ug/L	0.21	0.21	U
Xylene (Total)	ug/L	0.28	0.28	U
1,2-Dichloroethane-d4 (S)	%	101	70-130	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3508624

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Toluene-d8 (S)	%	99	70-130
Bromofluorobenzene (S)	%	108	70-130

LABORATORY CONTROL SAMPLE & LCSD: 3508625 3508626

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	22	23	108	114	70-130	5	30	
1,1-Dichloroethylene	ug/L	20	18	19	90	95	70-130	6	30	
Methylene Chloride	ug/L	20	18	19	90	94	70-130	5	30	
trans-1,2-Dichloroethylene	ug/L	20	19	21	95	103	70-130	8	30	
cis-1,2-Dichloroethylene	ug/L	20	20	20	99	100	70-130	1	30	
1,2-Dichloroethane	ug/L	20	20	20	99	102	70-130	3	30	
1,1,1-Trichloroethane	ug/L	20	18	19	90	94	70-130	4	30	
Carbon Tetrachloride	ug/L	20	20	21	101	107	70-130	6	30	
Benzene	ug/L	20	18	19	91	97	70-130	6	30	
1,2-Dichloropropane	ug/L	20	19	20	94	99	70-130	5	30	
Trichloroethene	ug/L	20	19	20	94	102	70-130	8	30	
1,1,2-Trichloroethane	ug/L	20	18	19	88	94	70-130	7	30	
Toluene	ug/L	20	18	19	88	95	70-130	7	30	
Tetrachloroethylene (PCE)	ug/L	20	17	18	85	92	70-130	9	30	
Chlorobenzene	ug/L	20	17	19	86	93	70-130	8	30	
Ethylbenzene	ug/L	20	17	19	86	95	70-130	10	30	
Styrene	ug/L	20	17	18	86	92	70-130	6	30	
1,4-Dichlorobenzene	ug/L	20	18	20	88	100	70-130	13	30	
1,2-Dichlorobenzene	ug/L	20	17	19	84	94	70-130	11	30	
1,2,4-Trichlorobenzene	ug/L	20	17	21	85	104	70-130	20	30	
Xylene (Total)	ug/L	60	52	57	87	96	70-130	9	30	
1,2-Dichloroethane-d4 (S)	%				97	97	70-130	0		
Toluene-d8 (S)	%				98	98	70-130	1		
Bromofluorobenzene (S)	%				105	105	70-130	0		

MATRIX SPIKE SAMPLE: 3508627

Original: T2010530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	0.32	0	70-130	J4

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 3508627

Original: T2010530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethylene	ug/L	0	20	0.24	0	70-130	J4
Methylene Chloride	ug/L	0	20	18	88	70-130	
trans-1,2-Dichloroethylene	ug/L	0	20	19	94	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	19	93	70-130	
1,2-Dichloroethane	ug/L	0	20	22	111	70-130	
1,1,1-Trichloroethane	ug/L	0	20	20	102	70-130	
Carbon Tetrachloride	ug/L	0	20	23	113	70-130	
Benzene	ug/L	0	20	17	84	70-130	
1,2-Dichloropropane	ug/L	0	20	18	92	70-130	
Trichloroethene	ug/L	0	20	19	94	70-130	
1,1,2-Trichloroethane	ug/L	0	20	18	88	70-130	
Toluene	ug/L	0	20	0.20	0	70-130	J4
Tetrachloroethylene (PCE)	ug/L	0	20	19	97	70-130	
Chlorobenzene	ug/L	0	20	18	88	70-130	
Ethylbenzene	ug/L	0	20	0.20	0	70-130	J4
Styrene	ug/L	0	20	0.21	0	70-130	J4
1,4-Dichlorobenzene	ug/L	0	20	17	85	70-130	
1,2-Dichlorobenzene	ug/L	0	20	16	79	70-130	
1,2,4-Trichlorobenzene	ug/L	0	20	18	88	70-130	
Xylene (Total)	ug/L	0	60	0.28	0	70-130	J4
1,2-Dichloroethane-d4 (S)	%				122	70-130	
Toluene-d8 (S)	%				95	70-130	
Bromofluorobenzene (S)	%				98	70-130	

QC Batch: EXTj/1858

Analysis Method: EPA 548.1

QC Batch Method: EPA 548.1

Prepared: 06/09/2020 06:50

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3508726

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Endothall	ug/L	1.8	1.8	U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3508727 3508728

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Endothall	ug/L	50	46	51	92	102	63-131	10	30	

MATRIX SPIKE SAMPLE: 3508730 Original: J2007717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Endothall	ug/L	0	50	44	89	63-131	

QC Batch: EXTj/1859

Analysis Method: EPA 549.2

QC Batch Method: EPA 549.2

Prepared: 06/09/2020 06:50

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3508776

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Diquat	ug/L	0.37	0.37	U

LABORATORY CONTROL SAMPLE & LCSD: 3508777 3508778

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Diquat	ug/L	20	18	18	90	92	70-130	1	30	

MATRIX SPIKE SAMPLE: 3508794 Original: J2007717001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Diquat	ug/L	0	23	7.1	31	70-130	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch: HPLj/1104 Analysis Method: EPA 531.1
QC Batch Method: EPA 531.1 Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3508805

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Oxamyl	ug/L	0.57	0.57 U
Carbofuran	ug/L	0.28	0.28 U

LABORATORY CONTROL SAMPLE & LCSD: 3508806 3508807

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Oxamyl	ug/L	20	23	22	117	111	80-120	5	20
Carbofuran	ug/L	20	23	21	114	103	80-120	9	20

MATRIX SPIKE SAMPLE: 3508809 Original: J2007633001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Oxamyl	ug/L	0	20	22	108	80-120
Carbofuran	ug/L	0	20	21	105	80-120

QC Batch: GCSj/1586 Analysis Method: EPA 515.3
QC Batch Method: EPA 515.3 Prepared: 06/10/2020 07:30
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3510158

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Dalapon	ug/L	0.90	0.90 U
2,4-D	ug/L	0.095	0.095 U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3510158

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Pentachlorophenol	ug/L	0.038	0.038	U
Silvex (2,4,5-TP)	ug/L	0.090	0.090	U
Picloram	ug/L	0.090	0.090	U
Dinoseb	ug/L	0.18	0.18	U
2,4-Dichlorophenylacetic acid (S)	%	105	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 3510159 3510160

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Dalapon	ug/L	25	25	27	99	108	70-130	8	30	
2,4-D	ug/L	12	13	14	104	112	70-130	8	30	
Pentachlorophenol	ug/L	2.5	3.1	3.3	123	133	70-130	8	30	
Silvex (2,4,5-TP)	ug/L	5	5.6	6.3	112	125	70-130	11	30	
Picloram	ug/L	2.5	2.5	2.7	101	107	70-130	5	30	
Dinoseb	ug/L	12	14	15	111	121	70-130	9	30	
2,4-Dichlorophenylacetic acid (S)	%				105	113	70-130	7		

MATRIX SPIKE SAMPLE: 3510162 Original: J2007593001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Dalapon	ug/L	0	25	30	120	70-130	
2,4-D	ug/L	0	12	14	111	70-130	
Pentachlorophenol	ug/L	0	2.5	2.1	83	70-130	
Silvex (2,4,5-TP)	ug/L	0	5	5.7	114	70-130	
Picloram	ug/L	0	2.5	2.9	114	70-130	
Dinoseb	ug/L	0	12	7.1	57	70-130	
2,4-Dichlorophenylacetic acid (S)	%				124	70-130	

QC Batch: WCAI/4482 Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E Prepared:
Associated Lab Samples: T2010429001, T2010429002

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3510346

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Cyanide	mg/L	0.0048	0.0048 U

LABORATORY CONTROL SAMPLE: 3510347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Cyanide	mg/L	0.04	0.037	92	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3510348 3510349 Original: J2007707001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Cyanide	mg/L	0	0.04	0.036	0.035	89	88	90-110	1	10	

QC Batch: DGM/1817

Analysis Method: EPA 245.1

QC Batch Method: EPA 245.1

Prepared: 06/10/2020 10:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3511778

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS Mercury	mg/L	0.000050	0.000050 U

LABORATORY CONTROL SAMPLE: 3511779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
METALS Mercury	mg/L	0.001	0.00099	99	85-115

