



Hillsborough County Florida

PUBLIC UTILITIES

PO Box 1110 Tampa, FL 33601-1110

February 14, 2018

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

RE: **Southeast County Landfill
Leachate Treatment Plant (WACS Test Site #19864)
Quarterly Analytical Data Report
Fourth Quarter (October – December, 2017)**

Dear Mr. Morgan:

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

The referenced plan requires monthly sampling of the leachate treatment plant effluent and the daily recording of the plant pH values. The monthly effluent samples were collected by County personnel from the designated sampling port at the plant on October 20 and November 21, 2017 and analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and five (5) field parameters. County personnel collected the semi-annual effluent sample on December 20, 2017 for Primary and Secondary Drinking Water Standards, Priority Pollutants, and field parameters.

The daily pH values recorded by plant personnel ranged from 7.31 to 8.50 pH units, and the monthly analytical samples ranged from 7.63 to 7.94 pH units. These values are within the State of Florida Secondary Drinking Water Standard (SDWS), FAC Ch. 62-550.320 of 6.5 to 8.5 pH units. The monthly pH logs from the treatment plant are included within this submittal.

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Lucia E. Garsys

Mr. Steve Morgan

February 14, 2018

Page 2 of 2

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

Respectfully,



Michael D. Townsel
Senior Hydrologist
Public Utilities Department
Environmental Services

2/14/2018

TSD\... \enviro\southeast\scanned reports-docs\Leachate plant\SELF2017-4thQtrEffluent.pdf

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

Month	PH Calibration Log					
	BCT, 2017					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1						
2	4.00	7.00	10.00	7.55	7.31	
3	4.00	7.00	10.00	7.45	7.37	
4	4.01	6.96	10.01	7.50	7.40	
5	4.00	7.04	10.01	7.50	7.50	
6	4.00	7.00	10.00	7.50		
7	4.01	7.00	10.01	7.51		
8	4.00	7.00	10.00	7.50		
9	4.00	7.00	10.00	7.43	7.62	
10	4.00	7.00	10.00	7.40	7.61	
11	4.00	7.01	10.01	7.47	7.70	
12	4.00	7.00	10.00	7.40	7.42	
13	4.00	7.00	10.00	7.59	7.68	
14	4.00	7.00	10.01	7.49	7.54	
15						
16	4.00	7.00	10.00	7.49	8.12	7.74
17	4.00	7.00	10.00	7.49	7.94	
18	4.00	7.00	10.00	7.35	7.49	8.10
19	4.00	7.01	9.99	7.44	7.75	7.96
20	4.00	7.00	10.01	7.44	7.86	
21	4.00	7.00	10.00	7.63	7.71	
22						
23	4.00	7.00	9.99	7.56	7.68	
24	4.00	7.00	10.00	7.42	7.72	
25	4.00	7.01	10.00	7.67	7.88	7.75
26	4.00	7.02	10.00	7.60	7.68	7.53
27	4.00	7.01	10.01	7.59	7.76	7.58
28	4.00	7.01	10.01	7.78	8.01	8.04
29	4.00	7.01	10.01	7.76		
30	4.00	7.01	10.01	7.88	8.26	8.00
31	4.00	7.02	10.00	7.75	8.17	7.91

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.01	10.02	7.85	8.18	8.06
2	4.00	7.02	10.01	7.77	7.85	8.20
3	4.00	7.00	10.00	7.81	7.91	8.35
4	4.00	7.01	10.01	7.95	7.96	
5						
6	4.00	7.00	10.02	7.72	8.40	
7	4.00	7.00	10.01	7.74	8.25	
8	4.00	7.00	10.00	7.97	8.34	
9	4.00	7.01	10.01	7.75	8.45	
10	4.00	7.00	10.00	8.23	8.05	
11	3.99	7.01	10.01	8.21	8.04	
12						
13	4.00	7.00	10.01	7.90	8.10	
14	4.00	7.01	10.01	7.72	8.23	
15	4.00	7.01	10.00	7.84	8.19	
16	4.00	7.01	10.01	7.67	8.19	
17	3.99	7.02	10.01	7.75	8.18	
18	4.00	7.01	10.01	7.77	8.14	
19						
20	4.00	7.01	10.01	7.70	8.42	
21	4.00	7.01	10.01	7.77	8.30	
22	4.00	7.01	10.00	7.83	8.15	
23						
24	3.99	7.00	10.01	7.75	8.00	8.11
25	3.99	7.02	10.01	7.73	7.98	
26						
27	4.00	7.02	10.01	7.71	8.08	7.85
28	4.01	7.02	10.01	7.75	8.25	7.84
29	4.00	7.01	10.01	7.92	8.25	7.96
30	4.00	7.01	10.00	7.70	8.10	
31						

Month	PH Calibration Log					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.02	10.01	7.87	8.10	8.16
2	4.01	7.02	10.01	7.71	7.91	8.07
3						
4	4.00	7.01	10.01	7.80	8.20	8.14
5	4.00	7.00	10.01	7.71	7.99	8.06
6	4.00	7.01	10.01	7.77	8.07	8.15
7	4.01	7.01	10.02	7.78	8.50	8.15
8	4.00	7.01	10.01	7.85	8.36	8.24
9	4.00	7.01	10.01	7.70	8.06	
10						
11	4.00	7.02	10.00	7.77	7.98	8.45
12	4.00	7.03	10.01	7.84	8.13	8.30
13	4.02	7.00	10.00	7.78	8.10	8.20
14	4.01	7.03	10.01	7.83	8.17	8.21
15	4.00	7.02	10.01	7.65	8.15	8.05
16	4.00	7.02	10.01	7.69	7.97	8.09
17						
18	4.00	7.02	10.01	7.65	8.15	8.20
19	4.00	7.01	10.01	7.71	8.10	8.40
20	4.00	7.01	10.01	7.75	8.10	
21	3.98	7.07	10.05	7.56	8.26	8.15
22	4.00	7.01	10.01	7.71	8.11	8.13
23						
24						
25						
26	4.00	7.00	10.00	7.67		8.22
27	4.00	7.00	10.00	7.52	7.82	8.02
28	4.00	7.02	10.01	7.60	7.80	7.90
29	4.00	7.02	10.01	7.64	8.10	7.90
30	4.00	7.02	10.01	7.67	8.27	7.91
31						



Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

November 13, 2017

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

RE: Workorder: T1718026 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, October 20, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,

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

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

Report ID: 516509 - 1497220

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SAMPLE SUMMARY

Workorder: T1718026 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1718026001	Field Blank	Water	10/20/2017 09:49	10/20/2017 12:10
T1718026002	Leachate Effluent	Water	10/20/2017 09:56	10/20/2017 12:10

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ANALYTICAL RESULTS

Workorder: T1718026 SELF Plant Effluent

Lab ID: **T1718026001**

Date Received: 10/20/17 12:10 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 10/20/17 09:49

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	I	mg/L	1	50	24	10/23/2017 14:43	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	12	U	mg/L	1.25	12	12	10/26/2017 11:28	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	0.50	U	mg/L	0.5	0.50	0.50	10/27/2017 11:29	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate	0.18	U	mg/L	1	0.20	0.18	10/20/2017 14:40	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	10/20/2017 14:05	T

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ANALYTICAL RESULTS

Workorder: T1718026 SELF Plant Effluent

Lab ID: **T1718026002**
Sample ID: **Leachate Effluent**

Date Received: 10/20/17 12:10 Matrix: Water
Date Collected: 10/20/17 09:56

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	14105		umhos/cm	1			10/20/2017 09:56	T^
Dissolved Oxygen	0.18		mg/L	1			10/20/2017 09:56	T^
ORP-2580BW	-85.3		mV	1			10/20/2017 09:56	T^
Temperature	29.54		°C	1			10/20/2017 09:56	T^
pH	7.63		SU	1			10/20/2017 09:56	T^
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	1100		mg/L	1	50	24	10/27/2017 14:42	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	6600		mg/L	1.25	12	12	10/26/2017 11:28	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	25		mg/L	5	5.0	5.0	10/27/2017 11:29	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate	0.18	U	mg/L	1	0.20	0.18	10/20/2017 14:41	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	420		mg/L	1	2.0	2.0	10/20/2017 14:14	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1718026 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: T1718026 SELF Plant Effluent

QC Batch: WCAI/11573 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1718026001, T1718026002

METHOD BLANK: 2506572

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate	mg/L	0.18	0.18 U

LABORATORY CONTROL SAMPLE: 2506573

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506574 2506575 Original: S1701651006

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate	mg/L	0	1	0.56	0.62	56	62	90-110	11	10 J4	

QC Batch: WCAI/11589 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1718026001, T1718026002

METHOD BLANK: 2507654

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: T1718026 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2507655

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

SAMPLE DUPLICATE: 2507656

Original: T1717916001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	1100	22000	182	20 J4
QC Batch:	WCAt/11604		Analysis Method:	EPA 410.4	
QC Batch Method:	EPA 410.4		Prepared:		
Associated Lab Samples:	T1718026001				

METHOD BLANK: 2507997

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

LABORATORY CONTROL SAMPLE: 2507998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Chemical Oxygen Demand	mg/L	500	490	99	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2508000

2508001

Original: T1718026001

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	24	500	530	520	101	100	90-110	1	10

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QUALITY CONTROL DATA

Workorder: T1718026 SELF Plant Effluent

QC Batch: WCAI/11702 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Prepared:
Associated Lab Samples: T1718026002

METHOD BLANK: 2513401

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

LABORATORY CONTROL SAMPLE: 2513402

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	490	98	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2513412 2513413 Original: T1718366001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
WET CHEMISTRY										
Chemical Oxygen Demand	mg/L	710	500	1200	1200	105	105	90-110	0	10

QC Batch: WCAI/11704 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1718026001, T1718026002

METHOD BLANK: 2513444

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: T1718026 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2513445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Suspended Solids	mg/L	200	160	79	75-125

SAMPLE DUPLICATE: 2513447

Original: T1718025003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	2900	2900	0	10	
QC Batch:	WCAI/11705		Analysis Method:		SM 2540 C	
QC Batch Method:	SM 2540 C		Prepared:			
Associated Lab Samples:	T1718026001, T1718026002					

METHOD BLANK: 2513464

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

LABORATORY CONTROL SAMPLE: 2513465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	600	91	75-125

SAMPLE DUPLICATE: 2513466

Original: T1717994001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	270	270	0	5

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QUALITY CONTROL DATA

Workorder: T1718026 SELF Plant Effluent

SAMPLE DUPLICATE: 2513467

Original: T1718026001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	12U	12	0	5

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1718026 SELF Plant Effluent

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: T1718026 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1718026001	Field Blank			SM 4500NO3-F	WCA/t/11573
T1718026002	Leachate Effluent			SM 4500NO3-F	WCA/t/11573
T1718026001	Field Blank			SM 5210B	WCA/t/11589
T1718026002	Leachate Effluent			SM 5210B	WCA/t/11589
T1718026001	Field Blank			EPA 410.4	WCA/t/11604
T1718026002	Leachate Effluent			EPA 410.4	WCA/t/11702
T1718026001	Field Blank			SM 2540D	WCA/t/11704
T1718026002	Leachate Effluent			SM 2540D	WCA/t/11704
T1718026001	Field Blank			SM 2540 C	WCA/t/11705
T1718026002	Leachate Effluent			SM 2540 C	WCA/t/11705
T1718026002	Leachate Effluent	Field Measurements	FLD/t/	Field Measurements	FLD/t/

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Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

December 13, 2017

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

RE: Workorder: T1720188 SELF Plant Effluent

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, November 21, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,

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

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

Report ID: 522459 - 1647269

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SAMPLE SUMMARY

Workorder: T1720188 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1720188001	Leachate	Water	11/21/2017 12:04	11/21/2017 13:00
T1720188002	Field Blank	Water	11/21/2017 11:58	11/21/2017 13:00

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ANALYTICAL RESULTS

Workorder: T1720188 SELF Plant Effluent

Lab ID: **T1720188001**
Sample ID: **Leachate**

Date Received: 11/21/17 13:00 Matrix: Water
Date Collected: 11/21/17 12:04

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	15676		umhos/cm	1			11/21/2017 12:04	....
Dissolved Oxygen	2.7		mg/L	1			11/21/2017 12:04	....
ORP-2580BW	-89.4		mV	1			11/21/2017 12:04	....
Temperature	26.5		°C	1			11/21/2017 12:04	....
pH	7.91		SU	1			11/21/2017 12:04	....
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water			Analytical Method: EPA 410.4					
Chemical Oxygen Demand	1000		mg/L	1	50	24	11/28/2017 15:07	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	8200		mg/L	1.25	12	12	11/27/2017 13:23	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	66		mg/L	10	10	10	11/28/2017 08:42	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate	0.18	U	mg/L	1	0.20	0.18	11/22/2017 11:26	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	190		mg/L	1	2.0	2.0	11/22/2017 15:27	T

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ANALYTICAL RESULTS

Workorder: T1720188 SELF Plant Effluent

Lab ID: **T1720188002**

Date Received: 11/21/17 13:00 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 11/21/17 11:58

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	11/28/2017 15:07	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540 C					
Total Dissolved Solids	12	U	mg/L	1.25	12	12	11/27/2017 13:23	T
Analysis Desc: TSS,SM2540D,Water			Analytical Method: SM 2540D					
Total Suspended Solids	1.0	U	mg/L	1	1.0	1.0	11/28/2017 08:42	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water			Analytical Method: SM 4500NO3-F					
Nitrate	0.18	U	mg/L	1	0.20	0.18	11/22/2017 10:42	T
Analysis Desc: BOD,SM5210B,Water			Analytical Method: SM 5210B					
Biochemical Oxygen Demand	2.0	U	mg/L	1	2.0	2.0	11/22/2017 15:32	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1720188 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: T1720188 SELF Plant Effluent

QC Batch: WCAI/12226 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1720188001, T1720188002

METHOD BLANK: 2539594

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY Nitrate	mg/L	0.18	0.18 U

LABORATORY CONTROL SAMPLE: 2539595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate	mg/L	1	1.1	106	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2539596 2539597 Original: T1720130001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Nitrate	mg/L	0.64	1	1.7	1.7	102	102	90-110	0	10	

QC Batch: WCAI/12259 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1720188001, T1720188002

METHOD BLANK: 2541961

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

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QUALITY CONTROL DATA

Workorder: T1720188 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2541962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	590	89	75-125	

SAMPLE DUPLICATE: 2541963

Original: T1720308001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	25060	25000	1	5	

SAMPLE DUPLICATE: 2541964

Original: T1720172005

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	450	470	5	5	
QC Batch:	WCAI/12263		Analysis Method:		SM 5210B	
QC Batch Method:	SM 5210B		Prepared:			
Associated Lab Samples:				T1720188001, T1720188002		

METHOD BLANK: 2542464

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

LABORATORY CONTROL SAMPLE: 2542465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	210	106	84.6-115.4	