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3511780 3511781 Original: M2003154002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.001	0.00069	0.00084	69	84	70-130	19	20	

QC Batch: WCAI/4509 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Prepared:
Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3512006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Chemical Oxygen Demand	mg/L	24	24 U	

LABORATORY CONTROL SAMPLE: 3512007

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	480	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3512009 3512010 Original: T2010996001

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	500	500	1000	1000	104	104	90-110	0	10	

QC Batch: WCAI/4544 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: T2010429001, T2010429002

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3514169

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Fluoride	mg/L	0.10	0.10 U
Chloride	mg/L	1.0	1.0 U
Sulfate	mg/L	1.0	1.0 U

LABORATORY CONTROL SAMPLE: 3514170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Fluoride	mg/L	2.5	2.4	96	90-110
Chloride	mg/L	25	25	99	90-110
Sulfate	mg/L	25	24	97	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3514171 3514172 Original: T2010777001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0.076	2	2.0	2.0	101	102	90-110	1	10	
Chloride	mg/L	7.8	20	32	32	122	123	90-110	1	10	
Sulfate	mg/L	0.64	20	21	21	106	106	90-110	0	10	

QC Batch: EXTj/1877

Analysis Method: EPA 525.2

QC Batch Method: EPA 525.2

Prepared: 06/16/2020 06:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3514669

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Simazine	ug/L	0.060	0.060 U
Atrazine	ug/L	0.090	0.090 U
Alachlor	ug/L	0.15	0.15 U
Di(2-ethylhexyl) adipate	ug/L	0.50	0.50 U
bis(2-Ethylhexyl) phthalate	ug/L	0.50	0.50 U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3514669

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Benzo[a]pyrene	ug/L	0.015	0.015 U
p-Terphenyl-d14 (S)	%	99	70-130

LABORATORY CONTROL SAMPLE & LCSD: 3514670 3514671

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Simazine	ug/L	2	1.8	1.9	90	93	70-130	3	30
Atrazine	ug/L	2	1.9	1.9	97	97	70-130	1	30
Alachlor	ug/L	2	2.4	2.6	122	131	70-130	7	30
Di(2-ethylhexyl) adipate	ug/L	2	1.9	2.0	96	99	70-130	3	30
bis(2-Ethylhexyl) phthalate	ug/L	2	2.0	2.2	100	108	70-130	8	30
Benzo[a]pyrene	ug/L	2	1.9	1.9	95	96	70-130	1	30
p-Terphenyl-d14 (S)	%				101	96	70-130	5	

MATRIX SPIKE SAMPLE: 3516375 Original: J2008131001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Simazine	ug/L	0	2	1.6	78	70-130
Atrazine	ug/L	0	2	1.6	80	70-130
Alachlor	ug/L	0	2	2.2	112	70-130
Di(2-ethylhexyl) adipate	ug/L	0	2	1.9	95	70-130
bis(2-Ethylhexyl) phthalate	ug/L	0.03	2	1.9	94	70-130
Benzo[a]pyrene	ug/L	0	2	1.8	88	70-130
p-Terphenyl-d14 (S)	%	101			101	70-130

QC Batch: GCS1/1454

Analysis Method: EPA 552.2

QC Batch Method: EPA 552.2

Prepared: 06/15/2020 07:45

Associated Lab Samples: T2010429001

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3514696

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Chloroacetic Acid	ug/L	0.50	0.50 U
Bromoacetic Acid	ug/L	0.54	0.54 U
Dichloroacetic Acid	ug/L	0.81	0.81 U
Trichloroacetic Acid	ug/L	0.91	0.91 U
Dibromoacetic Acid	ug/L	0.54	0.54 U
Total Haloacetic Acids (HAA5)	ug/L	0.91	0.91 U
2,3-Dibromopropionic Acid (S)	%	109	70-130

LABORATORY CONTROL SAMPLE & LCSD: 3514697 3514698

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Chloroacetic Acid	ug/L	20	22.64	24.13	113	121	70-130	6	30
Bromoacetic Acid	ug/L	20	18.63	19.39	93	97	70-130	4	30
Dichloroacetic Acid	ug/L	20	19.91	21.27	100	106	70-130	7	30
Trichloroacetic Acid	ug/L	20	17.94	21.24	90	106	70-130	17	30
Dibromoacetic Acid	ug/L	20	16.77	19.10	84	96	70-130	13	30
Total Haloacetic Acids (HAA5)	ug/L		95.89	105.13				9	30
2,3-Dibromopropionic Acid (S)	%				75	96	70-130	25	30

MATRIX SPIKE SAMPLE: 3514700 Original: M2003172008

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Chloroacetic Acid	ug/L	0	20	22.64	113	70-130
Bromoacetic Acid	ug/L	0	20	18.88	94	70-130
Dichloroacetic Acid	ug/L	0	20	20.86	104	70-130
Trichloroacetic Acid	ug/L	0	20	21.94	110	70-130
Dibromoacetic Acid	ug/L	0	20	19.45	97	70-130
Total Haloacetic Acids (HAA5)	ug/L			103.77		
2,3-Dibromopropionic Acid (S)	%	91			103	70-130

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

QC Batch:	GCS/1456	Analysis Method:	EPA 552.2
QC Batch Method:	EPA 552.2	Prepared:	06/16/2020 07:30
Associated Lab Samples:	T2010429002		

METHOD BLANK: 3514961

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Chloroacetic Acid	ug/L	0.50	0.50 U
Bromoacetic Acid	ug/L	0.54	0.54 U
Dichloroacetic Acid	ug/L	0.81	0.81 U
Trichloroacetic Acid	ug/L	0.91	0.91 U
Dibromoacetic Acid	ug/L	0.54	0.54 U
Total Haloacetic Acids (HAA5)	ug/L	0.91	0.91 U
2,3-Dibromopropionic Acid (S)	%	110	70-130

LABORATORY CONTROL SAMPLE & LCSD: 3514962 3514963

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Chloroacetic Acid	ug/L	20	24.77	24.38	124	122	70-130	2	30
Bromoacetic Acid	ug/L	20	23.71	23.51	119	118	70-130	1	30
Dichloroacetic Acid	ug/L	20	22.54	22.83	113	114	70-130	1	30
Trichloroacetic Acid	ug/L	20	23.10	23.04	116	115	70-130	0	30
Dibromoacetic Acid	ug/L	20	21.41	21.66	107	108	70-130	1	30
Total Haloacetic Acids (HAA5)	ug/L		115.53	115.42				0	30
2,3-Dibromopropionic Acid (S)	%				106	102	70-130	4	30

MATRIX SPIKE SAMPLE: 3514964 Original: A2004920001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Chloroacetic Acid	ug/L			25.48		
Bromoacetic Acid	ug/L			24.65		
Dichloroacetic Acid	ug/L			32.37		
Trichloroacetic Acid	ug/L			38.15		
Dibromoacetic Acid	ug/L			22.88		
Total Haloacetic Acids (HAA5)	ug/L			143.53		

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 3514964

Original: A2004920001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,3-Dibromopropionic Acid (S)	%	126			115	70-130	

MATRIX SPIKE SAMPLE: 3514965

Original: T2011097001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L			16.33			
Bromoacetic Acid	ug/L			20.94			
Dichloroacetic Acid	ug/L			51.32			
Trichloroacetic Acid	ug/L			76.97			
Dibromoacetic Acid	ug/L			21.87			
Total Haloacetic Acids (HAA5)	ug/L			187.43			
2,3-Dibromopropionic Acid (S)	%	100			105	70-130	

QC Batch: DGMj/1771

Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8

Prepared: 06/16/2020 03:30

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3515517

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Manganese	mg/L	0.00055	0.00055	U
Copper	mg/L	0.00035	0.00035	U
Arsenic	mg/L	0.000077	0.000077	U
Selenium	mg/L	0.00058	0.00058	U
Silver	mg/L	0.000068	0.000068	U
Cadmium	mg/L	0.000064	0.000064	U
Antimony	mg/L	0.00011	0.00011	U
Thallium	mg/L	0.000057	0.000057	U
Lead	mg/L	0.00024	0.00024	U
Uranium	ug/L	0.070	0.070	U

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 3515518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Manganese	mg/L	0.05	0.051	102	85-115	
Copper	mg/L	0.05	0.051	102	85-115	
Arsenic	mg/L	0.05	0.052	104	85-115	
Selenium	mg/L	0.05	0.055	110	85-115	
Silver	mg/L	0.05	0.050	100	85-115	
Cadmium	mg/L	0.05	0.048	97	85-115	
Antimony	mg/L	0.05	0.045	89	85-115	
Thallium	mg/L	0.05	0.049	99	85-115	
Lead	mg/L	0.05	0.050	99	85-115	
Uranium	ug/L	50	52	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3515519 3515520 Original: J2007736004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
METALS											
Manganese	mg/L	0	0.05	0.072	0.064	144	129	70-130	11	20	
Copper	mg/L	0.0019	0.05	0.049	0.044	94	85	70-130	10	20	
Arsenic	mg/L	0	0.05	0.054	0.049	108	98	70-130	10	20	
Selenium	mg/L	0	0.05	0.049	0.042	98	85	70-130	15	20	
Silver	mg/L	0	0.05	0.045	0.042	89	84	70-130	6	20	
Cadmium	mg/L	0	0.05	0.043	0.040	87	80	70-130	8	20	
Antimony	mg/L	0	0.05	0.048	0.044	96	87	70-130	9	20	
Thallium	mg/L	0	0.05	0.054	0.050	108	100	70-130	8	20	
Lead	mg/L	0	0.05	0.053	0.049	107	99	70-130	8	20	
Uranium	ug/L	0	50	63	100	126	201	70-130	46	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3515521 3515522 Original: J2007738001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
METALS											
Manganese	mg/L	0.023	0.05	0.093	0.095	139	144	70-130	3	20	
Copper	mg/L	0.00041	0.05	0.065	0.067	129	134	70-130	4	20	
Arsenic	mg/L	0	0.05	0.073	0.077	147	154	70-130	5	20	
Selenium	mg/L	0	0.05	0.055	0.057	109	115	70-130	5	20	
Silver	mg/L	0.0027	0.05	0.053	0.055	101	105	70-130	4	20	
Cadmium	mg/L	2.7e-005	0.05	0.055	0.057	110	113	70-130	3	20	
Antimony	mg/L	0	0.05	0.070	0.074	139	149	70-130	7	20	
Thallium	mg/L	5.2e-005	0.05	0.063	0.065	126	130	70-130	3	20	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3515521 3515522 Original: J2007738001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lead	mg/L	0.0003	0.05	0.065	0.067	129	134	70-130	4	20	
Uranium	ug/L	0.075	50	90	150	179	304	70-130	52	20	

QC Batch: DGM/1836

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Prepared: 06/15/2020 09:00

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3515705

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Aluminum	mg/L	0.20	0.20	U
Barium	mg/L	0.0030	0.0030	U
Beryllium	mg/L	0.0020	0.0020	U
Chromium	mg/L	0.0050	0.0050	U
Iron	mg/L	0.20	0.20	U
Sodium	mg/L	0.80	0.80	U
Nickel	mg/L	0.010	0.010	U
Zinc	mg/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE: 3515706

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Aluminum	mg/L	4	4.4	110	85-115	
Barium	mg/L	0.06	0.064	107	85-115	
Beryllium	mg/L	0.04	0.042	105	85-115	
Chromium	mg/L	0.1	0.11	106	85-115	
Iron	mg/L	4	4.0	101	85-115	
Sodium	mg/L	16	17	106	85-115	
Nickel	mg/L	0.2	0.21	107	85-115	
Zinc	mg/L	1	1.0	105	85-115	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3515707 3515708 Original: G2005376005

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Aluminum	mg/L	0	4	4.3	4.3	109	108	70-130	0	20	
Barium	mg/L	0	0.06	0.060	0.060	99	99	70-130	0	20	
Beryllium	mg/L	0	0.04	0.041	0.041	103	103	70-130	0	20	
Chromium	mg/L	0	0.1	0.10	0.10	102	101	70-130	0	20	
Iron	mg/L	0	4	4.7	4.7	118	118	70-130	0	20	
Sodium	mg/L	110	16	130	130	127	114	70-130	1	20	
Nickel	mg/L	0	0.2	0.22	0.22	110	110	70-130	0	20	
Zinc	mg/L	0	1	1.1	1.1	113	112	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3515709 3515710 Original: G2005692001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Aluminum	mg/L	0.21	4	4.6	4.6	109	109	70-130	0	20	
Barium	mg/L	0.022	0.06	0.079	0.079	95	95	70-130	0	20	
Beryllium	mg/L	0	0.04	0.041	0.041	102	102	70-130	0	20	
Chromium	mg/L	0.0014	0.1	0.10	0.10	103	103	70-130	0	20	
Iron	mg/L	0.72	4	5.0	5.0	108	108	70-130	0	20	
Sodium	mg/L	260	16	270	270	62	64	70-130	0	20	
Nickel	mg/L	0	0.2	0.20	0.20	101	101	70-130	0	20	
Zinc	mg/L	0.16	1	1.2	1.2	109	109	70-130	0	20	

QC Batch: MSVt/1968

Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2

Prepared:

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3518073

Parameter	Units	Blank Result	Reporting Limit Qualifiers
VOLATILES			
Chloroform	ug/L	0.31	0.31 U
Bromodichloromethane	ug/L	0.49	0.49 U
Dibromochloromethane	ug/L	0.56	0.56 U
Bromoform	ug/L	0.46	0.46 U
Total Trihalomethanes	ug/L	0.56	0.56 U
1,2-Dichloroethane-d4 (S)	%	95	70-130
Toluene-d8 (S)	%	99	70-130
Bromofluorobenzene (S)	%	106	70-130

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCS: 3518074 3518075

Parameter	Units	Spike Conc.	LCS Result	LCS Result	LCS % Rec	LCS % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloroform	ug/L	20	18.33	19.63	92	98	80-105	7	15	
Bromodichloromethane	ug/L	20	18.13	19.50	91	98	80-105	7	15	
Dibromochloromethane	ug/L	20	18.58	19.57	93	98	80-105	5	15	
Bromoform	ug/L	20	16.20	17.72	81	89	80-105	9	15	
Total Trihalomethanes	ug/L		71.24	76.42				7		
1,2-Dichloroethane-d4 (S)	%				87	88	70-130	2		
Toluene-d8 (S)	%				100	99	70-130	1		
Bromofluorobenzene (S)	%				103	101	70-130	2		

MATRIX SPIKE SAMPLE: 3518076 Original: T2010999001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloroform	ug/L	0	20	19.37	97	75-125	
Bromodichloromethane	ug/L	0	20	19.68	98	75-125	
Dibromochloromethane	ug/L	0	20	19.13	96	75-125	
Bromoform	ug/L	0	20	19.06	95	75-125	
Total Trihalomethanes	ug/L			77.24			
1,2-Dichloroethane-d4 (S)	%	110			103	70-130	
Toluene-d8 (S)	%	98			99	70-130	
Bromofluorobenzene (S)	%	101			93	70-130	

QC Batch: MSVt/1970

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 06/16/2020 15:13

Associated Lab Samples: T2010429003

METHOD BLANK: 3518479

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Dichlorodifluoromethane	ug/L	0.36	0.36 U	
Chloromethane	ug/L	0.53	0.53 U	
Vinyl Chloride	ug/L	0.20	0.20 U	
Bromomethane	ug/L	0.97	0.97 U	
Chloroethane	ug/L	0.38	0.38 U	
Trichlorofluoromethane	ug/L	0.84	0.84 U	