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QUALITY CONTROL DATA

Workorder: T1720188 SELF Plant Effluent

SAMPLE DUPLICATE: 2542466

Original: T1720332001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Biochemical Oxygen Demand	mg/L	1800	1200	40	20 J4
QC Batch:	WCAI/12272		Analysis Method:	SM 2540D	
QC Batch Method:	SM 2540D		Prepared:		
Associated Lab Samples:	T1720188001, T1720188002				

METHOD BLANK: 2542856

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

LABORATORY CONTROL SAMPLE: 2542857

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	200	190	95	75-125

SAMPLE DUPLICATE: 2542858

Original: T1720186001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	78	74	5	10

SAMPLE DUPLICATE: 2542859

Original: T1720201004

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY Total Suspended Solids	mg/L	2700	2700	1	10
QC Batch:	WCAI/12286		Analysis Method:	EPA 410.4	
QC Batch Method:	EPA 410.4		Prepared:		

Report ID: 522459 - 1647269

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QUALITY CONTROL DATA

Workorder: T1720188 SELF Plant Effluent

Associated Lab Samples: T1720188001, T1720188002

METHOD BLANK: 2543354

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

LABORATORY CONTROL SAMPLE: 2543355

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Chemical Oxygen Demand	mg/L	500	490	98	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2543357 2543358 Original: T1720188002

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	500	500	500	100	100	90-110	0	10

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1720188 SELF Plant Effluent

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

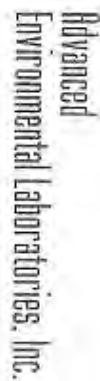
Workorder: T1720188 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1720188001	Leachate			SM 4500NO3-F	WCA/t/12226
T1720188002	Field Blank			SM 4500NO3-F	WCA/t/12226
T1720188001	Leachate			SM 2540 C	WCA/t/12259
T1720188002	Field Blank			SM 2540 C	WCA/t/12259
T1720188001	Leachate			SM 5210B	WCA/t/12263
T1720188002	Field Blank			SM 5210B	WCA/t/12263
T1720188001	Leachate			SM 2540D	WCA/t/12272
T1720188002	Field Blank			SM 2540D	WCA/t/12272
T1720188001	Leachate			EPA 410.4	WCA/t/12286
T1720188002	Field Blank			EPA 410.4	WCA/t/12286
T1720188001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

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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: 11/21/17	

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 RAMP 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) $= (\text{N/A} \text{ feet} - \text{N/A} \text{ feet}) \times \text{N/A} \text{ gallons/foot} = \text{N/A} \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{N/A} \text{ gallons} + (\text{N/A} \text{ gallons/foot} \times \text{N/A} \text{ feet}) + \text{N/A} \text{ gallons} = \text{N/A} \text{ gallons}$											
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)
12:04	N/A	N/A	N/A	N/A	7.9	26.5	15676	2.70	N/A	N/A	N/A
0/A 11/21/17											
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>T. Aguilar J Fuller</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>12:04</i>		SAMPLING ENDED AT: <i>12:09</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			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 <i>12:04 (-89.4)</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 $+ 10\%$ (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: 11/21/17	

PURGING DATA

WELL DIAMETER (inches): N/A		TUBING DIAMETER (inches): N/A		WELL SCREEN INTERVAL DEPTH: N/A ft to N/A ft		STATIC DEPTH TO WATER (feet): N/A		PURGE PUMP TYPE OR BAILER: N/A			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\text{N/A} \text{ feet} - \text{N/A} \text{ feet}) \times \text{N/A} \text{ gallons/foot} = \text{N/A} \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{N/A} \text{ gallons} + (\text{N/A} \text{ gallons/foot} \times \text{N/A} \text{ feet}) + \text{N/A} \text{ gallons} = \text{N/A} \text{ gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A			FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A			PURGING INITIATED AT: N/A		PURGING ENDED AT: N/A		TOTAL VOLUME PURGED (gallons): N/A	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
Field Blank 11/21/17 <i>[Signature]</i>											
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>J. Aguilar J. Fuller</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>11:58</i>		SAMPLING ENDED AT: <i>12:00</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			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; 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: ± 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)

January 11, 2018

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

RE: Workorder: T1721858 SELF Plant Effluent Semi

Dear Michael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, December 20, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

Sincerely,



Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

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SAMPLE SUMMARY

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1721858001	Leachate Effluent(SemiAnnual)	Water	12/20/2017 10:30	12/20/2017 13:23
T1721858002	Field Blank	Water	12/20/2017 09:50	12/20/2017 13:23
T1721858003	Travel Blank	Water	12/20/2017 00:00	12/20/2017 13:23

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001** Date Received: 12/20/17 13:23 Matrix: Water
Sample ID: **Leachate Effluent(SemiAnnual)** Date Collected: 12/20/17 10:30

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	17562		umhos/cm	1			12/20/2017 10:30	....
Dissolved Oxygen	3.17		mg/L	1			12/20/2017 10:30	....
ORP-2580BW	105.2		mV	1			12/20/2017 10:30	....
Temperature	27.3		°C	1			12/20/2017 10:30	....
pH	7.94		SU	1			12/20/2017 10:30	....

METALS

Analysis Desc: E200.7 Analysis,Waters			Preparation Method: EPA 200.7						
Analytical Method: EPA 200.7									
Aluminum	84	I	ug/L	1	600	25	12/22/2017 12:50	T	
Barium	31		ug/L	1	2.0	1.5	12/22/2017 12:50	T	
Beryllium	0.18	U	ug/L	1	0.60	0.18	12/22/2017 12:50	T	
Chromium	12		ug/L	1	2.5	2.0	12/22/2017 12:50	T	
Iron	3000		ug/L	1	100	21	12/22/2017 12:50	T	
Nickel	25		ug/L	1	9.0	4.4	12/22/2017 12:50	T	
Sodium	3000		mg/L	100	20	17	12/22/2017 13:14	T	
Zinc	130		ug/L	1	10	7.4	12/22/2017 12:50	T	

Analysis Desc: E200.8 Analysis,Waters			Preparation Method: EPA 200.8					
Analytical Method: EPA 200.8								
Antimony	1.4		ug/L	1	0.70	0.046	12/27/2017 20:54	J
Arsenic	5.6		ug/L	1	1.0	0.077	12/27/2017 20:54	J
Cadmium	0.22	I	ug/L	1	0.50	0.028	12/27/2017 20:54	J
Copper	58		ug/L	1	0.70	0.11	12/27/2017 20:54	J
Lead	2.1		ug/L	1	0.70	0.24	12/27/2017 20:54	J
Manganese	440		ug/L	1	1.0	0.055	12/27/2017 20:54	J
Selenium	1.0	I	ug/L	1	5.0	0.58	12/27/2017 20:54	J
Silver	0.080	I	ug/L	1	0.50	0.027	12/27/2017 20:54	J
Thallium	0.14	I	ug/L	1	0.20	0.057	12/27/2017 20:54	J
Uranium	3.2		ug/L	1	0.20	0.070	12/27/2017 20:54	J

Analysis Desc: EPA 245.1 Analysis,Water				Preparation Method: EPA 245.1					
				Analytical Method: EPA 245.1					
Mercury	0.061	I	ug/L	1	0.10	0.050	1/3/2018 13:33	T	

SEMIVOLATILES

Report ID: 527872 - 1745170

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Leachate Effluent(SemiAnnual)**

Date Collected: 12/20/17 10:30

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	0.0060	U	ug/L	1	0.020	0.0060	12/26/2017 15:21	J
Ethylene Dibromide (EDB)	0.0062	U	ug/L	1	0.020	0.0062	12/26/2017 15:21	J
Tetrachloro-m-xylene (S)	58	J4	%	1	64-150		12/26/2017 15:21	
Analysis Desc: E508 Analysis, Water		Preparation Method: EPA 508						
		Analytical Method: EPA 508						
Chlordane (technical)	0.26	U	ug/L	5	1.0	0.26	12/26/2017 12:16	J
Endrin	0.034	U	ug/L	5	0.10	0.034	12/26/2017 12:16	J
Heptachlor	0.030	U	ug/L	5	0.10	0.030	12/26/2017 12:16	J
Heptachlor Epoxide	0.026	U	ug/L	5	0.10	0.026	12/26/2017 12:16	J
Hexachlorobenzene	0.032	U	ug/L	5	0.10	0.032	12/26/2017 12:16	J
Hexachlorocyclopentadiene	0.062	U	ug/L	5	0.10	0.062	12/26/2017 12:16	J
Methoxychlor	0.034	U	ug/L	5	0.10	0.034	12/26/2017 12:16	J
PCBs	0.55	U	ug/L	5	1.0	0.55	12/26/2017 12:16	J
Toxaphene	0.60	U	ug/L	5	1.0	0.60	12/26/2017 12:16	J
gamma-BHC (Lindane)	0.036	U	ug/L	5	0.10	0.036	12/26/2017 12:16	J
Tetrachloro-m-xylene (S)	0	1	%	5	70-130		12/26/2017 12:16	
Decachlorobiphenyl (S)	0	1	%	5	70-130		12/26/2017 12:16	
Analysis Desc: E515.3 Analysis, Water		Preparation Method: EPA 515.3						
		Analytical Method: EPA 515.3						
2,4-D	1.5	U	ug/L	1	5.0	1.5	12/27/2017 12:44	J
Dalapon	1.0	U	ug/L	1	5.0	1.0	12/27/2017 12:44	J
Dinoseb	0.86	U	ug/L	1	2.5	0.86	12/27/2017 12:44	J
Pentachlorophenol	0.069	U	ug/L	1	0.50	0.069	12/27/2017 12:44	J
Picloram	0.23	U	ug/L	1	0.50	0.23	12/27/2017 12:44	J
Silvex (2,4,5-TP)	0.32	U	ug/L	1	1.0	0.32	12/27/2017 12:44	J
2,4-Dichlorophenylacetic acid (S)	12	J4	%	1	70-130		12/27/2017 12:44	
Analysis Desc: E525.2 Analysis, Water		Preparation Method: EPA 525.2						
		Analytical Method: EPA 525.2						
Alachlor	1.0	U	ug/L	1	2.0	1.0	1/3/2018 17:38	J
Atrazine	0.64	U	ug/L	1	2.0	0.64	1/3/2018 17:38	J
Benzo[a]pyrene	0.38	U	ug/L	1	2.0	0.38	1/3/2018 17:38	J
Di(2-ethylhexyl) adipate	3.8	U	ug/L	1	4.0	3.8	1/3/2018 17:38	J
Simazine	0.76	U	ug/L	1	2.0	0.76	1/3/2018 17:38	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Leachate Effluent(SemiAnnual)**

Date Collected: 12/20/17 10:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
bis(2-Ethylhexyl) phthalate	6.0	U	ug/L	1	8.0	6.0	1/3/2018 17:38	J
p-Terphenyl-d14 (S)	72		%	1	70-130		1/3/2018 17:38	
Analysis Desc: E531.1 Analysis, Water		Analytical Method: EPA 531.1						
Carbofuran	0.28	U	ug/L	1	2.5	0.28	1/4/2018 13:09	J
Oxamyl	0.57	U	ug/L	1	2.5	0.57	1/4/2018 13:09	J
Analysis Desc: E547 Analysis, Water		Analytical Method: EPA 547						
Glyphosate	6.5	U	ug/L	1	50	6.5	12/22/2017 09:29	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	12/26/2017 11:59	J
Analysis Desc: E549.2 Analysis, Water		Preparation Method: EPA 549.2						
		Analytical Method: EPA 549.2						
Diquat	11	U	ug/L	1	100	11	12/21/2017 14:32	J
Analysis Desc: 552.2 Analysis, Water, HAA		Preparation Method: EPA 552.2						
		Analytical Method: EPA 552.2						
Bromoacetic Acid	2.34		ug/L	1	1.0	0.54	1/4/2018 02:56	T
Chloroacetic Acid	27.42		ug/L	1	1.0	0.50	1/4/2018 02:56	T
Dibromoacetic Acid	41.47		ug/L	1	1.0	0.54	1/4/2018 02:56	T
Dichloroacetic Acid	22.60		ug/L	1	1.0	0.81	1/4/2018 02:56	T
Total Haloacetic Acids (HAA5)	130.75		ug/L	1	1.0	0.50	1/4/2018 02:56	T
Trichloroacetic Acid	36.91		ug/L	1	1.0	0.91	1/4/2018 02:56	T
2,3-Dibromopropionic Acid (S)	76		%	1	70-130		1/4/2018 02:56	
Analysis Desc: 8081A Pesticide Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: EPA 8081						
4,4'-DDD	0.0017	U,J4	ug/L	1	0.020	0.0017	12/26/2017 19:29	J
4,4'-DDE	0.0038	U,J4	ug/L	1	0.020	0.0038	12/26/2017 19:29	J
4,4'-DDT	0.0022	U,J4	ug/L	1	0.020	0.0022	12/26/2017 19:29	J
Aldrin	0.0019	U,J4	ug/L	1	0.020	0.0019	12/26/2017 19:29	J
Dieldrin	0.0011	U,J4	ug/L	1	0.020	0.0011	12/26/2017 19:29	J
Endosulfan I	0.0031	U,J4	ug/L	1	0.020	0.0031	12/26/2017 19:29	J
Endosulfan II	0.0027	U,J4	ug/L	1	0.020	0.0027	12/26/2017 19:29	J
Endosulfan Sulfate	0.0032	U	ug/L	1	0.020	0.0032	12/26/2017 19:29	J
Endrin Aldehyde	0.0025	U,J4	ug/L	1	0.020	0.0025	12/26/2017 19:29	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Leachate Effluent(SemiAnnual)**

Date Collected: 12/20/17 10:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
alpha-BHC	0.0031	U,J4	ug/L	1	0.020	0.0031	12/26/2017 19:29	J
beta-BHC	0.0019	U,J4	ug/L	1	0.020	0.0019	12/26/2017 19:29	J
delta-BHC	0.00087	U,J4	ug/L	1	0.020	0.00087	12/26/2017 19:29	J
Tetrachloro-m-xylene (S)	11	J4	%	1	44-124		12/26/2017 19:29	
Decachlorobiphenyl (S)	14	J4	%	1	48-137		12/26/2017 19:29	

Analysis Desc: 8082A PCB Analysis,
Water

Preparation Method: SW-846 3510C

Analytical Method: SW-846 8082A

Aroclor 1016 (PCB-1016)	0.065	U	ug/L	1	0.20	0.065	12/26/2017 19:29	J
Aroclor 1221 (PCB-1221)	0.11	U	ug/L	1	0.20	0.11	12/26/2017 19:29	J
Aroclor 1232 (PCB-1232)	0.098	U	ug/L	1	0.20	0.098	12/26/2017 19:29	J
Aroclor 1242 (PCB-1242)	0.097	U	ug/L	1	0.20	0.097	12/26/2017 19:29	J
Aroclor 1248 (PCB-1248)	0.068	U	ug/L	1	0.20	0.068	12/26/2017 19:29	J
Aroclor 1254 (PCB-1254)	0.052	U	ug/L	1	0.20	0.052	12/26/2017 19:29	J
Aroclor 1260 (PCB-1260)	0.080	U,J4	ug/L	1	0.20	0.080	12/26/2017 19:29	J
Tetrachloro-m-xylene (S)	11	J4	%	1	61-119		12/26/2017 19:29	
Decachlorobiphenyl (S)	14	J4	%	1	44-136		12/26/2017 19:29	