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

METHOD BLANK: 3518479

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Acrolein (Propenal)	ug/L	3.5	3.5 U
1,1-Dichloroethylene	ug/L	0.70	0.70 U
Acrylonitrile	ug/L	1.9	1.9 U
Methylene Chloride	ug/L	1.0	1.0 U
trans-1,2-Dichloroethylene	ug/L	0.50	0.50 U
Methyl tert-butyl Ether (MTBE)	ug/L	0.41	0.41 U
1,1-Dichloroethane	ug/L	0.86	0.86 U
cis-1,2-Dichloroethylene	ug/L	0.51	0.51 U
Chloroform	ug/L	0.31	0.31 U
1,2-Dichloroethane	ug/L	0.60	0.60 U
1,1,1-Trichloroethane	ug/L	0.44	0.44 U
Carbon Tetrachloride	ug/L	0.60	0.60 U
Benzene	ug/L	0.20	0.20 U
1,2-Dichloropropane	ug/L	0.76	0.76 U
Trichloroethene	ug/L	0.60	0.60 U
Bromodichloromethane	ug/L	0.60	0.60 U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58 U
cis-1,3-Dichloropropene	ug/L	0.20	0.20 U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20 U
1,1,2-Trichloroethane	ug/L	0.46	0.46 U
Toluene	ug/L	0.45	0.45 U
Dibromochloromethane	ug/L	0.40	0.40 U
Tetrachloroethylene (PCE)	ug/L	0.60	0.60 U
Chlorobenzene	ug/L	0.56	0.56 U
Ethylbenzene	ug/L	0.26	0.26 U
Bromoform	ug/L	0.88	0.88 U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20 U
Isopropylbenzene	ug/L	0.80	0.80 U
1,3,5-Trimethylbenzene	ug/L	0.68	0.68 U
1,2,4-Trimethylbenzene	ug/L	0.54	0.54 U
1,3-Dichlorobenzene	ug/L	0.43	0.43 U
1,4-Dichlorobenzene	ug/L	0.97	0.97 U
1,2-Dichlorobenzene	ug/L	0.63	0.63 U
Xylene (Total)	ug/L	0.74	0.74 U
1,2-Dichloroethane-d4 (S)	%	103	70-128
Toluene-d8 (S)	%	99	77-119
Bromofluorobenzene (S)	%	108	86-123

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3518480 3518481

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Dichlorodifluoromethane	ug/L	20	21	23	104	115		11		
Chloromethane	ug/L	20	21	23	105	117		10		
Vinyl Chloride	ug/L	20	24	24	119	121	70-130	1	20	
Bromomethane	ug/L	20	19	24	94	122		25		
Chloroethane	ug/L	20	23	26	115	129		11		
Trichlorofluoromethane	ug/L	20	21	24	105	120		13		
Acrolein (Propenal)	ug/L	100	82	85	82	85		3		
1,1-Dichloroethylene	ug/L	20	21	22	104	112	70-130	8	20	
Acrylonitrile	ug/L	20	19	21	94	106		12		
Methylene Chloride	ug/L	20	20	22	100	108		8		
trans-1,2-Dichloroethylene	ug/L	20	21	22	106	112		6		
Methyl tert-butyl Ether (MTBE)	ug/L	20	20	24	99	121	70-130	20	20	
1,1-Dichloroethane	ug/L	20	21	22	105	112		7		
cis-1,2-Dichloroethylene	ug/L	20	21	22	104	111	70-130	7	20	
Chloroform	ug/L	20	21	22	104	112	70-130	7	20	
1,2-Dichloroethane	ug/L	20	20	22	101	112		11		
1,1,1-Trichloroethane	ug/L	20	21	22	105	111		6		
Carbon Tetrachloride	ug/L	20	22	24	110	118		7		
Benzene	ug/L	20	21	22	104	112	70-130	7	20	
1,2-Dichloropropane	ug/L	20	21	22	104	111		6		
Trichloroethene	ug/L	20	21	22	103	111	70-130	7	20	
Bromodichloromethane	ug/L	20	20	22	102	109		7		
2-Chloroethyl Vinyl Ether	ug/L	20	17	20	85	101		17		
cis-1,3-Dichloropropene	ug/L	20	20	22	98	108		10		
trans-1,3-Dichloropropylene	ug/L	20	20	22	98	110		12		
1,1,2-Trichloroethane	ug/L	20	19	21	95	107		11		
Toluene	ug/L	20	20	22	99	108	70-130	8	20	
Dibromochloromethane	ug/L	20	18	19	88	96		8		
Tetrachloroethylene (PCE)	ug/L	20	20	21	99	107	70-130	8	20	
Chlorobenzene	ug/L	20	19	21	96	106	70-130	10	20	
Ethylbenzene	ug/L	20	20	22	100	109	70-130	8	20	
Bromoform	ug/L	20	16	19	82	94		13		
1,1,1,2-Tetrachloroethane	ug/L	20	18	21	93	104		11		
Isopropylbenzene	ug/L	20	19	20	95	101		6		
1,3,5-Trimethylbenzene	ug/L	20	19	21	96	103		7		
1,2,4-Trimethylbenzene	ug/L	20	19	20	94	100	70-130	7	20	
1,3-Dichlorobenzene	ug/L	20	19	21	96	103	70-130	8	20	
1,4-Dichlorobenzene	ug/L	20	18	21	92	104		12		
1,2-Dichlorobenzene	ug/L	20	19	20	93	100	70-130	7	20	
Xylene (Total)	ug/L	60	61	65	101	109	70-130	8	20	
1,2-Dichloroethane-d4 (S)	%				106	106	70-128	0		
Toluene-d8 (S)	%				97	99	77-119	2		

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3518480 3518481

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Bromofluorobenzene (S)	%				97	96	86-123	2		

MATRIX SPIKE SAMPLE: 3518482 Original: T2011174001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Dichlorodifluoromethane	ug/L			20			
Chloromethane	ug/L			20			
Vinyl Chloride	ug/L			23			
Bromomethane	ug/L			22			
Chloroethane	ug/L			22			
Trichlorofluoromethane	ug/L			20			
Acrolein (Propenal)	ug/L			50			
1,1-Dichloroethylene	ug/L			19			
Acrylonitrile	ug/L			20			
Methylene Chloride	ug/L			17			
trans-1,2-Dichloroethylene	ug/L			19			
Methyl tert-butyl Ether (MTBE)	ug/L	0	20	16	81	70-130	
1,1-Dichloroethane	ug/L			19			
cis-1,2-Dichloroethylene	ug/L			19			
Chloroform	ug/L			19			
1,2-Dichloroethane	ug/L			19			
1,1,1-Trichloroethane	ug/L			19			
Carbon Tetrachloride	ug/L			19			
Benzene	ug/L	0	20	19	96	70-130	
1,2-Dichloropropane	ug/L			20			
Trichloroethene	ug/L			19			
Bromodichloromethane	ug/L			18			
2-Chloroethyl Vinyl Ether	ug/L			5.6			
cis-1,3-Dichloropropene	ug/L			18			
trans-1,3-Dichloropropylene	ug/L			18			
1,1,2-Trichloroethane	ug/L			21			
Toluene	ug/L	0.59	20	18	89	70-130	
Dibromochloromethane	ug/L			17			
Tetrachloroethylene (PCE)	ug/L			18			
Chlorobenzene	ug/L			18			
Ethylbenzene	ug/L	0	20	18	88	70-130	
Bromoform	ug/L			16			
1,1,2,2-Tetrachloroethane	ug/L			18			

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 3518482

Original: T2011174001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Isopropylbenzene	ug/L			17			
1,3,5-Trimethylbenzene	ug/L			89			
1,2,4-Trimethylbenzene	ug/L			15			
1,3-Dichlorobenzene	ug/L			19			
1,4-Dichlorobenzene	ug/L			18			
1,2-Dichlorobenzene	ug/L			19			
Xylene (Total)	ug/L	65	60	93	48	70-130	
1,2-Dichloroethane-d4 (S)	%	114			101	70-128	
Toluene-d8 (S)	%	98			96	77-119	
Bromofluorobenzene (S)	%	96			98	86-123	

QC Batch: MSVt/1974

Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B

Prepared: 06/15/2020 15:34

Associated Lab Samples: T2010429001, T2010429002

METHOD BLANK: 3519391

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloromethane	ug/L	0.53	0.53	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Acrolein (Propenal)	ug/L	3.5	3.5	U
Acrylonitrile	ug/L	1.9	1.9	U
1,1-Dichloroethane	ug/L	0.86	0.86	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,3-Dichlorobenzene	ug/L	0.43	0.43	U
1,2-Dichloroethane-d4 (S)	%	95	70-128	
Toluene-d8 (S)	%	99	77-119	
Bromofluorobenzene (S)	%	108	86-123	

LABORATORY CONTROL SAMPLE & LCSD: 3519392

3519393

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										

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QUALITY CONTROL DATA

Workorder: T2010429 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 3519392 3519393

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Chloromethane	ug/L	20	19	20	93	98		5		
Bromomethane	ug/L	20	20	22	102	110		8		
Chloroethane	ug/L	20	17	21	83	107		25		
Acrolein (Propenal)	ug/L	100	100	99	103	99		3		
Acrylonitrile	ug/L	20	19	21	94	106		12		
1,1-Dichloroethane	ug/L	20	18	21	90	103		13		
2-Chloroethyl Vinyl Ether	ug/L	20	11	12	54	60		11		
trans-1,3-Dichloropropylene	ug/L	20	17	20	86	102		16		
1,1,2,2-Tetrachloroethane	ug/L	20	18	19	88	93		6		
1,3-Dichlorobenzene	ug/L	20	20	21	101	105	70-130	5	20	
1,2-Dichloroethane-d4 (S)	%				87	89	70-128	3		
Toluene-d8 (S)	%				100	99	77-119	1		
Bromofluorobenzene (S)	%				105	103	86-123	2		

MATRIX SPIKE SAMPLE: 3519394

Original: T2011541001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloromethane	ug/L			25			
Bromomethane	ug/L			21			
Chloroethane	ug/L			29			
Acrolein (Propenal)	ug/L			13			
Acrylonitrile	ug/L			26			
1,1-Dichloroethane	ug/L			25			
2-Chloroethyl Vinyl Ether	ug/L			43			
trans-1,3-Dichloropropylene	ug/L			24			
1,1,2,2-Tetrachloroethane	ug/L			0.68			
1,3-Dichlorobenzene	ug/L			22			
1,2-Dichloroethane-d4 (S)	%				105	70-128	
Toluene-d8 (S)	%				99	77-119	
Bromofluorobenzene (S)	%				96	86-123	

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QUALITY CONTROL DATA QUALIFIERS

Workorder: T2010429 SELF Plant Effluent Semi

QUALITY CONTROL PARAMETER QUALIFIERS

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2010429001	Leachate Effluent Semi Annual			SM 4500H+B	WCAt/4335
T2010429002	Field Blank			SM 4500H+B	WCAt/4335
T2010429001	Leachate Effluent Semi Annual			SM 2120 B	WCAt/4347
T2010429002	Field Blank			SM 2120 B	WCAt/4347
T2010429001	Leachate Effluent Semi Annual			SM 3500-CR D	WCAt/4348
T2010429002	Field Blank			SM 3500-CR D	WCAt/4348
T2010429001	Leachate Effluent Semi Annual	EPA 504.1	EXTt/1587	EPA 504.1	GCSi/1425
T2010429002	Field Blank	EPA 504.1	EXTt/1587	EPA 504.1	GCSi/1425
T2010429001	Leachate Effluent Semi Annual	EPA 508	EXTj/1837	EPA 508	GCSj/1576
T2010429002	Field Blank	EPA 508	EXTj/1837	EPA 508	GCSj/1576
T2010429001	Leachate Effluent Semi Annual			SM 2150 B	WCAt/4350
T2010429002	Field Blank			SM 2150 B	WCAt/4350
T2010429001	Leachate Effluent Semi Annual			SM 4500NO3-F	WCAt/4382
T2010429002	Field Blank			SM 4500NO3-F	WCAt/4382
T2010429001	Leachate Effluent Semi Annual			SM 5210B	WCAt/4388
T2010429002	Field Blank			SM 5210B	WCAt/4388
T2010429001	Leachate Effluent Semi Annual			SM 2540 C	WCAt/4390
T2010429002	Field Blank			SM 2540 C	WCAt/4390
T2010429001	Leachate Effluent Semi Annual			SM 5540 C	WCAg/2796
T2010429002	Field Blank			SM 5540 C	WCAg/2796

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2010429001	Leachate Effluent Semi Annual			SM 2540D	WCAt/4421
T2010429002	Field Blank			SM 2540D	WCAt/4421
T2010429001	Leachate Effluent Semi Annual	SW-846 3510C	EXTt/1601	EPA 8081	GCSj/1434
T2010429002	Field Blank	SW-846 3510C	EXTt/1601	EPA 8081	GCSj/1434
T2010429001	Leachate Effluent Semi Annual	SW-846 3510C	EXTt/1602	SW-846 8082A	GCSj/1435
T2010429002	Field Blank	SW-846 3510C	EXTt/1602	SW-846 8082A	GCSj/1435
T2010429001	Leachate Effluent Semi Annual			EPA 547	HPLj/1102
T2010429002	Field Blank			EPA 547	HPLj/1102
T2010429001	Leachate Effluent Semi Annual	SW-846 3510C	EXTm/1657	SW-846 8270C	MSSm/1283
T2010429002	Field Blank	SW-846 3510C	EXTm/1657	SW-846 8270C	MSSm/1283
T2010429001	Leachate Effluent Semi Annual			EPA 524.2	MSVt/1925
T2010429002	Field Blank			EPA 524.2	MSVt/1925
T2010429001	Leachate Effluent Semi Annual	EPA 548.1	EXTj/1858	EPA 548.1	MSSj/1357
T2010429002	Field Blank	EPA 548.1	EXTj/1858	EPA 548.1	MSSj/1357
T2010429001	Leachate Effluent Semi Annual	EPA 549.2	EXTj/1859	EPA 549.2	HPLj/1106
T2010429002	Field Blank	EPA 549.2	EXTj/1859	EPA 549.2	HPLj/1106
T2010429001	Leachate Effluent Semi Annual			EPA 531.1	HPLj/1104
T2010429002	Field Blank			EPA 531.1	HPLj/1104
T2010429001	Leachate Effluent Semi Annual	EPA 515.3	GCSj/1586	EPA 515.3	GCSj/1587
T2010429002	Field Blank	EPA 515.3	GCSj/1586	EPA 515.3	GCSj/1587

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2010429001	Leachate Effluent Semi Annual			SM 4500-CN-E	WCAt/4482
T2010429002	Field Blank			SM 4500-CN-E	WCAt/4482
T2010429001	Leachate Effluent Semi Annual	EPA 245.1	DGMt/1817	EPA 245.1	CVAt/1237
T2010429002	Field Blank	EPA 245.1	DGMt/1817	EPA 245.1	CVAt/1237
T2010429001	Leachate Effluent Semi Annual			EPA 410.4	WCAt/4509
T2010429002	Field Blank			EPA 410.4	WCAt/4509
T2010429001	Leachate Effluent Semi Annual			EPA 300.0	WCAt/4544
T2010429002	Field Blank			EPA 300.0	WCAt/4544
T2010429001	Leachate Effluent Semi Annual	EPA 525.2	EXTj/1877	EPA 525.2	MSSj/1362
T2010429002	Field Blank	EPA 525.2	EXTj/1877	EPA 525.2	MSSj/1362
T2010429001	Leachate Effluent Semi Annual	EPA 552.2	GCSt/1454	EPA 552.2	GCSt/1455
T2010429002	Field Blank	EPA 552.2	GCSt/1456	EPA 552.2	GCSt/1461
T2010429001	Leachate Effluent Semi Annual	EPA 200.8	DGMj/1771	EPA 200.8	ICMj/1255
T2010429002	Field Blank	EPA 200.8	DGMj/1771	EPA 200.8	ICMj/1255
T2010429001	Leachate Effluent Semi Annual	EPA 200.7	DGMt/1836	EPA 200.7	ICPt/1507
T2010429002	Field Blank	EPA 200.7	DGMt/1836	EPA 200.7	ICPt/1507
T2010429001	Leachate Effluent Semi Annual			EPA 524.2	MSVt/1968
T2010429002	Field Blank			EPA 524.2	MSVt/1968
T2010429003	Travel Blank	SW-846 5030B	MSVt/1970	SW-846 8260B	MSVt/1971

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T2010429 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T2010429001	Leachate Effluent Semi Annual	SW-846 5030B	MSVt/1974	SW-846 8260B	MSVt/1975
T2010429002	Field Blank	SW-846 5030B	MSVt/1974	SW-846 8260B	MSVt/1975
T2010429001	Leachate Effluent Semi Annual	Field Measurements	FLDt/	Field Measurements	FLDt/