Analysis Desc: 8270C Analysis, Water

Preparation Method: SW-846 3510C

Analytical Method: SW-846 8270C

1,2-Diphenylhydrazine	0.96	U	ug/L	1	5.0	0.96	12/26/2017 16:35	J
1,3-Dichlorobenzene	1.0	U	ug/L	1	5.0	1.0	12/26/2017 16:35	J
2,4,6-Trichlorophenol	1.4	U	ug/L	1	5.0	1.4	12/26/2017 16:35	J
2,4-Dichlorophenol	0.90	U	ug/L	1	5.0	0.90	12/26/2017 16:35	J
2,4-Dimethylphenol	2.6	U	ug/L	1	5.0	2.6	12/26/2017 16:35	J
2,4-Dinitrophenol	1.1	U	ug/L	1	10	1.1	12/26/2017 16:35	J
2,4-Dinitrotoluene (2,4-DNT)	1.8	U	ug/L	1	5.0	1.8	12/26/2017 16:35	J
2,6-Dinitrotoluene (2,6-DNT)	2.0	U	ug/L	1	5.0	2.0	12/26/2017 16:35	J
2-Chloronaphthalene	1.7	U	ug/L	1	5.0	1.7	12/26/2017 16:35	J
2-Chlorophenol	1.5	U	ug/L	1	5.0	1.5	12/26/2017 16:35	J
2-Methyl-4,6-dinitrophenol	1.2	U	ug/L	1	5.0	1.2	12/26/2017 16:35	J
2-Nitrophenol	0.63	U	ug/L	1	5.0	0.63	12/26/2017 16:35	J
3,3'-Dichlorobenzidine	1.3	U	ug/L	1	5.0	1.3	12/26/2017 16:35	J
4-Bromophenyl Phenyl Ether	1.1	U	ug/L	1	5.0	1.1	12/26/2017 16:35	J
4-Chloro-3-methylphenol	0.63	U	ug/L	1	5.0	0.63	12/26/2017 16:35	J
4-Chlorophenyl Phenyl Ether	1.6	U	ug/L	1	5.0	1.6	12/26/2017 16:35	J
4-Nitrophenol	2.9	U	ug/L	1	5.0	2.9	12/26/2017 16:35	J
Acenaphthene	0.040	U	ug/L	1	0.20	0.040	12/26/2017 16:35	J
Acenaphthylene	0.042	U	ug/L	1	0.20	0.042	12/26/2017 16:35	J
Anthracene	0.035	U	ug/L	1	0.20	0.035	12/26/2017 16:35	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**
Sample ID: **Leachate Effluent(SemiAnnual)**

Date Received: 12/20/17 13:23 Matrix: Water
Date Collected: 12/20/17 10:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Benidine	1.2	U	ug/L	1	5.0	1.2	12/26/2017 16:35	J
Benzo[a]anthracene	0.012	U	ug/L	1	0.20	0.012	12/26/2017 16:35	J
Benzo[b]fluoranthene	0.012	U	ug/L	1	0.10	0.012	12/26/2017 16:35	J
Benzo[g,h,i]perylene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 16:35	J
Benzo[k]fluoranthene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 16:35	J
Butyl benzyl phthalate	1.1	U	ug/L	1	5.0	1.1	12/26/2017 16:35	J
Chrysene	0.033	U	ug/L	1	0.20	0.033	12/26/2017 16:35	J
Di-n-Butyl Phthalate	0.88	U	ug/L	1	5.0	0.88	12/26/2017 16:35	J
Di-n-octyl Phthalate	1.2	U	ug/L	1	5.0	1.2	12/26/2017 16:35	J
Dibenzo[a,h]anthracene	0.024	U	ug/L	1	0.20	0.024	12/26/2017 16:35	J
Diethyl phthalate	2.1	U	ug/L	1	5.0	2.1	12/26/2017 16:35	J
Dimethyl phthalate	1.8	U	ug/L	1	10	1.8	12/26/2017 16:35	J
Fluoranthene	0.037	U	ug/L	1	0.20	0.037	12/26/2017 16:35	J
Fluorene	0.038	U	ug/L	1	0.20	0.038	12/26/2017 16:35	J
Hexachlorobutadiene	1.3	U	ug/L	1	5.0	1.3	12/26/2017 16:35	J
Hexachloroethane	1.2	U	ug/L	1	5.0	1.2	12/26/2017 16:35	J
Indeno(1,2,3-cd)pyrene	0.011	U	ug/L	1	0.20	0.011	12/26/2017 16:35	J
Isophorone	1.1	U	ug/L	1	5.0	1.1	12/26/2017 16:35	J
N-Nitrosodi-n-propylamine	2.2	U	ug/L	1	5.0	2.2	12/26/2017 16:35	J
N-Nitrosodimethylamine	0.93	U	ug/L	1	5.0	0.93	12/26/2017 16:35	J
N-Nitrosodiphenylamine	2.1	U	ug/L	1	5.0	2.1	12/26/2017 16:35	J
Naphthalene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 16:35	J
Nitrobenzene	1.1	U	ug/L	1	5.0	1.1	12/26/2017 16:35	J
Phenanthrene	0.040	U	ug/L	1	0.20	0.040	12/26/2017 16:35	J
Phenol	0.54	U	ug/L	1	5.0	0.54	12/26/2017 16:35	J
Pyrene	0.036	U	ug/L	1	0.20	0.036	12/26/2017 16:35	J
bis(2-Chloroethoxy)methane	1.2	U	ug/L	1	5.0	1.2	12/26/2017 16:35	J
bis(2-Chloroethyl)Ether	1.5	U	ug/L	1	5.0	1.5	12/26/2017 16:35	J
bis(2-Chloroisopropyl) Ether	1.4	U	ug/L	1	5.0	1.4	12/26/2017 16:35	J
bis(2-Ethylhexyl) phthalate	2.0	U	ug/L	1	5.0	2.0	12/26/2017 16:35	J
2-Fluorophenol (S)	25	J4	%	1	31-134		12/26/2017 16:35	
Phenol-d6 (S)	17	J4	%	1	24-120		12/26/2017 16:35	
Nitrobenzene-d5 (S)	62		%	1	38-139		12/26/2017 16:35	
2-Fluorobiphenyl (S)	50		%	1	42-138		12/26/2017 16:35	
2,4,6-Tribromophenol (S)	49		%	1	48-147		12/26/2017 16:35	
p-Terphenyl-d14 (S)	21	J4	%	1	61-154		12/26/2017 16:35	

VOLATILES

Analysis Desc: 524.2 Analysis, Water

Analytical Method: EPA 524.2

1,1,1-Trichloroethane	0.39	U	ug/L	1	0.50	0.39	12/31/2017 01:03	M
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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**
Sample ID: **Leachate Effluent(SemiAnnual)**

Date Received: 12/20/17 13:23 Matrix: Water
Date Collected: 12/20/17 10:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,2-Trichloroethane	0.12	U	ug/L	1	0.50	0.12	12/31/2017 01:03	M
1,1-Dichloroethylene	0.18	U	ug/L	1	0.50	0.18	12/31/2017 01:03	M
1,2,4-Trichlorobenzene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:03	M
1,2-Dichlorobenzene	0.46	U	ug/L	1	0.50	0.46	12/31/2017 01:03	M
1,2-Dichloroethane	0.36	U	ug/L	1	0.50	0.36	12/31/2017 01:03	M
1,2-Dichloropropane	0.26	U	ug/L	1	0.50	0.26	12/31/2017 01:03	M
1,4-Dichlorobenzene	0.26	U	ug/L	1	0.50	0.26	12/31/2017 01:03	M
Benzene	0.17	U	ug/L	1	0.50	0.17	12/31/2017 01:03	M
Bromodichloromethane	20.46		ug/L	1	0.50	0.14	12/31/2017 01:03	M
Bromoform	107.46		ug/L	1	0.50	0.26	12/31/2017 01:03	M
Carbon Tetrachloride	0.23	U	ug/L	1	0.50	0.23	12/31/2017 01:03	M
Chlorobenzene	0.12	U	ug/L	1	0.50	0.12	12/31/2017 01:03	M
Chloroform	10.84		ug/L	1	0.50	0.39	12/31/2017 01:03	M
Dibromochloromethane	60.56		ug/L	1	0.50	0.32	12/31/2017 01:03	M
Ethylbenzene	0.17	U	ug/L	1	0.50	0.17	12/31/2017 01:03	M
Methylene Chloride	0.60		ug/L	1	0.50	0.44	12/31/2017 01:03	M
Styrene	0.39	U	ug/L	1	0.50	0.39	12/31/2017 01:03	M
Tetrachloroethylene (PCE)	0.24	U	ug/L	1	0.50	0.24	12/31/2017 01:03	M
Toluene	0.22	U	ug/L	1	0.50	0.22	12/31/2017 01:03	M
Total Trihalomethanes	199.32		ug/L	1	0.50	0.14	12/31/2017 01:03	M
Trichloroethene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:03	M
Vinyl Chloride	0.20	U	ug/L	1	0.50	0.20	12/31/2017 01:03	M
Xylene (Total)	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:03	M
cis-1,2-Dichloroethylene	0.32	U	ug/L	1	0.50	0.32	12/31/2017 01:03	M
trans-1,2-Dichloroethylene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:03	M
1,2-Dichloroethane-d4 (S)	100		%	1	80-120		12/31/2017 01:03	
1,2-Dichloroethane-d4 (S)	100		%	1	80-120		12/31/2017 01:03	
Toluene-d8 (S)	104		%	1	81-118		12/31/2017 01:03	
Toluene-d8 (S)	104		%	1	81-118		12/31/2017 01:03	
Bromofluorobenzene (S)	109		%	1	86-115		12/31/2017 01:03	
Bromofluorobenzene (S)	109		%	1	86-115		12/31/2017 01:03	

Analysis Desc: 8260B 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	12/28/2017 00:27	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	12/28/2017 00:27	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	12/28/2017 00:27	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	12/28/2017 00:27	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	12/28/2017 00:27	T
Bromomethane	52		ug/L	1	1.0	0.97	12/28/2017 00:27	T

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001**
Sample ID: **Leachate Effluent(SemiAnnual)**

Date Received: 12/20/17 13:23 Matrix: Water
Date Collected: 12/20/17 10:30

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chloroethane	0.38	U	ug/L	1	1.0	0.38	12/28/2017 00:27	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	12/28/2017 00:27	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	12/28/2017 00:27	T
1,2-Dichloroethane-d4 (S)	124		%	1	70-128		12/28/2017 00:27	
Toluene-d8 (S)	102		%	1	77-119		12/28/2017 00:27	
Bromofluorobenzene (S)	112		%	1	86-123		12/28/2017 00:27	

WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	3900		mg/L	25	120	25	12/26/2017 19:19	T
Fluoride	2.5	U	mg/L	25	12	2.5	12/26/2017 19:19	T
Sulfate	93	I	mg/L	25	120	25	12/26/2017 19:19	T
Analysis Desc: Color,SM2120B,Water		Analytical Method: SM 2120 B						
pH for Color Analysis	8.0		SU	10	5.0	0.10	12/21/2017 15:03	T
Color	340		PCU	10	50	27	12/21/2017 15:03	T
Analysis Desc: Odor,SM2150B,Water		Analytical Method: SM 2150 B						
Odor	16		TON @ 40°C	1	1.0	1.0	12/20/2017 15:25	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	8400		mg/L	1.25	12	12	12/26/2017 08:33	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	12/21/2017 08:30	T
Analysis Desc: Cyanide, SM4500-E, Water		Analytical Method: SM 4500-CN-E						
Cyanide	0.016		mg/L	1	0.010	0.0048	12/21/2017 18:00	T
Analysis Desc: .PH,SM4500H+B, Water		Analytical Method: SM 4500H+B						
pH	7.6	Q	SU	1			12/26/2017 08:00	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate	32		mg/L	10	2.0	1.8	12/21/2017 11:50	T
Nitrite	46		mg/L	10	2.0	1.8	12/21/2017 11:50	T

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858001** Date Received: 12/20/17 13:23 Matrix: Water
Sample ID: **Leachate Effluent(SemiAnnual)** Date Collected: 12/20/17 10:30

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	1.6	I,V	mg/L	10	2.0	0.40	12/21/2017 12:15	G

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

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	25	U	ug/L	1	600	25	12/22/2017 13:15	T
Barium	1.5	U	ug/L	1	2.0	1.5	12/22/2017 13:15	T
Beryllium	0.18	U	ug/L	1	0.60	0.18	12/22/2017 13:15	T
Chromium	2.0	U	ug/L	1	2.5	2.0	12/22/2017 13:15	T
Iron	21	U	ug/L	1	100	21	12/22/2017 13:15	T
Nickel	4.4	U	ug/L	1	9.0	4.4	12/22/2017 13:15	T
Sodium	0.17	U	mg/L	1	0.20	0.17	12/22/2017 13:15	T
Zinc	11		ug/L	1	10	7.4	12/22/2017 13:15	T
Analysis Desc: E200.8 Analysis,Waters			Preparation Method: EPA 200.8					
			Analytical Method: EPA 200.8					
Antimony	0.14	I	ug/L	1	0.70	0.046	12/27/2017 21:00	J
Arsenic	0.11	I	ug/L	1	1.0	0.077	12/27/2017 21:00	J
Cadmium	0.10	I	ug/L	1	0.50	0.028	12/27/2017 21:00	J
Copper	0.23	I	ug/L	1	0.70	0.11	12/27/2017 21:00	J
Lead	0.24	U	ug/L	1	0.70	0.24	12/27/2017 21:00	J
Manganese	0.96	I	ug/L	1	1.0	0.055	12/27/2017 21:00	J
Selenium	0.58	U	ug/L	1	5.0	0.58	12/27/2017 21:00	J
Silver	0.038	I	ug/L	1	0.50	0.027	12/27/2017 21:00	J
Thallium	0.057	U	ug/L	1	0.20	0.057	12/27/2017 21:00	J
Analysis Desc: EPA 245.1 Analysis,Water			Preparation Method: EPA 245.1					
			Analytical Method: EPA 245.1					
Mercury	0.050	U	ug/L	1	0.10	0.050	1/3/2018 13:33	T
SEMIVOLATILES								
Analysis Desc: E504.1 Analysis, Water			Preparation Method: EPA 504.1					
			Analytical Method: EPA 504.1					
1,2-Dibromo-3-Chloropropane	0.0060	U	ug/L	1	0.020	0.0060	12/26/2017 15:51	J
Ethylene Dibromide (EDB)	0.0062	U	ug/L	1	0.020	0.0062	12/26/2017 15:51	J
Tetrachloro-m-xylene (S)	116		%	1	64-150		12/26/2017 15:51	
Analysis Desc: E508 Analysis, Water			Preparation Method: EPA 508					
			Analytical Method: EPA 508					
Chlordane (technical)	0.055	U	ug/L	1	0.21	0.055	12/26/2017 12:37	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Endrin	0.0071	U	ug/L	1	0.021	0.0071	12/26/2017 12:37	J
Heptachlor	0.0062	U	ug/L	1	0.021	0.0062	12/26/2017 12:37	J
Heptachlor Epoxide	0.0054	U	ug/L	1	0.021	0.0054	12/26/2017 12:37	J
Hexachlorobenzene	0.0065	U	ug/L	1	0.021	0.0065	12/26/2017 12:37	J
Hexachlorocyclopentadiene	0.013	U	ug/L	1	0.021	0.013	12/26/2017 12:37	J
Methoxychlor	0.0070	U	ug/L	1	0.021	0.0070	12/26/2017 12:37	J
PCBs	0.11	U	ug/L	1	0.21	0.11	12/26/2017 12:37	J
Toxaphene	0.12	U	ug/L	1	0.21	0.12	12/26/2017 12:37	J
gamma-BHC (Lindane)	0.0073	U	ug/L	1	0.021	0.0073	12/26/2017 12:37	J
Tetrachloro-m-xylene (S)	69	J4	%	1	70-130		12/26/2017 12:37	
Decachlorobiphenyl (S)	58	J4	%	1	70-130		12/26/2017 12:37	