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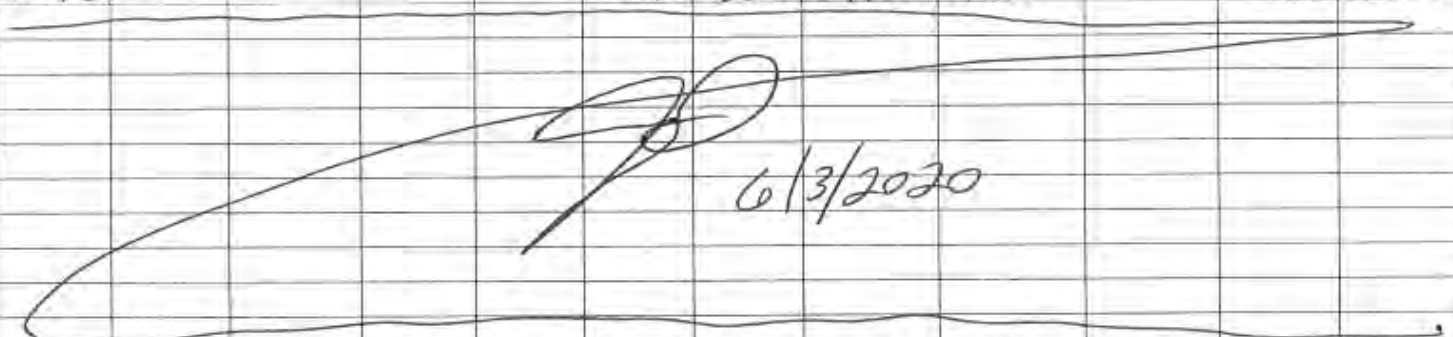
[illegible]

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Leachate Effluent		DATE: 6/3/2020	

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: Valve			
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 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) umhos/cm or nS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1045	N/A	N/A	N/A	N/A	7.71	30.1	21981	1.67	N/A	Brown Lechate	Lechate
											
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal / Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Morales, Grayson				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1045	SAMPLING ENDED AT: 1115	
PUMP OR TUBING DEPTH IN WELL (feet) N/A				TUBING MATERIAL CODE: N/A	FIELD-FILTERED - Y (N) Filtration Equipment Type _____		FILTER SIZE _____ µm		
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced))				DUPLICATE Y (N)					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS ORP: 1045(106.8)									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = 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)

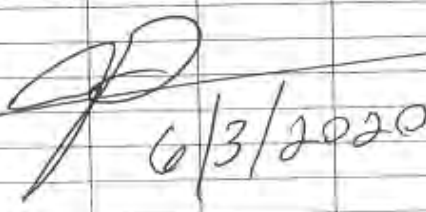
pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is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

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant	SITE LOCATION: Lithia, Florida	DATE: 6/3/2020
WELL NO: Field Blank	SAMPLE ID: Field Blank	

PURGING DATA

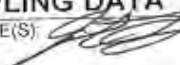
WELL	TUBING	WELL SCREEN INTERVAL	STATIC DEPTH	PURGE PUMP TYPE
DIAMETER (inches): N/A	DIAMETER (inches): N/A	DEPTH: N/A ft to N/A ft	TO WATER (feet): N/A	OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (N/A 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	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) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
											

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.86
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: <u>Moakes, Grayson</u>			SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1010		SAMPLING ENDED AT: 1020	
PUMP OR TUBING			TUBING			FIELD-FILTERED: Y <u>N</u>		FILTER SIZE: _____ μm	
DEPTH IN WELL (feet): N/A			MATERIAL CODE: N/A			Filtration Equipment Type:			
FIELD DECONTAMINATION			TUBING			DUPLICATE			
PUMP Y <u>N</u>			Y <u>N (replaced)</u>			Y <u>N</u>			

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)



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Fax (904) 363-9354

Project No.: T2010429
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 245.1
Preparation: EPA 245.1

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Duplicates: All acceptance criteria were met.
D. Spikes: The matrix spike recovery of Mercury for M2003154002 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike Duplicate (MSD) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
E. Serial Diluion: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 508
Preparation: EPA 508

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: All acceptance criteria were met.
D. Spikes: All acceptance criteria were met.
E. Internal Standard:
F. Samples: S2001376003, T2010429001 and 3503961MS were Copper cleaned as per EPA method 3660b to remove matrix interferences.
G. Other:



Project No.: T2010429
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 515.3
Preparation: EPA 515.3

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: The control criteria for 2,4-Dichlorophenylacetic acid in T2010429001 are not applicable ((at 27%) range 70-130%). As recorded in the extraction logbook, the samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. The affected surrogate was qualified to indicate matrix interference.
D. Spikes: The matrix spike (MS) recoveries of Dinoseb for J2007593001 were outside control criteria ((at 57%) range 70-130%). Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.

The spike recovery of Pentachlorophenol for the Laboratory Control Sample Duplicate (LCSD) was outside the upper control criterion ((at 133%) range 70-130%). The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.

E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 504.1
Preparation: EPA 504.1

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: The lower control criterion was exceeded for the following surrogate in sample T2010429001 due to matrix interferences: Tetrachloro-m-xylene. The outlier surrogates were qualified accordingly.
D. Spikes: All acceptance criteria were met.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 8081
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

- A. Calibration: The Continuing Calibration Verification (CCV) standards were below the method acceptance of 80-120% for several Pesticide AB analytes. However, a Method Reporting Limit (MRL) standard was run at the end of the analytical sequence. Since the analytes in question were detected in the MRL standard, instrument sensitivity was documented. As the analytes in question were not detected in the field samples, the results are deemed acceptable.
- The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): Endrin, 4-4-DDT, Endosulfan Sulfate. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: The control criterion was exceeded for the following surrogate in T2010429001 due to matrix interferences: Tetrachloro-m-xylene. Due to the presence of non-target background components that prevented adequate resolution of the surrogate, accurate quantitation was not possible. The affected surrogate is qualified accordingly.
- D. Spikes: All acceptance criteria were met.
- E. Internal Standard: All acceptance criteria were met.
- F. Samples: Sample analyses proceeded normally.
- G. Other:



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ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.
Analysis: All holding times were met.

III. Method

Analysis: SW-846 8082A
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: The control criterion was exceeded for the following surrogate in T2010429001 due to matrix interferences: Tetrachloro-m-xylene. Due to the presence of non-target background components that prevented adequate resolution of the surrogate, accurate quantitation was not possible. The affected surrogate is qualified accordingly.
D. Spikes: Due to insufficient sample to perform the matrix spikes that are required by the method, a Laboratory Control Spike (LCS) and LCS duplicate (LCSD) were analyzed for quality control in this analytical batch.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 552.2
Preparation: EPA 552.2

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: The upper control criterion was exceeded for the following surrogate in sample T2010862001 due to matrix interferences: 2,3-Dibromopropionic Acid. The sample had no indication of any Haloacetic Acids (HAA5). The outlier surrogates were qualified accordingly.
D. Spikes: The control criteria for matrix spike recoveries for A2004920001 and T2011097001 are not applicable due to possible difficult sample matrices analyzed in this batch. The parent samples required re-prepping, leaving this batch without parents or matrix spikes. An LCS duplicate (LCSD) was analyzed to allow the precision (RPD) to be calculated from the recoveries of these two quality control samples.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 531.1
Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

The upper control criterion was exceeded for Carbofuran (at 123%)(Range 80-120%) in Continuing Calibration Verification (CCV) standard for analytical batch 1104, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: The data were reported as is.

F. Samples: Sample analyses proceeded normally.

G. Other:



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ProjectID: SELF Plant Effluent Semi

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 549.2
Preparation: EPA 549.2

IV. Preparation

The method detection limit (MDL) for the following matrix QC sample was elevated: J2007633001MS and J2007717001MS. There was no extra sample volume provided to perform a matrix spike. As a result, the aforementioned MS was extracted at a reduced volume using volume designated for other drinking water tests.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: All acceptance criteria were met.
D. Spikes: The matrix spike (MS) recoveries of Diquat for (J2007633001 at 34%) and (J2007717001 at 31%) were outside control criteria(Range 70-130%). Recoveries in the Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

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 200.8
Preparation: EPA 200.8

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 Mn and U for J2007736004 and Mn,Cu, As, Sb,Pb, U for J2007738001 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control.

E. Serial Diluion: Due to non-target background analytes, the proper quantitaion of the internal standard in J2007738001 was obstructed. In order to return the internal standard to within acceptance limits, this sample was analyzed at a dilution.
F. Samples: Sample analyses proceeded normally.
G. Other:



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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 200.7
Preparation: EPA 200.7

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 Sodium for G2005692001 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Project No.: T2010429
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 525.2
Preparation: EPA 525.2

IV. Preparation

The Method Detection Limit (MDL) for all analytes for T2010429001 were elevated due to difficult sample matrix. Sample contained large quantity of particulate matter, clogging the SPE cartridge. T2010429001 was prepped with a volume (350 mL) less than normal procedures (1000 mL). As a result, the reported MDL is elevated on the final report.

V. Analysis

- A. Calibration: The upper control criterion was exceeded for target analyte Alachlor in one of the Continuing Calibration Verification (CCV) standards for analytical batch MSSj:1362, indicating increased sensitivity. The client samples reported in this batch did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.
- B. Blanks: All acceptance criteria were met.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The spike recovery of Alachlor for the Laboratory Control Sample Duplicate (LCSD) (131%) was outside the upper control criterion (70-130%). The analyte in question was not detected in the associated client samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was required.
- E. Internal Standard: The data were reported as is.
- F. Samples: Sample G2005636001 produced large quantity of yellow precipitate during the evaporation process.
- G. Other:



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Project No.: T2010429
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 8270C
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: The control criteria for p-Terphenyl in G2005302001, 2-Fluorophenol, Phenol-d6 and p-Terphenyl in T2010429001 and M2003140003, 2-Fluorophenol and 2,4,6-Triborophenol in J2007577001 and 2-Fluorophenol and Phenol-d6 in T2010574013 are not applicable. As recorded in the extraction logbook, the samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. The affected surrogates were qualified to indicate matrix interference.
D. Spikes: All acceptance criteria were met.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 524.2
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. Surrogates: All acceptance criteria were met.
D. Spikes: The matrix spike recoveries of Vinyl Chloride, 1,1-Dichloroethylene, Toluene, Ethylbenzene, Xylene-mp, Styrene, Xylene-o, Xylene (Total) were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) 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.
E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.
Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B
Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: All acceptance criteria were met.
D. Spikes: The matrix spike recoveries of Xylene-mp and Xylene(total) for T2011174001 were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) 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.

The Method required MS/MSD was met. The blanks in the MS/MSD recoveries for T2011174001 is due to differing analyte lists requested in the parent/spiked QC sample

E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.
Analysis: All holding times were met.

III. Method

Analysis: SW-846 8260B
Preparation: SW-846 5030B

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Surrogates: All acceptance criteria were met.
D. Spikes: The relative percent difference (RPD) for MTBE between the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) was outside control criteria. Spike recoveries in the LCS and LCSD were within acceptable limits, indicating the analytical batch was in control. No further corrective action was required.

The matrix spike recoveries of MTBE for were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) and the Laboratory Control Sample Duplicate (LCSD) 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.

The Method required MS/MSD was met. The blanks in the MS/MSD recoveries for T2011541001 is due to differing analyte lists requested in the parent/spiked QC sample

E. Internal Standard: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.
Analysis: All holding times were met.

III. Method

Analysis: SM 4500NO3-F
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 Nitrite and NOx for T2010570001 was outside control criteria. Recoveries in the Laboratory Control Sample (LCS) and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The effected sample is qualified to indicate matrix interference.
E. Serial Diluion: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



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ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.
Analysis: All holding times were met.

III. Method

Analysis: SM 4500-CN-E
Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.
B. Blanks: All acceptance criteria were met.
C. Duplicates: All acceptance criteria were met.
D. Spikes: The matrix spike recoveries of Cyanide for J2007707001 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was required.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

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

Project No.: T2010429
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

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 (MS) and matrix spike duplicate (MSD) recoveries of COD for T2010996002 were outside control criteria. 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. No further corrective action is required.
E. Serial Dilution: All acceptance criteria were met.
F. Samples: Sample analyses proceeded normally.
G. Other:



Advanced
Environmental Laboratories, Inc.

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

Queue: WCA

Batch Number: 4544

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 300.0

Preparation:

IV. Preparation

Sample preparation proceeded normally.

T2011015001, 02, 03 were analyzed at dilution due to high Chloride levels. The lowest possible dilution was performed to allow the analyte value to be within the calibration curves highest level and to prevent possible carry over in the following sample analyses.

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 Chloride for T2010777001 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), and %RPD were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. No further corrective action was required.

E. Serial Dilution: All acceptance criteria were met.

F. Samples: T2010429002-due to lab error, the sulfate result could not be reported out.

G. Other:



Report Date: July 21, 2020

Advanced Environmental Labs
9610 Princess Palm Ave
Tampa, FL 33619

Field Custody: Client
Client/Field ID: T2010429001
Leachate Effl
Sample Collection: 06-03-20/1045
Lab ID No: 20.6911R1
Lab Custody Date: 06-08-20/1550
Sample description: Water

CERTIFICATE OF ANALYSIS

Parameter	Units	Results	Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	8.2 ± 1.6	6-13-20/1250	EPA 00-02	1.1
Combined Radium (Radium-226 + Radium 228)	pCi/l	6.0 I ± 1.8	Calc	Calc	1.9
Radium-226	pCi/l	6.0 I ± 1.8	06-16-20/1108	EPA 903.0*	1.9
Radium-228	pCi/l	2.1 U ± 1.8	06-17-20/1216	EPA Ra-05	2.7

Alpha Standard: Th-230

* 99% carrier recovery

U = indicates that the compound was analyzed for but not detected.

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

Thomas J. Weeks
Laboratory Manager

Test results meet all requirements of the 2016 TNI standards. Statement of estimated uncertainty available upon request. Test results refer only to sample(s) listed.
Contact person: Thomas Weeks (813) 229-2879.



Report Date: July 21, 2020

Advanced Environmental Labs
9610 Princess Palm Ave
Tampa, FL 33619

Field Custody: Client
Client/Field ID: T2010429002
Field Blank
Sample Collection: 06-03-20/1010
Lab ID No: 20.6912R1
Lab Custody Date: 06-08-20/1550
Sample description: Water

CERTIFICATE OF ANALYSIS

Parameter	Units	Results	Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	0.6 U $\pm$ 0.4	6-9-20/1655	EPA 900.0	0.6
Combined Radium (Radium-226 + Radium 228)	pCi/l	0.2 U $\pm$ 0.2	Calc	Calc	0.4
Radium-226	pCi/l	0.2 U $\pm$ 0.2	06-16-20/1108	EPA 903.0*	0.4
Radium-228	pCi/l	0.1 U $\pm$ 0.3	06-17-20/1216	EPA Ra-05	0.5

Alpha Standard: Th-230

* 99% carrier recovery

U = indicates that the compound was analyzed for but not detected.

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

Thomas J. Weeks
Laboratory Manager

Test results meet all requirements of the 2016 TNI standards. Statement of estimated uncertainty available upon request. Test results refer only to sample(s) listed.
Contact person: Thomas Weeks (813) 229-2879.

R610 20.6911-12

Results Requested By 6/15/2020

Requested Analysis

EP
EP
SV
EP

* per H. Parker, run Rad-226 + Rad-228
as 7-21-20

July 21, 2020

Mr. Michael Cammarata
Advanced Environmental Laboratories, Incorporated
9610 Princess Palm Avenue
Tampa, Florida 33619

Re: Dioxin Subcontract - Tampa
Work Order: 16779
SDG: T2010429

Dear Mr. Cammarata:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on July 09, 2020. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,



Cynde Larkins
Project Manager

Enclosures

Supplier of Water:

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: AELI	Work Order: 16779
Shipping Company: FedEx	Date/Time Received: 09 JUL 20 1020

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			☒
Samples identified as Foreign Soil?			☒

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?		☒	
Samples < 2x background?		☒	

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			☒

Air Witness: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	☒			Circle Applicable: seals broken damaged container leaking container other(describe)
2 Custody seal/s present on cooler?			☒	Seal intact? Yes No
3 Chain of Custody documents included with shipment?	☒			
4 Samples requiring cold preservation within 0-6°C?	☒			Preservation Method: <u>ice bags</u> blue ice dry ice none other (describe) Temperature Blank present: Yes <u>No</u> 2.7° + 0.0 = 2.7°C
5 Aqueous samples found to have visible solids?	☒			Sample IDs, containers affected: Minimal (<1%) visible solids in T2010429001
5 Samples requiring chemical preservation at proper pH?		☒		Sample IDs, containers affected and pH observed: pH = 8 in T2010429001, pH = 7 in 002 If preservative added, Lot#:
7 Samples requiring preservation have no residual chlorine?	☒			Sample IDs, containers affected: If preservative added, Lot#:
8 Samples received within holding time?	☒			Sample IDs, tests affected:
9 Sample IDs on COC match IDs on containers?	☒			Sample IDs, containers affected:
10 Date & time of COC match date & time on containers?	☒			Sample IDs, containers affected:
11 Number of containers received match number indicated on COC?	☒			List type and number of containers / Sample IDs, containers affected: 1-1L NMAG bottle per sample
12 COC form is properly signed in relinquished/received sections?	☒			