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

Analytical Method: EPA 515.3

2,4-D	1.5	U	ug/L	1	5.0	1.5	12/27/2017 13:18	J
Dalapon	1.0	U	ug/L	1	5.0	1.0	12/27/2017 13:18	J
Dinoseb	0.86	U	ug/L	1	2.5	0.86	12/27/2017 13:18	J
Pentachlorophenol	0.069	U	ug/L	1	0.50	0.069	12/27/2017 13:18	J
Picloram	0.23	U	ug/L	1	0.50	0.23	12/27/2017 13:18	J
Silvex (2,4,5-TP)	0.32	U	ug/L	1	1.0	0.32	12/27/2017 13:18	J
2,4-Dichlorophenylacetic acid (S)	92		%	1	70-130		12/27/2017 13:18	

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

Analytical Method: EPA 525.2

Alachlor	0.26	U	ug/L	1	0.50	0.26	1/3/2018 18:04	J
Atrazine	0.16	U	ug/L	1	0.50	0.16	1/3/2018 18:04	J
Benzo[a]pyrene	0.096	U	ug/L	1	0.50	0.096	1/3/2018 18:04	J
Di(2-ethylhexyl) adipate	0.95	U	ug/L	1	1.0	0.95	1/3/2018 18:04	J
Simazine	0.19	U	ug/L	1	0.50	0.19	1/3/2018 18:04	J
bis(2-Ethylhexyl) phthalate	1.5	U	ug/L	1	2.0	1.5	1/3/2018 18:04	J
p-Terphenyl-d14 (S)	79		%	1	70-130		1/3/2018 18:04	

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

Carbofuran	0.28	U	ug/L	1	2.5	0.28	1/4/2018 13:46	J
Oxamyl	0.57	U	ug/L	1	2.5	0.57	1/4/2018 13:46	J

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

Glyphosate	6.5	U	ug/L	1	50	6.5	12/22/2017 09:07	J
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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

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	12/26/2017 12:13	J
Analysis Desc: E549.2 Analysis, Water		Preparation Method: EPA 549.2						
		Analytical Method: EPA 549.2						
Diquat	7.6	U	ug/L	1	71	7.6	12/21/2017 14:06	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	12/28/2017 04:22	T
Chloroacetic Acid	0.50	U	ug/L	1	1.0	0.50	12/28/2017 04:22	T
Dibromoacetic Acid	0.54	U	ug/L	1	1.0	0.54	12/28/2017 04:22	T
Dichloroacetic Acid	0.81	U	ug/L	1	1.0	0.81	12/28/2017 04:22	T
Total Haloacetic Acids (HAA5)	0.50	U	ug/L	1	1.0	0.50	12/28/2017 04:22	T
Trichloroacetic Acid	0.91	U	ug/L	1	1.0	0.91	12/28/2017 04:22	T
2,3-Dibromopropionic Acid (S)	95		%	1	70-130		12/28/2017 04:22	
Analysis Desc: 8081A Pesticide Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: EPA 8081						
4,4'-DDD	0.0016	U	ug/L	1	0.020	0.0016	12/26/2017 19:49	J
4,4'-DDE	0.0037	U	ug/L	1	0.020	0.0037	12/26/2017 19:49	J
4,4'-DDT	0.0021	U	ug/L	1	0.020	0.0021	12/26/2017 19:49	J
Aldrin	0.0019	U	ug/L	1	0.020	0.0019	12/26/2017 19:49	J
Dieldrin	0.0011	U	ug/L	1	0.020	0.0011	12/26/2017 19:49	J
Endosulfan I	0.0031	U	ug/L	1	0.020	0.0031	12/26/2017 19:49	J
Endosulfan II	0.0026	U	ug/L	1	0.020	0.0026	12/26/2017 19:49	J
Endosulfan Sulfate	0.0032	U	ug/L	1	0.020	0.0032	12/26/2017 19:49	J
Endrin Aldehyde	0.0025	U	ug/L	1	0.020	0.0025	12/26/2017 19:49	J
alpha-BHC	0.0030	U	ug/L	1	0.020	0.0030	12/26/2017 19:49	J
beta-BHC	0.0019	U	ug/L	1	0.020	0.0019	12/26/2017 19:49	J
delta-BHC	0.00086	U	ug/L	1	0.020	0.00086	12/26/2017 19:49	J
Tetrachloro-m-xylene (S)	95		%	1	44-124		12/26/2017 19:49	
Decachlorobiphenyl (S)	106		%	1	48-137		12/26/2017 19:49	
Analysis Desc: 8082A PCB Analysis, Water		Preparation Method: SW-846 3510C						
		Analytical Method: SW-846 8082A						
Aroclor 1016 (PCB-1016)	0.065	U	ug/L	1	0.20	0.065	12/26/2017 19:49	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Aroclor 1221 (PCB-1221)	0.11	U	ug/L	1	0.20	0.11	12/26/2017 19:49	J
Aroclor 1232 (PCB-1232)	0.097	U	ug/L	1	0.20	0.097	12/26/2017 19:49	J
Aroclor 1242 (PCB-1242)	0.096	U	ug/L	1	0.20	0.096	12/26/2017 19:49	J
Aroclor 1248 (PCB-1248)	0.067	U	ug/L	1	0.20	0.067	12/26/2017 19:49	J
Aroclor 1254 (PCB-1254)	0.051	U	ug/L	1	0.20	0.051	12/26/2017 19:49	J
Aroclor 1260 (PCB-1260)	0.080	U	ug/L	1	0.20	0.080	12/26/2017 19:49	J
Tetrachloro-m-xylene (S)	95		%	1	61-119		12/26/2017 19:49	
Decachlorobiphenyl (S)	116		%	1	44-136		12/26/2017 19:49	

Analysis Desc: 8270C Analysis, Water

Preparation Method: SW-846 3510C

Analytical Method: SW-846 8270C

1,2-Diphenylhydrazine	0.96	U	ug/L	1	5.0	0.96	12/26/2017 17:19	J
1,3-Dichlorobenzene	1.0	U	ug/L	1	5.0	1.0	12/26/2017 17:19	J
2,4,6-Trichlorophenol	1.4	U	ug/L	1	5.0	1.4	12/26/2017 17:19	J
2,4-Dichlorophenol	0.90	U	ug/L	1	5.0	0.90	12/26/2017 17:19	J
2,4-Dimethylphenol	2.6	U	ug/L	1	5.0	2.6	12/26/2017 17:19	J
2,4-Dinitrophenol	1.1	U	ug/L	1	10	1.1	12/26/2017 17:19	J
2,4-Dinitrotoluene (2,4-DNT)	1.8	U	ug/L	1	5.0	1.8	12/26/2017 17:19	J
2,6-Dinitrotoluene (2,6-DNT)	2.0	U	ug/L	1	5.0	2.0	12/26/2017 17:19	J
2-Chloronaphthalene	1.7	U	ug/L	1	5.0	1.7	12/26/2017 17:19	J
2-Chlorophenol	1.5	U	ug/L	1	5.0	1.5	12/26/2017 17:19	J
2-Methyl-4,6-dinitrophenol	1.2	U	ug/L	1	5.0	1.2	12/26/2017 17:19	J
2-Nitrophenol	0.63	U	ug/L	1	5.0	0.63	12/26/2017 17:19	J
3,3'-Dichlorobenzidine	1.3	U	ug/L	1	5.0	1.3	12/26/2017 17:19	J
4-Bromophenyl Phenyl Ether	1.1	U	ug/L	1	5.0	1.1	12/26/2017 17:19	J
4-Chloro-3-methylphenol	0.63	U	ug/L	1	5.0	0.63	12/26/2017 17:19	J
4-Chlorophenyl Phenyl Ether	1.6	U	ug/L	1	5.0	1.6	12/26/2017 17:19	J
4-Nitrophenol	2.9	U	ug/L	1	5.0	2.9	12/26/2017 17:19	J
Acenaphthene	0.040	U	ug/L	1	0.20	0.040	12/26/2017 17:19	J
Acenaphthylene	0.042	U	ug/L	1	0.20	0.042	12/26/2017 17:19	J
Anthracene	0.035	U	ug/L	1	0.20	0.035	12/26/2017 17:19	J
Benzidine	1.2	U	ug/L	1	5.0	1.2	12/26/2017 17:19	J
Benzo[a]anthracene	0.012	U	ug/L	1	0.20	0.012	12/26/2017 17:19	J
Benzo[b]fluoranthene	0.012	U	ug/L	1	0.10	0.012	12/26/2017 17:19	J
Benzo[g,h,i]perylene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 17:19	J
Benzo[k]fluoranthene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 17:19	J
Butyl benzyl phthalate	1.1	U	ug/L	1	5.0	1.1	12/26/2017 17:19	J
Chrysene	0.033	U	ug/L	1	0.20	0.033	12/26/2017 17:19	J
Di-n-Butyl Phthalate	0.88	U	ug/L	1	5.0	0.88	12/26/2017 17:19	J
Di-n-octyl Phthalate	1.2	U	ug/L	1	5.0	1.2	12/26/2017 17:19	J

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Dibenzo[a,h]anthracene	0.024	U	ug/L	1	0.20	0.024	12/26/2017 17:19	J
Diethyl phthalate	2.1	U	ug/L	1	5.0	2.1	12/26/2017 17:19	J
Dimethyl phthalate	1.8	U	ug/L	1	10	1.8	12/26/2017 17:19	J
Fluoranthene	0.037	U	ug/L	1	0.20	0.037	12/26/2017 17:19	J
Fluorene	0.038	U	ug/L	1	0.20	0.038	12/26/2017 17:19	J
Hexachlorobutadiene	1.3	U	ug/L	1	5.0	1.3	12/26/2017 17:19	J
Hexachloroethane	1.2	U	ug/L	1	5.0	1.2	12/26/2017 17:19	J
Indeno(1,2,3-cd)pyrene	0.011	U	ug/L	1	0.20	0.011	12/26/2017 17:19	J
Isophorone	1.1	U	ug/L	1	5.0	1.1	12/26/2017 17:19	J
N-Nitrosodi-n-propylamine	2.2	U	ug/L	1	5.0	2.2	12/26/2017 17:19	J
N-Nitrosodimethylamine	0.93	U	ug/L	1	5.0	0.93	12/26/2017 17:19	J
N-Nitrosodiphenylamine	2.1	U	ug/L	1	5.0	2.1	12/26/2017 17:19	J
Naphthalene	0.048	U	ug/L	1	0.20	0.048	12/26/2017 17:19	J
Nitrobenzene	1.1	U	ug/L	1	5.0	1.1	12/26/2017 17:19	J
Phenanthrene	0.040	U	ug/L	1	0.20	0.040	12/26/2017 17:19	J
Phenol	0.54	U	ug/L	1	5.0	0.54	12/26/2017 17:19	J
Pyrene	0.036	U	ug/L	1	0.20	0.036	12/26/2017 17:19	J
bis(2-Chloroethoxy)methane	1.2	U	ug/L	1	5.0	1.2	12/26/2017 17:19	J
bis(2-Chloroethyl)Ether	1.5	U	ug/L	1	5.0	1.5	12/26/2017 17:19	J
bis(2-Chloroisopropyl) Ether	1.4	U	ug/L	1	5.0	1.4	12/26/2017 17:19	J
bis(2-Ethylhexyl) phthalate	2.0	U	ug/L	1	5.0	2.0	12/26/2017 17:19	J
2-Fluorophenol (S)	63		%	1	31-134		12/26/2017 17:19	
Phenol-d6 (S)	39		%	1	24-120		12/26/2017 17:19	
Nitrobenzene-d5 (S)	119		%	1	38-139		12/26/2017 17:19	
2-Fluorobiphenyl (S)	117		%	1	42-138		12/26/2017 17:19	
2,4,6-Tribromophenol (S)	142		%	1	48-147		12/26/2017 17:19	
p-Terphenyl-d14 (S)	131		%	1	61-154		12/26/2017 17:19	

VOLATILES

Analysis Desc: 524.2 Analysis, Water

Analytical Method: EPA 524.2

1,1,1-Trichloroethane	0.39	U	ug/L	1	0.50	0.39	12/31/2017 01:27	M
1,1,2-Trichloroethane	0.12	U	ug/L	1	0.50	0.12	12/31/2017 01:27	M
1,1-Dichloroethylene	0.18	U	ug/L	1	0.50	0.18	12/31/2017 01:27	M
1,2,4-Trichlorobenzene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:27	M
1,2-Dichlorobenzene	0.46	U	ug/L	1	0.50	0.46	12/31/2017 01:27	M
1,2-Dichloroethane	0.36	U	ug/L	1	0.50	0.36	12/31/2017 01:27	M
1,2-Dichloropropane	0.26	U	ug/L	1	0.50	0.26	12/31/2017 01:27	M
1,4-Dichlorobenzene	0.26	U	ug/L	1	0.50	0.26	12/31/2017 01:27	M
Benzene	0.17	U	ug/L	1	0.50	0.17	12/31/2017 01:27	M
Bromodichloromethane	0.14	U	ug/L	1	0.50	0.14	12/31/2017 01:27	M

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromoform	0.26	U	ug/L	1	0.50	0.26	12/31/2017 01:27	M
Carbon Tetrachloride	0.23	U	ug/L	1	0.50	0.23	12/31/2017 01:27	M
Chlorobenzene	0.12	U	ug/L	1	0.50	0.12	12/31/2017 01:27	M
Chloroform	0.39	U	ug/L	1	0.50	0.39	12/31/2017 01:27	M
Dibromochloromethane	0.32	U	ug/L	1	0.50	0.32	12/31/2017 01:27	M
Ethylbenzene	0.17	U	ug/L	1	0.50	0.17	12/31/2017 01:27	M
Methylene Chloride	0.66	U	ug/L	1	0.50	0.44	12/31/2017 01:27	M
Styrene	0.39	U	ug/L	1	0.50	0.39	12/31/2017 01:27	M
Tetrachloroethylene (PCE)	0.24	U	ug/L	1	0.50	0.24	12/31/2017 01:27	M
Toluene	0.22	U	ug/L	1	0.50	0.22	12/31/2017 01:27	M
Total Trihalomethanes	0.14	U	ug/L	1	0.50	0.14	12/31/2017 01:27	M
Trichloroethene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:27	M
Vinyl Chloride	0.20	U	ug/L	1	0.50	0.20	12/31/2017 01:27	M
Xylene (Total)	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:27	M
cis-1,2-Dichloroethylene	0.32	U	ug/L	1	0.50	0.32	12/31/2017 01:27	M
trans-1,2-Dichloroethylene	0.28	U	ug/L	1	0.50	0.28	12/31/2017 01:27	M
1,2-Dichloroethane-d4 (S)	97		%	1	80-120		12/31/2017 01:27	
1,2-Dichloroethane-d4 (S)	97		%	1	80-120		12/31/2017 01:27	
Toluene-d8 (S)	108		%	1	81-118		12/31/2017 01:27	
Toluene-d8 (S)	108		%	1	81-118		12/31/2017 01:27	
Bromofluorobenzene (S)	107		%	1	86-115		12/31/2017 01:27	
Bromofluorobenzene (S)	107		%	1	86-115		12/31/2017 01:27	

Analysis Desc: 8260B 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	12/27/2017 18:01	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	12/27/2017 18:01	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	12/27/2017 18:01	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	12/27/2017 18:01	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	12/27/2017 18:01	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	12/27/2017 18:01	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	12/27/2017 18:01	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	12/27/2017 18:01	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:01	T
1,2-Dichloroethane-d4 (S)	117		%	1	70-128		12/27/2017 18:01	
Toluene-d8 (S)	102		%	1	77-119		12/27/2017 18:01	
Bromofluorobenzene (S)	106		%	1	86-123		12/27/2017 18:01	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858002**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Field Blank**

Date Collected: 12/20/17 09:50

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	1.0	U	mg/L	1	5.0	1.0	12/26/2017 19:04	T
Fluoride	0.10	U	mg/L	1	0.50	0.10	12/26/2017 19:04	T
Sulfate	1.0	U	mg/L	1	5.0	1.0	12/26/2017 19:04	T
Analysis Desc: Color,SM2120B,Water		Analytical Method: SM 2120 B						
Color	2.7	U	PCU	1	5.0	2.7	12/21/2017 15:04	T
pH for Color Analysis	9.0		SU	1	5.0	0.10	12/21/2017 15:04	T
Analysis Desc: Odor,SM2150B,Water		Analytical Method: SM 2150 B						
Odor	1.0	U	TON @ 40°C	1	1.0	1.0	12/20/2017 15:25	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540 C						
Total Dissolved Solids	12	U	mg/L	1.25	12	12	12/26/2017 08:33	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	12/21/2017 08:30	T
Analysis Desc: Cyanide, SM4500-E, Water		Analytical Method: SM 4500-CN-E						
Cyanide	0.0048	U	mg/L	1	0.010	0.0048	12/21/2017 17:30	T
Analysis Desc: .PH,SM4500H+B, Water		Analytical Method: SM 4500H+B						
pH	8.2	Q	SU	1			12/26/2017 08:00	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water		Analytical Method: SM 4500NO3-F						
Nitrate	0.18	U	mg/L	1	0.20	0.18	12/21/2017 11:51	T
Nitrite	0.39		mg/L	1	0.20	0.18	12/21/2017 11:51	T
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous		Analytical Method: SM 5540 C						
MBAS,as LAS,mol.wt.348	0.15	I,V	mg/L	1	0.20	0.040	12/21/2017 12:15	G

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858003**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Travel Blank**

Date Collected: 12/20/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B 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	12/27/2017 18:26	T
1,1,2,2-Tetrachloroethane	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:26	T
1,1,2-Trichloroethane	0.46	U	ug/L	1	1.0	0.46	12/27/2017 18:26	T
1,1-Dichloroethane	0.86	U	ug/L	1	1.0	0.86	12/27/2017 18:26	T
1,1-Dichloroethylene	0.70	U	ug/L	1	1.0	0.70	12/27/2017 18:26	T
1,2-Dichlorobenzene	0.63	U	ug/L	1	1.0	0.63	12/27/2017 18:26	T
1,2-Dichloroethane	0.60	U	ug/L	1	1.0	0.60	12/27/2017 18:26	T
1,2-Dichloropropane	0.76	U	ug/L	1	1.0	0.76	12/27/2017 18:26	T
1,3-Dichlorobenzene	0.43	U	ug/L	1	1.0	0.43	12/27/2017 18:26	T
1,4-Dichlorobenzene	0.97	U	ug/L	1	1.0	0.97	12/27/2017 18:26	T
2-Chloroethyl Vinyl Ether	0.58	U	ug/L	1	1.0	0.58	12/27/2017 18:26	T
Acrolein (Propenal)	3.5	U	ug/L	1	4.0	3.5	12/27/2017 18:26	T
Acrylonitrile	1.9	U	ug/L	1	5.0	1.9	12/27/2017 18:26	T
Benzene	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:26	T
Bromodichloromethane	0.60	U	ug/L	1	1.0	0.60	12/27/2017 18:26	T
Bromoform	0.88	U	ug/L	1	1.0	0.88	12/27/2017 18:26	T
Bromomethane	0.97	U	ug/L	1	1.0	0.97	12/27/2017 18:26	T
Carbon Tetrachloride	0.60	U	ug/L	1	1.0	0.60	12/27/2017 18:26	T
Chlorobenzene	0.56	U	ug/L	1	1.0	0.56	12/27/2017 18:26	T
Chloroethane	0.38	U	ug/L	1	1.0	0.38	12/27/2017 18:26	T
Chloroform	0.31	U	ug/L	1	1.0	0.31	12/27/2017 18:26	T
Chloromethane	0.53	U	ug/L	1	1.0	0.53	12/27/2017 18:26	T
Dibromochloromethane	0.40	U	ug/L	1	1.0	0.40	12/27/2017 18:26	T
Dichlorodifluoromethane	0.36	U	ug/L	1	1.0	0.36	12/27/2017 18:26	T
Ethylbenzene	0.26	U	ug/L	1	1.0	0.26	12/27/2017 18:26	T
Methylene Chloride	1.4	I,V	ug/L	1	2.0	1.0	12/27/2017 18:26	T
Tetrachloroethylene (PCE)	0.60	U	ug/L	1	1.0	0.60	12/27/2017 18:26	T
Toluene	0.45	U	ug/L	1	1.0	0.45	12/27/2017 18:26	T
Trichloroethene	0.60	U	ug/L	1	1.0	0.60	12/27/2017 18:26	T
Trichlorofluoromethane	0.84	U	ug/L	1	1.0	0.84	12/27/2017 18:26	T
Vinyl Chloride	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:26	T
Xylene (Total)	0.56	U	ug/L	1	3.0	0.56	12/27/2017 18:26	T
cis-1,2-Dichloroethylene	0.51	U	ug/L	1	1.0	0.51	12/27/2017 18:26	T
cis-1,3-Dichloropropene	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:26	T
trans-1,2-Dichloroethylene	0.50	U	ug/L	1	1.0	0.50	12/27/2017 18:26	T
trans-1,3-Dichloropropylene	0.20	U	ug/L	1	1.0	0.20	12/27/2017 18:26	T

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ANALYTICAL RESULTS

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID: **T1721858003**

Date Received: 12/20/17 13:23 Matrix: Water

Sample ID: **Travel Blank**

Date Collected: 12/20/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	121		%	1	70-128		12/27/2017 18:26	
Toluene-d8 (S)	102		%	1	77-119		12/27/2017 18:26	
Bromofluorobenzene (S)	109		%	1	86-123		12/27/2017 18:26	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1721858 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.
- [1] Surrogate diluted out.
- Q Missed Hold Time
- V Method Blank Contamination
- 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)
- M^ Not Certified
- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)
- T^ Not Certified

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

QC Batch: EXTj/4784 Analysis Method: EPA 549.2
QC Batch Method: EPA 549.2 Prepared: 12/20/2017 09:00
Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2566926

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Diquat	ug/L	7.6	7.6 U

LABORATORY CONTROL SAMPLE & LCSD: 2566927 2566928

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Diquat	ug/L	290	270	260	96	91	70-130	5	30

MATRIX SPIKE SAMPLE: 2566929 Original: T1721470001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Diquat	ug/L	0	290	130	45	70-130

QC Batch: EXTj/4785 Analysis Method: EPA 508
QC Batch Method: EPA 508 Prepared: 12/20/2017 13:30
Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2567438

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Hexachlorocyclopentadiene	ug/L	0.012	0.012 U
Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Hexachlorobenzene	ug/L	0.0063	0.0063 U
gamma-BHC (Lindane)	ug/L	0.0071	0.0071 U

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2567438

Parameter	Units	Blank Result	Reporting Limit Qualifiers
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	0.11	0.11 U
Chlordane (technical)	ug/L	0.053	0.053 U
Toxaphene	ug/L	0.12	0.12 U
Tetrachloro-m-xylene (S)	%	100	70-130
Decachlorobiphenyl (S)	%	100	70-130

LABORATORY CONTROL SAMPLE & LCSD: 2567439 2567440

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	105	95	70-130	10	20	
Hexachlorobenzene	ug/L	0.1	0.083	0.079	83	79	70-130	5	20	
gamma-BHC (Lindane)	ug/L	0.1	0.094	0.092	94	92	70-130	2	20	
Heptachlor	ug/L	0.1	0.090	0.088	91	88	70-130	3	20	
Heptachlor Epoxide	ug/L	0.1	0.092	0.090	92	90	70-130	2	20	
Endrin	ug/L	0.1	0.10	0.10	102	100	70-130	2	20	
Methoxychlor	ug/L	0.1	0.088	0.087	88	87	70-130	1	20	
PCBs	ug/L		0.11	0.11U				0	20	
Chlordane (technical)	ug/L		0.053	0.053U				0	20	
Toxaphene	ug/L		0.12	0.12U				0	20	
Tetrachloro-m-xylene (S)	%				105	96	70-130	9		
Decachlorobiphenyl (S)	%				108	104	70-130	3		

MATRIX SPIKE SAMPLE: 2567441 Original: T1721470001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.11	0.074	68	65-135	
Hexachlorobenzene	ug/L	0	0.11	0.16	152	65-135	
gamma-BHC (Lindane)	ug/L	0	0.11	0.091	84	65-135	
Heptachlor	ug/L	0	0.11	0.072	67	65-135	
Heptachlor Epoxide	ug/L	0	0.11	0.088	81	65-135	
Endrin	ug/L	0	0.11	0.10	92	65-135	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2567441

Original: T1721470001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methoxychlor	ug/L	0	0.11	0.15	141	65-135	
PCBs	ug/L			0.12			
Chlordane (technical)	ug/L			0.058			
Toxaphene	ug/L			0.13			
Tetrachloro-m-xylene (S)	%				90	70-130	
Decachlorobiphenyl (S)	%				92	70-130	

QC Batch: EXTj/4786

Analysis Method: EPA 548.1

QC Batch Method: EPA 548.1

Prepared: 12/20/2017 12:00

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2567676

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

LABORATORY CONTROL SAMPLE & LCSD: 2567677

2567678

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Endothall	ug/L	50	48	47	97	95	63-131	2	30	

MATRIX SPIKE SAMPLE: 2567679

Original: T1721470001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Endothall	ug/L	0	50	47	93	63-131	

QC Batch: WCA/12707

Analysis Method: SM 2150 B

QC Batch Method: SM 2150 B

Prepared:

Associated Lab Samples: T1721858001, T1721858002

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

SAMPLE DUPLICATE: 2567707

Original: T1721858002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Odor	TON @	1.0U	1.0	0	
QC Batch:	WCAI/12717		Analysis Method:	SM 2120 B	
QC Batch Method:	SM 2120 B		Prepared:		
Associated Lab Samples: T1721858001, T1721858002					

METHOD BLANK: 2568248

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: 2568250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
pH for Color Analysis	SU		0.10		
Color	PCU	30	29	97	90-110

SAMPLE DUPLICATE: 2568251

Original: T1721858002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
pH for Color Analysis	SU	9.0	9.0	0	10
Color	PCU	2.7U	2.7	0	20
QC Batch:	WCAI/12722		Analysis Method:	SM 3500-CR D	
QC Batch Method:	SM 3500-CR D		Prepared:		
Associated Lab Samples: T1721858001, T1721858002					

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2568521

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

LABORATORY CONTROL SAMPLE: 2568522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Hexavalent Chromium	mg/L	0.1	0.10	105	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2568523 2568524 Original: T1721858002

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	0.001	0.1	0.10	0.097	103	97	85-115	6	20

QC Batch: DGMj/3973

Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8

Prepared: 12/22/2017 03:30

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2568736

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Manganese	ug/L	0.055	0.055 U
Copper	ug/L	0.11	0.11 U
Arsenic	ug/L	0.077	0.077 U
Selenium	ug/L	0.58	0.58 U
Silver	ug/L	0.027	0.027 U
Cadmium	ug/L	0.028	0.028 U
Antimony	ug/L	0.046	0.046 U
Thallium	ug/L	0.057	0.057 U
Lead	ug/L	0.24	0.24 U
Uranium	ug/L	0.070	0.070 U

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2568737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Manganese	ug/L	100	100	101	85-115	
Copper	ug/L	100	100	101	85-115	
Arsenic	ug/L	100	99	99	85-115	
Selenium	ug/L	100	100	103	85-115	
Silver	ug/L	100	100	102	85-115	
Cadmium	ug/L	100	100	103	85-115	
Antimony	ug/L	100	99	99	85-115	
Thallium	ug/L	100	95	95	85-115	
Lead	ug/L	100	98	98	85-115	
Uranium	ug/L	100	100	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2568738 2568739 Original: S1702016001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Manganese	ug/L	0	100	270	260	266	259	70-130	3	20	
Copper	ug/L	7.1	100	97	96	90	89	70-130	1	20	
Arsenic	ug/L	0	100	97	96	97	96	70-130	1	20	
Selenium	ug/L	0	100	95	95	95	95	70-130	1	20	
Silver	ug/L	0	100	35	36	35	36	70-130	1	20	
Cadmium	ug/L	0	100	97	94	97	94	70-130	3	20	
Antimony	ug/L	0	100	95	94	95	94	70-130	2	20	
Thallium	ug/L	0	100	110	100	105	104	70-130	1	20	
Lead	ug/L	0	100	110	110	107	105	70-130	1	20	
Uranium	ug/L	0	100	110	110	114	110	70-130	4	20	

QC Batch: WCA1/12732 Analysis Method: SM 4500-CN-E

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

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2569124

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

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2569125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Cyanide	mg/L	0.04	0.040	101	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569126 2569127 Original: J1712730001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY Cyanide	mg/L	0	0.04	0.041	0.043	102	108	90-110	6	10	

QC Batch: WCA/12736 Analysis Method: SM 4500NO3-F

QC Batch Method: SM 4500NO3-F Prepared:

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2569259

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Nitrate	mg/L	0.18	0.18	U
Nitrite	mg/L	0.18	0.18	U

LABORATORY CONTROL SAMPLE: 2569260

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Nitrate	mg/L	1	0.95	95	90-110
Nitrite	mg/L	1	0.97	97	90-110

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569261 2569262 Original: T1721852002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Nitrate	mg/L	3.7	1	4.7	4.8	102	107	90-110	1	10	
Nitrite	mg/L	0	1	1.1	1.0	109	105	90-110	4	10	

QC Batch: DGMt/4111

Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7

Prepared: 12/22/2017 08:15

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2569664

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Aluminum	ug/L	25	25	U
Barium	ug/L	1.5	1.5	U
Beryllium	ug/L	0.18	0.18	U
Chromium	ug/L	2.0	2.0	U
Iron	ug/L	21	21	U
Sodium	mg/L	0.17	0.17	U
Nickel	ug/L	4.4	4.4	U
Zinc	ug/L	7.4	7.4	U

LABORATORY CONTROL SAMPLE: 2569665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Aluminum	ug/L	25000	25000	98	85-115	
Barium	ug/L	400	350	87	85-115	
Beryllium	ug/L	400	370	93	85-115	
Chromium	ug/L	400	350	88	85-115	
Iron	ug/L	25000	25000	98	85-115	
Sodium	mg/L	50	50	99	85-115	
Zinc	ug/L	400	340	85	85-115	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2569665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
METALS					
Nickel	ug/L	400	350	86	85-115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569666 2569667 Original: T1721890001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
METALS											
Aluminum	ug/L			27000	27000			0	20		
Barium	ug/L			370	370			0	20		
Beryllium	ug/L			380	380			0	20		
Chromium	ug/L			360	360			0	20		
Iron	ug/L			24000	24000			0	20		
Sodium	mg/L			56	57			1	20		
Nickel	ug/L			340	340			0	20		
Zinc	ug/L			350	350			0	20		

QC Batch: WCAg/6865 Analysis Method: SM 5540 C
QC Batch Method: SM 5540 C Prepared:
Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2569671

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

METHOD BLANK: 2572902

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
MBAS,as LAS,mol.wt.348	mg/L	0.042	0.040 I

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2572904

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
MBAS,as LAS,mol.wt.348	mg/L	0.050	0.040 I

LABORATORY CONTROL SAMPLE: 2569700

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
MBAS,as LAS,mol.wt.348	mg/L	0.4	0.44	109	75-125

LABORATORY CONTROL SAMPLE: 2572903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
MBAS,as LAS,mol.wt.348	mg/L	2	1.8	91	75-125

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569673 2569674 Original: G1710814002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
WET CHEMISTRY										
MBAS,as LAS,mol.wt.348	mg/L	0.13	1	0.85	0.86	72	73	75-125	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569675 2569676 Original: T1721858002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD Qualifiers
WET CHEMISTRY										
MBAS,as LAS,mol.wt.348	mg/L	0.15	1	0.99	1.0	84	87	75-125	3	20

QC Batch: EXTj/4797

Analysis Method: EPA 8081

QC Batch Method: SW-846 3510C

Prepared: 12/21/2017 15:00

Associated Lab Samples: T1721858001, T1721858002

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2569874

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
alpha-BHC	ug/L	0.0030	0.0030	U
beta-BHC	ug/L	0.0019	0.0019	U
delta-BHC	ug/L	0.00086	0.00086	U
Aldrin	ug/L	0.0019	0.0019	U
Endosulfan I	ug/L	0.0031	0.0031	U
4,4'-DDE	ug/L	0.0037	0.0037	U
Dieldrin	ug/L	0.0011	0.0011	U
4,4'-DDD	ug/L	0.0016	0.0016	U
Endosulfan II	ug/L	0.0026	0.0026	U
Endrin Aldehyde	ug/L	0.0025	0.0025	U
4,4'-DDT	ug/L	0.0021	0.0021	U
Endosulfan Sulfate	ug/L	0.0032	0.0032	U
Tetrachloro-m-xylene (S)	%	77	44-124	
Decachlorobiphenyl (S)	%	95	48-137	

LABORATORY CONTROL SAMPLE: 2569875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
alpha-BHC	ug/L	0.1	0.10	100	54-138	
beta-BHC	ug/L	0.1	0.11	112	56-136	
delta-BHC	ug/L	0.1	0.11	112	52-142	
Aldrin	ug/L	0.1	0.10	102	45-134	
Endosulfan I	ug/L	0.1	0.082	83	62-126	
4,4'-DDE	ug/L	0.1	0.10	103	57-135	
Dieldrin	ug/L	0.1	0.10	104	60-136	
4,4'-DDD	ug/L	0.1	0.11	114	56-143	
Endosulfan II	ug/L	0.1	0.12	116	52-135	
Endrin Aldehyde	ug/L	0.1	0.10	101	51-132	
4,4'-DDT	ug/L	0.1	0.11	108	51-143	
Endosulfan Sulfate	ug/L	0.1	0.11	107	62-133	
Tetrachloro-m-xylene (S)	%			83	44-124	
Decachlorobiphenyl (S)	%			101	48-137	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569876 2569877 Original: T1721858001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
SEMIVOLATILES											
alpha-BHC	ug/L	0	0.2	0.038	0.0271	19	14	54-138	34	30	
beta-BHC	ug/L	0	0.2	0.031	0.0231	15	11	56-136	30	30	
delta-BHC	ug/L	0	0.2	0.24	0.18	121	88	52-142	32	30	
Aldrin	ug/L	0	0.2	0.049	0.0331	24	16	45-134	40	30	
Endosulfan I	ug/L	0	0.2	0.17	0.12	83	60	62-126	31	30	
4,4'-DDE	ug/L	0	0.2	0.099	0.060	50	30	57-135	50	30	
Dieldrin	ug/L	0	0.2	0.067	0.055	34	27	60-136	21	30	
4,4'-DDD	ug/L	0	0.2	0.072	0.054	36	27	56-143	29	30	
Endosulfan II	ug/L	0	0.2	0.095	0.074	48	37	52-135	25	30	
Endrin Aldehyde	ug/L	0	0.2	0.021	0.0121	10	6	51-132	57	30	
4,4'-DDT	ug/L	0	0.2	0.081	0.058	41	29	51-143	34	30	
Endosulfan Sulfate	ug/L	0	0.2	0.16	0.12	79	62	62-133	25	30	
Tetrachloro-m-xylene (S)	%	11				25	23	44-124	9	J4	
Decachlorobiphenyl (S)	%	14				29	29	48-137	2	J4	

QC Batch: EXTj/4798

Analysis Method: SW-846 8082A

QC Batch Method: SW-846 3510C

Prepared: 12/21/2017 15:00

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2569883

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Aroclor 1016 (PCB-1016)	ug/L	0.065	0.065	U
Aroclor 1221 (PCB-1221)	ug/L	0.11	0.11	U
Aroclor 1232 (PCB-1232)	ug/L	0.097	0.097	U
Aroclor 1242 (PCB-1242)	ug/L	0.096	0.096	U
Aroclor 1248 (PCB-1248)	ug/L	0.067	0.067	U
Aroclor 1254 (PCB-1254)	ug/L	0.051	0.051	U
Aroclor 1260 (PCB-1260)	ug/L	0.080	0.080	U
Tetrachloro-m-xylene (S)	%	77	61-119	
Decachlorobiphenyl (S)	%	110	44-136	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2569884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
Aroclor 1016 (PCB-1016)	ug/L	1	1.0	105	38-156	
Aroclor 1221 (PCB-1221)	ug/L		0.11			
Aroclor 1232 (PCB-1232)	ug/L		0.097			
Aroclor 1242 (PCB-1242)	ug/L		0.096			
Aroclor 1248 (PCB-1248)	ug/L		0.067			
Aroclor 1254 (PCB-1254)	ug/L		0.051			
Aroclor 1260 (PCB-1260)	ug/L	1	1.1	114	45-134	
Tetrachloro-m-xylene (S)	%			59	61-119	
Decachlorobiphenyl (S)	%			104	44-136	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2569885 2569886 Original: T1721858001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES											
Aroclor 1016 (PCB-1016)	ug/L	0	2	1.2	1.2	60	59	38-156	1	30	
Aroclor 1221 (PCB-1221)	ug/L			0.22	0.22U				0	30	
Aroclor 1232 (PCB-1232)	ug/L			0.19	0.19U				0	30	
Aroclor 1242 (PCB-1242)	ug/L			0.19	0.19U				0	30	
Aroclor 1248 (PCB-1248)	ug/L			0.13	0.13U				0	30	
Aroclor 1254 (PCB-1254)	ug/L			0.10	0.10U				0	30	
Aroclor 1260 (PCB-1260)	ug/L	0	2	0.36	0.28I	18	14	45-134	25	30	
Tetrachloro-m-xylene (S)	%	11				10	10	61-119	3	J4	
Decachlorobiphenyl (S)	%	14				13	15	44-136	13	J4	

QC Batch: GCSj/3559

Analysis Method: EPA 515.3

QC Batch Method: EPA 515.3

Prepared: 12/22/2017 14:00

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2570357

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Dalapon	ug/L	1.0	1.0	U
2,4-D	ug/L	1.5	1.5	U
Pentachlorophenol	ug/L	0.069	0.069	U
Silvex (2,4,5-TP)	ug/L	0.32	0.32	U

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2570357

Parameter	Units	Blank Result	Reporting Limit Qualifiers
Picloram	ug/L	0.23	0.23 U
Dinoseb	ug/L	0.86	0.86 U
2,4-Dichlorophenylacetic acid (S)	%	92	70-130

LABORATORY CONTROL SAMPLE & LCSD: 2570358 2570359

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Dalapon	ug/L	25	21	22	84	87	70-130	3	30	
2,4-D	ug/L	12	10	10	82	81	70-130	2	30	
Pentachlorophenol	ug/L	2.5	2.1	2.0	84	80	70-130	4	30	
Silvex (2,4,5-TP)	ug/L	5	4.0	4.0	80	79	70-130	1	30	
Picloram	ug/L	2.5	2.2	2.1	86	85	70-130	1	30	
Dinoseb	ug/L	12	11	11	86	88	70-130	2	30	
2,4-Dichlorophenylacetic acid (S)	%				95	92	70-130	3		

MATRIX SPIKE SAMPLE: 2570361 Original: J1712975001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Dalapon	ug/L	0	25	27	108	70-130	
2,4-D	ug/L	0	12	1.5	0	70-130	
Pentachlorophenol	ug/L	0	2.5	2.4	95	70-130	
Silvex (2,4,5-TP)	ug/L	0	5	3.9	78	70-130	
Picloram	ug/L	0	2.5	3.4	137	70-130	
Dinoseb	ug/L	0	12	12	94	70-130	
2,4-Dichlorophenylacetic acid (S)	%	72			73	70-130	

QC Batch: EXTj/4801

Analysis Method: EPA 504.1

QC Batch Method: EPA 504.1

Prepared: 12/22/2017 15:00

Associated Lab Samples: T1721858001, T1721858002

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2570370

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Ethylene Dibromide (EDB)	ug/L	0.0062	0.0062 U
1,2-Dibromo-3-Chloropropane	ug/L	0.0060	0.0060 U
Tetrachloro-m-xylene (S)	%	104	64-150

LABORATORY CONTROL SAMPLE & LCSD: 2570371 2570372

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	0.28	0.27	114	109	70-130	4	30
1,2-Dibromo-3-Chloropropane	ug/L	0.25	0.30	0.26	121	104	70-130	15	30
Tetrachloro-m-xylene (S)	%				118	107	64-150	10	

MATRIX SPIKE SAMPLE: 2570373

Original: T1721858002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Ethylene Dibromide (EDB)	ug/L	0	0.25	0.28	111	70-130
1,2-Dibromo-3-Chloropropane	ug/L	0	0.25	0.25	98	70-130
Tetrachloro-m-xylene (S)	%	116			106	64-150

QC Batch: WCA/12760

Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C

Prepared:

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2570531

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

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2570532

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	560	85	75-125	

SAMPLE DUPLICATE: 2570534

Original: T1721851003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	270	260	5	5	
QC Batch:	WCAI/12761		Analysis Method:		SM 4500H+B	
QC Batch Method:	SM 4500H+B		Prepared:			
Associated Lab Samples:	T1721858001, T1721858002					

SAMPLE DUPLICATE: 2570924

Original: T1721827001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
pH	SU	6.5	6.4	0	10	
QC Batch:	HPLj/1280		Analysis Method:		EPA 547	
QC Batch Method:	EPA 547		Prepared:			
Associated Lab Samples:	T1721858001, T1721858002					

METHOD BLANK: 2571049

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Glyphosate	ug/L	6.5	6.5	U

LABORATORY CONTROL SAMPLE & LCSD: 2571050

2571051

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: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2571050 2571051

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Glyphosate	ug/L	200	180	200	90	102	70-130	13	30	

MATRIX SPIKE SAMPLE: 2571052 Original: J1712975001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Glyphosate	ug/L	0	200	260	131	70-130	

QC Batch: GCS/2219

Analysis Method: EPA 552.2

QC Batch Method: EPA 552.2

Prepared: 12/27/2017 09:15

Associated Lab Samples: T1721858002

METHOD BLANK: 2571069

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	0.50	0.50	U
2,3-Dibromopropionic Acid (S)	%	82	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 2571070 2571071

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Chloroacetic Acid	ug/L	20	19.28	19.04	96	95	70-130	1	30	
Bromoacetic Acid	ug/L	20	20.69	18.74	103	94	70-130	10	30	
Dichloroacetic Acid	ug/L	20	20.85	19.79	104	99	70-130	5	30	
Trichloroacetic Acid	ug/L	20	21.53	19.62	108	98	70-130	9	30	
Dibromoacetic Acid	ug/L	20	22.93	20.72	115	104	70-130	10	30	
Total Haloacetic Acids (HAA5)	ug/L		105.27	97.91				7	30	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2571070 2571071

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
2,3-Dibromopropionic Acid (S)	%				93	84	70-130	10	30	

MATRIX SPIKE SAMPLE: 2571073 Original: T1721659001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L	0	20	20.36	102	70-130	
Bromoacetic Acid	ug/L	0	20	23.79	119	70-130	
Dichloroacetic Acid	ug/L	0	20	20.50	102	70-130	
Trichloroacetic Acid	ug/L	0	20	20.96	105	70-130	
Dibromoacetic Acid	ug/L	0	20	21.54	108	70-130	
Total Haloacetic Acids (HAA5)	ug/L			107.14			
2,3-Dibromopropionic Acid (S)	%	104			88	70-130	

QC Batch: EXTj/4816

Analysis Method: SW-846 8270C

QC Batch Method: SW-846 3510C

Prepared: 12/24/2017 08:00

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2571560

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Phenol	ug/L	0.54	0.54	U
2-Chlorophenol	ug/L	1.5	1.5	U
2-Nitrophenol	ug/L	0.63	0.63	U
2,4-Dimethylphenol	ug/L	2.6	2.6	U
2,4-Dichlorophenol	ug/L	0.90	0.90	U
4-Chloro-3-methylphenol	ug/L	0.63	0.63	U
2,4,6-Trichlorophenol	ug/L	1.4	1.4	U
2,4-Dinitrophenol	ug/L	1.1	1.1	U
4-Nitrophenol	ug/L	2.9	2.9	U
2-Methyl-4,6-dinitrophenol	ug/L	1.2	1.2	U
N-Nitrosodimethylamine	ug/L	0.93	0.93	U
bis(2-Chloroethyl)Ether	ug/L	1.5	1.5	U
1,3-Dichlorobenzene	ug/L	1.0	1.0	U
bis(2-Chloroisopropyl) Ether	ug/L	1.4	1.4	U

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

METHOD BLANK: 2571560

Parameter	Units	Blank Result	Reporting Limit Qualifiers
N-Nitrosodi-n-propylamine	ug/L	2.2	2.2 U
Hexachloroethane	ug/L	1.2	1.2 U
Nitrobenzene	ug/L	1.1	1.1 U
Isophorone	ug/L	1.1	1.1 U
bis(2-Chloroethoxy)methane	ug/L	1.2	1.2 U
Naphthalene	ug/L	0.048	0.048 U
Hexachlorobutadiene	ug/L	1.3	1.3 U
2-Chloronaphthalene	ug/L	1.7	1.7 U
Dimethyl phthalate	ug/L	1.8	1.8 U
2,6-Dinitrotoluene (2,6-DNT)	ug/L	2.0	2.0 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	1.8	1.8 U
Diethyl phthalate	ug/L	2.1	2.1 U
Fluorene	ug/L	0.038	0.038 U
4-Chlorophenyl Phenyl Ether	ug/L	1.6	1.6 U
1,2-Diphenylhydrazine	ug/L	0.96	0.96 U
4-Bromophenyl Phenyl Ether	ug/L	1.1	1.1 U
Phenanthrene	ug/L	0.040	0.040 U
Anthracene	ug/L	0.035	0.035 U
Di-n-Butyl Phthalate	ug/L	0.88	0.88 U
Fluoranthene	ug/L	0.037	0.037 U
Benzidine	ug/L	1.2	1.2 U
Pyrene	ug/L	0.036	0.036 U
Butyl benzyl phthalate	ug/L	1.1	1.1 U
Benzo[a]anthracene	ug/L	0.012	0.012 U
3,3'-Dichlorobenzidine	ug/L	1.3	1.3 U
Chrysene	ug/L	0.033	0.033 U
bis(2-Ethylhexyl) phthalate	ug/L	2.0	2.0 U
Di-n-octyl Phthalate	ug/L	1.2	1.2 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	2.1	2.1 U
2-Fluorophenol (S)	%	129	31-134
Phenol-d6 (S)	%	121	24-120
Nitrobenzene-d5 (S)	%	116	38-139
2-Fluorobiphenyl (S)	%	119	42-138
2,4,6-Tribromophenol (S)	%	146	48-147
p-Terphenyl-d14 (S)	%	148	61-154

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2571561

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
Phenol	ug/L	40	40	101	19-106	
2,4-Dichlorophenol	ug/L	40	48	121	47-121	
4-Chloro-3-methylphenol	ug/L	40	44	110	52-119	
2,4,6-Trichlorophenol	ug/L	40	52	130	50-125	
Hexachloroethane	ug/L	40	39	97	21-115	
Nitrobenzene	ug/L	40	42	104	45-121	
Hexachlorobutadiene	ug/L	40	42	104	22-124	
Acenaphthene	ug/L	40	43	107	47-122	
2,4-Dinitrotoluene (2,4-DNT)	ug/L	40	46	115	57-128	
Fluorene	ug/L	40	42	105	52-124	
Fluoranthene	ug/L	40	44	111	57-128	
bis(2-Ethylhexyl) phthalate	ug/L	40	47	117	55-135	
2-Fluorophenol (S)	%			113	31-134	
Phenol-d6 (S)	%			105	24-120	
Nitrobenzene-d5 (S)	%			110	38-139	
2-Fluorobiphenyl (S)	%			110	42-138	
2,4,6-Tribromophenol (S)	%			141	43-140 J1	
p-Terphenyl-d14 (S)	%			125	61-154	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2571562 2571563 Original: J1713045001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
SEMIVOLATILES											
Phenol	ug/L	0	2000	1400	1500	72	77	19-106	5	30	
2,4-Dichlorophenol	ug/L	0	2000	2000	2200	99	112	47-121	12	30	
4-Chloro-3-methylphenol	ug/L	0	2000	2100	2300	105	117	52-119	10	30	
2,4,6-Trichlorophenol	ug/L	0	2000	1900	2200	94	108	50-125	13	30	
Hexachloroethane	ug/L	0	2000	1700	1800	85	91	21-115	7	30	
Nitrobenzene	ug/L	0	2000	1900	2000	95	102	45-121	7	30	
Hexachlorobutadiene	ug/L	0	2000	1900	2100	94	105	22-124	11	30	
Acenaphthene	ug/L	0	2000	2000	2200	102	112	47-122	9	30	
2,4-Dinitrotoluene (2,4-DNT)	ug/L	0	2000	2100	2200	103	111	57-128	7	30	
Fluorene	ug/L	0	2000	2000	2200	100	109	52-124	9	30	
Fluoranthene	ug/L	0	2000	2100	2300	106	116	57-128	9	30	
bis(2-Ethylhexyl) phthalate	ug/L	0	2000	2400	2400	118	118	55-135	1	30	
2-Fluorophenol (S)	%	110				95	101	31-134	6	30	
Phenol-d6 (S)	%	97				85	88	24-120	3		
Nitrobenzene-d5 (S)	%	114				103	113	38-139	9		

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2571562 2571563 Original: J1713045001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
2-Fluorobiphenyl (S)	%	109				100	109	42-138	9	30	
2,4,6-Tribromophenol (S)	%	133				127	138	43-140	8	30	
p-Terphenyl-d14 (S)	%	126				132	129	61-154	2		

QC Batch: WCAI/12792 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Prepared:

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2571646

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: 2571647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	2.5	2.5	102	90-110	
Chloride	mg/L	25	25	101	90-110	
Sulfate	mg/L	25	25	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2571648 2571649 Original: T1721913003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0.084	2.5	2.5	2.6	102	102	90-110	0	10	
Chloride	mg/L	40	25	63	63	91	91	90-110	0	10	
Sulfate	mg/L	28	25	51	51	93	94	90-110	0	10	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

QC Batch: MSVT/4150 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 12/27/2017 12:15
Associated Lab Samples: T1721858001, T1721858002, T1721858003

METHOD BLANK: 2572628

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
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	5.4	1.0
trans-1,2-Dichloroethylene	ug/L	0.50	0.50 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
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	0.56	0.56 U
1,2-Dichloroethane-d4 (S)	%	114	70-128
Toluene-d8 (S)	%	100	77-119
Bromofluorobenzene (S)	%	103	86-123

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2572629

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
VOLATILES					
Vinyl Chloride	ug/L	20	23	114	70-130
1,1-Dichloroethylene	ug/L	20	20	102	70-130
cis-1,2-Dichloroethylene	ug/L	20	20	98	70-130
Chloroform	ug/L	20	20	100	70-130
Benzene	ug/L	20	20	99	70-130
Trichloroethene	ug/L	20	19	95	70-130
Toluene	ug/L	20	20	99	70-130
Tetrachloroethylene (PCE)	ug/L	20	19	97	70-130
Chlorobenzene	ug/L	20	19	96	70-130
Ethylbenzene	ug/L	20	19	97	70-130
1,3-Dichlorobenzene	ug/L	20	18	92	70-130
1,2-Dichlorobenzene	ug/L	20	18	90	70-130
Xylene (Total)	ug/L	60	59	99	70-130
1,2-Dichloroethane-d4 (S)	%			113	70-128
Toluene-d8 (S)	%			102	77-119
Bromofluorobenzene (S)	%			93	86-123

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2572630 2572631 Original: T1721993002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
VOLATILES											
Vinyl Chloride	ug/L	0	20	17	13	86	67	70-130	24	30	J4
1,1-Dichloroethylene	ug/L	0	20	16	12	80	62	70-130	25	30	J4
cis-1,2-Dichloroethylene	ug/L	8.9	20	25	21	81	63	70-130	16	30	
Chloroform	ug/L	0	20	16	12	79	61	70-130	25	30	J4
Benzene	ug/L			16	12				28	30	J4
Trichloroethene	ug/L	11	20	27	24	78	63	70-130	12	30	J4
Toluene	ug/L			15	12				22	30	J4
Tetrachloroethylene (PCE)	ug/L	47	20	66	60	93	67	70-130	8	30	J4
Chlorobenzene	ug/L	0	20	15	12	74	59	70-130	23	30	J4
Ethylbenzene	ug/L			15	12				23	30	J4
1,3-Dichlorobenzene	ug/L	0	20	14	12	72	58	70-130	21	30	J4
1,2-Dichlorobenzene	ug/L	0	20	14	12	71	58	70-130	21	30	J4
Xylene (Total)	ug/L			43	35				21	30	
1,2-Dichloroethane-d4 (S)	%	119				112	110	70-128	2		
Toluene-d8 (S)	%	103				101	102	77-119	1		
Bromofluorobenzene (S)	%	120				98	102	86-123	3		

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

QC Batch: EXTj/4842 Analysis Method: EPA 525.2
QC Batch Method: EPA 525.2 Prepared: 12/31/2017 12:00
Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2574889

Parameter	Units	Blank Result	Reporting Limit Qualifiers
SEMIVOLATILES			
Simazine	ug/L	0.19	0.19 U
Atrazine	ug/L	0.16	0.16 U
Alachlor	ug/L	0.26	0.26 U
Di(2-ethylhexyl) adipate	ug/L	0.95	0.95 U
bis(2-Ethylhexyl) phthalate	ug/L	1.5	1.5 U
Benzo[a]pyrene	ug/L	0.096	0.096 U
p-Terphenyl-d14 (S)	%	86	70-130

LABORATORY CONTROL SAMPLE & LCSD: 2574890 2574891

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
SEMIVOLATILES									
Simazine	ug/L	2	2.0	2.2	101	108	70-130	7	30
Atrazine	ug/L	2	2.1	2.2	104	110	70-130	5	30
Alachlor	ug/L	2	2.2	2.1	109	106	70-130	3	30
Di(2-ethylhexyl) adipate	ug/L	2	2.4	2.0	119	101	70-130	16	30
bis(2-Ethylhexyl) phthalate	ug/L	2	3.4	2.9	170	146	70-130	15	30
Benzo[a]pyrene	ug/L	2	1.6	1.3	81	66	70-130	19	30
p-Terphenyl-d14 (S)	%				94	79	70-130	17	

MATRIX SPIKE SAMPLE: 2574892 Original: J1712975001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
SEMIVOLATILES						
Simazine	ug/L	0	2	1.7	83	70-130
Atrazine	ug/L	0	2	1.8	88	70-130
Alachlor	ug/L	0	2	2.0	99	70-130
Di(2-ethylhexyl) adipate	ug/L	0.19	2	2.0	99	70-130
bis(2-Ethylhexyl) phthalate	ug/L	1	2	2.7	135	70-130
Benzo[a]pyrene	ug/L	0	2	1.2	60	70-130
p-Terphenyl-d14 (S)	%	73			77	70-130

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

QC Batch: MSVm/3709 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Prepared:
Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2575194

Parameter	Units	Blank Result	Reporting Limit Qualifiers
VOLATILES			
Chloroform	ug/L	0.39	0.39 U
Bromodichloromethane	ug/L	0.14	0.14 U
Dibromochloromethane	ug/L	0.32	0.32 U
Bromoform	ug/L	0.26	0.26 U
Total Trihalomethanes	ug/L	0.14	0.14 U
1,2-Dichloroethane-d4 (S)	%	97	80-120
Toluene-d8 (S)	%	105	81-118
Bromofluorobenzene (S)	%	110	86-115

LABORATORY CONTROL SAMPLE & LCSD: 2575195 2575196

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
VOLATILES									
Chloroform	ug/L	20	22.25	22.57	111	113	70-130	1	30
Bromodichloromethane	ug/L	20	20.29	20.73	101	104	70-130	2	30
Dibromochloromethane	ug/L	20	22.25	20.80	111	104	70-130	7	30
Bromoform	ug/L	20	20.28	20.73	101	104	70-130	2	30
Total Trihalomethanes	ug/L		85.07	84.83				0	
1,2-Dichloroethane-d4 (S)	%				100	105	80-120	5	
Toluene-d8 (S)	%				113	104	81-118	8	
Bromofluorobenzene (S)	%				100	101	86-115	1	

MATRIX SPIKE SAMPLE: 2575197 Original: T1721790001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits Qualifiers
VOLATILES						
Chloroform	ug/L	2.07	20	23.82	109	70-130
Bromodichloromethane	ug/L	3.65	20	24.41	104	70-130
Dibromochloromethane	ug/L	6.15	20	28.61	112	70-130
Bromoform	ug/L	1.57	20	22.40	104	70-130

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2575197

Original: T1721790001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Trihalomethanes	ug/L			99.24			
1,2-Dichloroethane-d4 (S)	%	99			105	80-120	
Toluene-d8 (S)	%	102			111	81-118	
Bromofluorobenzene (S)	%	108			101	86-115	

QC Batch: MSVm/3710

Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2

Prepared:

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2575231

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Vinyl Chloride	ug/L	0.20	0.20	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Methylene Chloride	ug/L	0.44	0.44	U
trans-1,2-Dichloroethylene	ug/L	0.28	0.28	U
cis-1,2-Dichloroethylene	ug/L	0.32	0.32	U
1,2-Dichloroethane	ug/L	0.36	0.36	U
1,1,1-Trichloroethane	ug/L	0.39	0.39	U
Carbon Tetrachloride	ug/L	0.23	0.23	U
Benzene	ug/L	0.17	0.17	U
1,2-Dichloropropane	ug/L	0.26	0.26	U
Trichloroethene	ug/L	0.28	0.28	U
1,1,2-Trichloroethane	ug/L	0.12	0.12	U
Toluene	ug/L	0.22	0.22	U
Tetrachloroethylene (PCE)	ug/L	0.24	0.24	U
Chlorobenzene	ug/L	0.12	0.12	U
Ethylbenzene	ug/L	0.17	0.17	U
Styrene	ug/L	0.39	0.39	U
1,4-Dichlorobenzene	ug/L	0.26	0.26	U
1,2-Dichlorobenzene	ug/L	0.46	0.46	U
1,2,4-Trichlorobenzene	ug/L	0.28	0.28	U
Xylene (Total)	ug/L	0.28	0.28	U
1,2-Dichloroethane-d4 (S)	%	97	80-120	
Toluene-d8 (S)	%	105	81-118	
Bromofluorobenzene (S)	%	110	86-115	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2575232 2575233

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	20	22	101	108	70-130	6	30	
1,1-Dichloroethylene	ug/L	20	21	22	107	110	70-130	2	30	
Methylene Chloride	ug/L	20	23	24	117	119	70-130	2	30	
trans-1,2-Dichloroethylene	ug/L	20	21	23	105	115	70-130	10	30	
cis-1,2-Dichloroethylene	ug/L	20	22	21	110	106	70-130	3	30	
1,2-Dichloroethane	ug/L	20	20	21	102	105	70-130	3	30	
1,1,1-Trichloroethane	ug/L	20	22	23	112	115	70-130	3	30	
Carbon Tetrachloride	ug/L	20	22	23	111	117	70-130	5	30	
Benzene	ug/L	20	22	22	111	111	70-130	1	30	
1,2-Dichloropropane	ug/L	20	21	22	107	111	70-130	4	30	
Trichloroethene	ug/L	20	22	23	109	114	70-130	4	30	
1,1,2-Trichloroethane	ug/L	20	22	21	108	103	70-130	5	30	
Toluene	ug/L	20	22	22	111	108	70-130	2	30	
Tetrachloroethylene (PCE)	ug/L	20	23	22	115	110	70-130	5	30	
Chlorobenzene	ug/L	20	23	23	117	113	70-130	3	30	
Ethylbenzene	ug/L	20	22	22	109	109	70-130	0	30	
Styrene	ug/L	20	21	21	107	106	70-130	1	30	
1,4-Dichlorobenzene	ug/L	20	23	23	115	115	70-130	0	30	
1,2-Dichlorobenzene	ug/L	20	24	23	119	115	70-130	3	30	
1,2,4-Trichlorobenzene	ug/L	20	22	22	110	112	70-130	2	30	
Xylene (Total)	ug/L	60	66	67	111	111	70-130	1	30	
1,2-Dichloroethane-d4 (S)	%				100	105	80-120	5		
Toluene-d8 (S)	%				113	104	81-118	8		
Bromofluorobenzene (S)	%				100	101	86-115	1		

MATRIX SPIKE SAMPLE: 2575234

Original: T1721922002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	25	125	70-130	
1,1-Dichloroethylene	ug/L	0	20	25	124	70-130	
Methylene Chloride	ug/L	0	20	25	124	70-130	
trans-1,2-Dichloroethylene	ug/L	0	20	25	123	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	24	119	70-130	
1,2-Dichloroethane	ug/L	0	20	23	115	70-130	
1,1,1-Trichloroethane	ug/L	0	20	25	124	70-130	
Carbon Tetrachloride	ug/L	0	20	26	128	70-130	
Benzene	ug/L	0	20	24	121	70-130	
1,2-Dichloropropane	ug/L	0	20	23	116	70-130	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2575234

Original: T1721922002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	0	20	24	119	70-130	
1,1,2-Trichloroethane	ug/L	0	20	21	107	70-130	
Toluene	ug/L	0	20	25	125	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	26	129	70-130	
Chlorobenzene	ug/L	0	20	25	123	70-130	
Ethylbenzene	ug/L	0	20	24	120	70-130	
Styrene	ug/L	0	20	23	113	70-130	
1,4-Dichlorobenzene	ug/L	0	20	24	119	70-130	
1,2-Dichlorobenzene	ug/L	0	20	25	123	70-130	
1,2,4-Trichlorobenzene	ug/L	0	20	23	117	70-130	
Xylene (Total)	ug/L	0	60	72	120	70-130	
1,2-Dichloroethane-d4 (S)	%				94	80-120	
Toluene-d8 (S)	%				113	81-118	
Bromofluorobenzene (S)	%				96	86-115	

QC Batch: DGM/4151

Analysis Method: EPA 245.1

QC Batch Method: EPA 245.1

Prepared: 01/03/2018 09:45

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2575418

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Mercury	ug/L	0.050	0.050	U

LABORATORY CONTROL SAMPLE: 2575419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	ug/L	1	1.0	101	85-115	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575420 2575421 Original: T1721871001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.025	1	0.99	0.95	99	95	70-130	4	20	

QC Batch: GCSI/2227

Analysis Method: EPA 552.2

QC Batch Method: EPA 552.2

Prepared: 01/03/2018 09:45

Associated Lab Samples: T1721858001

METHOD BLANK: 2575570

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	0.50	0.50	U
2,3-Dibromopropionic Acid (S)	%	84	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 2575571 2575572

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Chloroacetic Acid	ug/L	20	18.08	18.38	90	92	70-130	2	30	
Bromoacetic Acid	ug/L	20	21.70	21.96	108	110	70-130	1	30	
Dichloroacetic Acid	ug/L	20	21.32	21.59	107	108	70-130	1	30	
Trichloroacetic Acid	ug/L	20	23.84	25.08	119	125	70-130	5	30	
Dibromoacetic Acid	ug/L	20	23.04	23.72	115	119	70-130	3	30	
Total Haloacetic Acids (HAA5)	ug/L		107.97	110.73				3	30	
2,3-Dibromopropionic Acid (S)	%				92	96	70-130	4	30	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2575573

Original: M1705112001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L	5.73	20	21.32	78	70-130	
Bromoacetic Acid	ug/L	0	20	24.58	123	70-130	
Dichloroacetic Acid	ug/L	37.5	20	60.25	114	70-130	
Trichloroacetic Acid	ug/L	16.05	20	39.41	117	70-130	
Dibromoacetic Acid	ug/L	0.73	20	24.03	117	70-130	
Total Haloacetic Acids (HAA5)	ug/L			169.59			
2,3-Dibromopropionic Acid (S)	%	96			96	70-130	

QC Batch: HPLj/1281

Analysis Method: EPA 531.1

QC Batch Method: EPA 531.1

Prepared:

Associated Lab Samples: T1721858001, T1721858002

METHOD BLANK: 2575942

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: 2575943 2575944

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	113	108	80-120	4	20	
Carbofuran	ug/L	20	20	17	99	86	80-120	14	20	

MATRIX SPIKE SAMPLE: 2575946

Original: J1712920001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Oxamyl	ug/L	0	20	0.57	0	80-120	

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QUALITY CONTROL DATA

Workorder: T1721858 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2575946

Original: J1712920001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Carbofuran	ug/L	0	20	0.28	0	80-120	

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1721858 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.
- J1 Surrogate Failure
- J4 Estimated Result
- Q Missed Hold Time
- V Method Blank Contamination

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1721858001	Leachate Effluent(SemiAnnual)	EPA 549.2	EXTj/4784	EPA 549.2	HPLj/1279
T1721858002	Field Blank	EPA 549.2	EXTj/4784	EPA 549.2	HPLj/1279
T1721858001	Leachate Effluent(SemiAnnual)	EPA 508	EXTj/4785	EPA 508	GCSj/3550
T1721858002	Field Blank	EPA 508	EXTj/4785	EPA 508	GCSj/3550
T1721858001	Leachate Effluent(SemiAnnual)	EPA 548.1	EXTj/4786	EPA 548.1	MSSj/2666
T1721858002	Field Blank	EPA 548.1	EXTj/4786	EPA 548.1	MSSj/2666
T1721858001	Leachate Effluent(SemiAnnual)			SM 2150 B	WCAt/12707
T1721858002	Field Blank			SM 2150 B	WCAt/12707
T1721858001	Leachate Effluent(SemiAnnual)			SM 2120 B	WCAt/12717
T1721858002	Field Blank			SM 2120 B	WCAt/12717
T1721858001	Leachate Effluent(SemiAnnual)			SM 3500-CR D	WCAt/12722
T1721858002	Field Blank			SM 3500-CR D	WCAt/12722
T1721858001	Leachate Effluent(SemiAnnual)	EPA 200.8	DGMj/3973	EPA 200.8	ICMj/1834
T1721858002	Field Blank	EPA 200.8	DGMj/3973	EPA 200.8	ICMj/1834
T1721858001	Leachate Effluent(SemiAnnual)			SM 4500-CN-E	WCAt/12732
T1721858002	Field Blank			SM 4500-CN-E	WCAt/12732
T1721858001	Leachate Effluent(SemiAnnual)			SM 4500NO3-F	WCAt/12736
T1721858002	Field Blank			SM 4500NO3-F	WCAt/12736
T1721858001	Leachate Effluent(SemiAnnual)	EPA 200.7	DGMt/4111	EPA 200.7	ICPt/2938
T1721858002	Field Blank	EPA 200.7	DGMt/4111	EPA 200.7	ICPt/2938

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1721858001	Leachate Effluent(SemiAnnual)			SM 5540 C	WCAg/6865
T1721858002	Field Blank			SM 5540 C	WCAg/6865
T1721858001	Leachate Effluent(SemiAnnual)	SW-846 3510C	EXTj/4797	EPA 8081	GCSj/3564
T1721858002	Field Blank	SW-846 3510C	EXTj/4797	EPA 8081	GCSj/3564
T1721858001	Leachate Effluent(SemiAnnual)	SW-846 3510C	EXTj/4798	SW-846 8082A	GCSj/3565
T1721858002	Field Blank	SW-846 3510C	EXTj/4798	SW-846 8082A	GCSj/3565
T1721858001	Leachate Effluent(SemiAnnual)	EPA 515.3	GCSj/3559	EPA 515.3	GCSj/3571
T1721858002	Field Blank	EPA 515.3	GCSj/3559	EPA 515.3	GCSj/3571
T1721858001	Leachate Effluent(SemiAnnual)	EPA 504.1	EXTj/4801	EPA 504.1	GCSj/3568
T1721858002	Field Blank	EPA 504.1	EXTj/4801	EPA 504.1	GCSj/3568
T1721858001	Leachate Effluent(SemiAnnual)			SM 2540 C	WCAt/12760
T1721858002	Field Blank			SM 2540 C	WCAt/12760
T1721858001	Leachate Effluent(SemiAnnual)			SM 4500H+B	WCAt/12761
T1721858002	Field Blank			SM 4500H+B	WCAt/12761
T1721858001	Leachate Effluent(SemiAnnual)			EPA 547	HPLj/1280
T1721858002	Field Blank			EPA 547	HPLj/1280
T1721858002	Field Blank	EPA 552.2	GCSt/2219	EPA 552.2	GCSt/2221
T1721858001	Leachate Effluent(SemiAnnual)	SW-846 3510C	EXTj/4816	SW-846 8270C	MSSj/2668
T1721858002	Field Blank	SW-846 3510C	EXTj/4816	SW-846 8270C	MSSj/2668

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1721858 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1721858001	Leachate Effluent(SemiAnnual)			EPA 300.0	WCAt/12792
T1721858002	Field Blank			EPA 300.0	WCAt/12792
T1721858001	Leachate Effluent(SemiAnnual)	SW-846 5030B	MSVt/4150	SW-846 8260B	MSVt/4151
T1721858002	Field Blank	SW-846 5030B	MSVt/4150	SW-846 8260B	MSVt/4151
T1721858003	Travel Blank	SW-846 5030B	MSVt/4150	SW-846 8260B	MSVt/4151
T1721858001	Leachate Effluent(SemiAnnual)	EPA 525.2	EXTj/4842	EPA 525.2	MSSj/2684
T1721858002	Field Blank	EPA 525.2	EXTj/4842	EPA 525.2	MSSj/2684
T1721858001	Leachate Effluent(SemiAnnual)			EPA 524.2	MSVm/3709
T1721858002	Field Blank			EPA 524.2	MSVm/3709
T1721858001	Leachate Effluent(SemiAnnual)			EPA 524.2	MSVm/3710
T1721858002	Field Blank			EPA 524.2	MSVm/3710
T1721858001	Leachate Effluent(SemiAnnual)	EPA 245.1	DGMt/4151	EPA 245.1	CVAt/1793
T1721858002	Field Blank	EPA 245.1	DGMt/4151	EPA 245.1	CVAt/1793
T1721858001	Leachate Effluent(SemiAnnual)	EPA 552.2	GCSr/2227	EPA 552.2	GCSr/2228
T1721858001	Leachate Effluent(SemiAnnual)			EPA 531.1	HPLj/1281
T1721858002	Field Blank			EPA 531.1	HPLj/1281
T1721858001	Leachate Effluent(SemiAnnual)	Field Measurements	FLDt/	Field Measurements	FLDt/

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Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant		SITE LOCATION: Lithia, Florida	
WELL NO: Leachate Effluent		DATE: 12/20/17	

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)
10:30	N/A	N/A	N/A	N/A	7.94	27.3	17562	3.17	N/A	Brown	Leachate
12/20/17 STA											
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>T. Aguilar J. Fuller</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>10:30</i>		SAMPLING ENDED AT: <i>10:45</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			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							<i>ORP: 10:30 (105.2)</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 $+10\%$ (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: 12/20/17	

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) $= (\quad N/A \quad \text{feet} - \quad N/A \quad \text{feet}) \times \quad N/A \quad \text{gallons/foot} = \quad N/A \quad \text{gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \quad N/A \quad \text{gallons} + (\quad N/A \quad \text{gallons/foot} \times \quad N/A \quad \text{feet}) + \quad N/A \quad \text{gallons} = \quad N/A \quad \text{gallons}$											
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

[illegible]

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

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

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



Project No.: T1721858
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 508
Preparation: EPA 508

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: One or more of the Continuing Calibration Verification (CCV) standards associated with Laboratory Control Sample 2567439 (LCS), Laboratory Control Sample Duplicate 2567440 (LCSD), and Matrix Spike 2567441 (MS) were below the method acceptance criteria of 80-120% for analytes Hexachlorocyclopentadiene and Hexachlorobenzene. The Hexachlorocyclopentadiene and Hexachlorobenzene spike results were within the control limits in the LCS and LCSD. Therefore, the slight negative bias implied by the low CCV recoveries was deemed insignificant. The data were not adversely effected. The data were reported as is.

The upper control criterion was exceeded for several target analytes in one or more of the Continuing Calibration Verification (CCV) standards for analytical batch GCSj: 3550, 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: The control criteria for the following surrogates in T1721858002 are not applicable: Tetrachloro-m-xylene (at 69% (Limits 70-130%)) and Decachlorobiphenyl (at 58% (Limits 70-130%)). The control criteria for the following surrogates in J1712920001 are not applicable: Tetrachloro-m-xylene (at 67% (Limits 70-130%)) and Decachlorobiphenyl (at 54% (Limits 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 surrogates were qualified to indicate matrix interference.

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



The upper control criterion was exceeded for the following surrogates in J1712921001: Tetrachloro-m-xylene (at 182% (Limits 70-130%)) and Decachlorobiphenyl (at 178% (Limits 70-130%)). No target analytes were detected in the sample. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. The data were qualified to indicate potential sample matrix interference.

The control criteria for the following surrogates in T1721858001 are not applicable: Tetrachloro-m-xylene and Decachlorobiphenyl. The analysis of the sample required a dilution, which resulted in surrogate concentrations below the Practical Quantitation Limit (PQL). The data were qualified accordingly.

D. Spikes: The upper control criterion was exceeded for the following analytes in the matrix spike 2567441 (MS) for sample T1721470001: Hexachlorobenzene (at 152% (Limits 65-135%)) and Methoxychlor (at 141% (Limits 65-135%)). The analytes in question