Comments:

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
Advanced Environmental Laboratories, Incorporated (AELI)
SDG T2010429
Work Order 16779

Method/Analysis Information

Product: TCDD Only by EPA Method 1613B in Liquids
Analytical Method: EPA Method 1613B
Extraction Method: SW846 3520C
Analytical Batch Number: 44231
Clean Up Batch Number: 44229
Extraction Batch Number: 44228

Sample Analysis

Samples were received at 2.7°C (16779001, 16779002). The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
12026984	Method Blank (MB)
12026985	Laboratory Control Sample (LCS)
12026986	Laboratory Control Sample Duplicate (LCSD)
16779001	T2010429001
16779002	T2010429002

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 17.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement

The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement

The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement

The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation

A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Holding Time Specifications

CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation

A NCR was not required for this SDG.

Manual Integrations

Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration

This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP763_1	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report for

AELI001 Advanced Environmental Laboratories, Incorporated

Client SDG: T2010429 CFA Work Order: 16779

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- J Value is estimated
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: 

Name: Heather Patterson

Date: 21 JUL 2020

Title: Group Leader

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: T2010429
Lab Sample ID: 16779001
Client Sample: 1613B TCDD Water
Client ID: T2010429001
Batch ID: 44231
Run Date: 07/15/2020 00:33
Data File: b13jul20a_4-8
Prep Batch: 44228
Prep Date: 13-JUL-20

Client: AELI001
Date Collected: 06/03/2020 10:45
Date Received: 07/09/2020 10:20

Method: EPA Method 1613B
Analyst: MJC

Prep Method: SW846 3520C
Prep Aliquot: 964.9 mL

Project: AELI00716
Matrix: WATER

Prep Basis: As Received

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.4	pg/L	10.4

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1150	2070	pg/L	55.5	(31%-137%)
37Cl-2,3,7,8-TCDD		210	207	pg/L	101	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: T2010429
Lab Sample ID: 16779002
Client Sample: 1613B TCDD Water
Client ID: T2010429002
Batch ID: 44231
Run Date: 07/15/2020 01:21
Data File: b13jul20a_4-9
Prep Batch: 44228
Prep Date: 13-JUL-20

Client: AELI001
Date Collected: 06/03/2020 10:10
Date Received: 07/09/2020 10:20

Method: EPA Method 1613B
Analyst: MJC

Prep Method: SW846 3520C
Prep Aliquot: 978.3 mL

Project: AELI00716
Matrix: WATER

Prep Basis: As Received

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.2	pg/L	10.2

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1850	2040	pg/L	90.3	(31%-137%)
37Cl-2,3,7,8-TCDD		216	204	pg/L	106	(42%-164%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Quality Control Summary

**Hi-Res Dioxins/Furans
Surrogate Recovery Report**

SDG Number: T2010429

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12026985	LCS for batch 44228	13C-2,3,7,8-TCDD		60.4	(25%-141%)
		37Cl-2,3,7,8-TCDD		93.1	(37%-158%)
12026986	LCSD for batch 44228	13C-2,3,7,8-TCDD		84.2	(25%-141%)
		37Cl-2,3,7,8-TCDD		98.2	(37%-158%)
12026984	MB for batch 44228	13C-2,3,7,8-TCDD		82.0	(31%-137%)
		37Cl-2,3,7,8-TCDD		98.8	(42%-164%)
16779001	T2010429001	13C-2,3,7,8-TCDD		55.5	(31%-137%)
		37Cl-2,3,7,8-TCDD		101	(42%-164%)
16779002	T2010429002	13C-2,3,7,8-TCDD		90.3	(31%-137%)
		37Cl-2,3,7,8-TCDD		106	(42%-164%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

Page 1 of 2

SDG Number: T2010429

Sample Type: Laboratory Control Sample

Client ID: LCS for batch 44228

Matrix: WATER

Lab Sample ID: 12026985

Instrument: HRP763

Analysis Date: 07/14/2020 19:44

Dilution: 1

Analyst: MJC

Prep Batch ID: 44228

Batch ID: 44231

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	198	99	73-146

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

Page 2 of 2

SDG Number: T2010429

Sample Type: Laboratory Control Sample Duplicate

Client ID: LCSD for batch 44228

Matrix: WATER

Lab Sample ID: 12026986

Instrument: HRP763

Analysis Date: 07/14/2020 20:32

Dilution: 1

Analyst: MJC

Prep Batch ID: 44228

Batch ID: 44231

CAS No.	Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD 2,3,7,8-TCDD	200	189	94.6	73-146	4.56	0-20

Method Blank Summary

Page 1 of 1

SDG Number: T2010429
Client ID: MB for batch 44228
Lab Sample ID: 12026984
Column:

Client: AELI001
Instrument ID: HRP763
Prep Date: 13-JUL-20

Matrix: WATER
Data File: b13jul20a_4-4
Analyzed: 07/14/20 21:20

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 44228	12026985	b13jul20a_4-2	07/14/20	1944
02 LCSD for batch 44228	12026986	b13jul20a_4-3	07/14/20	2032
03 T2010429001	16779001	b13jul20a_4-8	07/15/20	0033
04 T2010429002	16779002	b13jul20a_4-9	07/15/20	0121

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: T2010429
Lab Sample ID: 12026984
Client Sample: QC for batch 44228
Client ID: MB for batch 44228
Batch ID: 44231
Run Date: 07/14/2020 21:20
Data File: b13jul20a_4-4
Prep Batch: 44228
Prep Date: 13-JUL-20

Client: AELI001

Method: EPA Method 1613B
Analyst: MJC

Prep Method: SW846 3520C
Prep Aliquot: 1000 mL

Project: AELI00716
Matrix: WATER

Prep Basis: As Received

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1640	2000	pg/L	82.0	(31%-137%)
37Cl-2,3,7,8-TCDD		198	200	pg/L	98.8	(42%-164%)

Comments:

J Value is estimated

K Estimated Maximum Possible Concentration

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans

Certificate of Analysis

Sample Summary

Page 1 of 1

SDG Number: T2010429

Lab Sample ID: 12026985

Client Sample: QC for batch 44228

Client ID: LCS for batch 44228

Batch ID: 44231

Run Date: 07/14/2020 19:44

Data File: b13jul20a_4-2

Prep Batch: 44228

Prep Date: 13-JUL-20

Client: AELI001

Method: EPA Method 1613B

Analyst: MJC

Prep Method: SW846 3520C

Prep Aliquot: 1000 mL

Project: AELI00716

Matrix: WATER

Prep Basis: As Received

Instrument: HRP763

Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		198	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1210	2000	pg/L	60.4	(25%-141%)
37Cl-2,3,7,8-TCDD		186	200	pg/L	93.1	(37%-158%)

Comments:

Hi-Res Dioxins/Furans Certificate of Analysis Sample Summary						Page 1	of 1
SDG Number:	T2010429	Client:	AELI001	Project:	AELI00716		
Lab Sample ID:	12026986			Matrix:	WATER		
Client Sample:	QC for batch 44228						
Client ID:	LCSD for batch 44228			Prep Basis:	As Received		
Batch ID:	44231	Method:	EPA Method 1613B				
Run Date:	07/14/2020 20:32	Analyst:	MJC	Instrument:	HRP763		
Data File:	b13jul20a_4-3			Dilution:	1		
Prep Batch:	44228	Prep Method:	SW846 3520C				
Prep Date:	13-JUL-20	Prep Aliquot:	1000 mL				
CAS No.	Parmname	Qual	Result	Units	PQL		
1746-01-6	2,3,7,8-TCDD		189	pg/L	10.0		

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1680	2000	pg/L	84.2	(25%-141%)
37Cl-2,3,7,8-TCDD		196	200	pg/L	98.2	(37%-158%)

Comments: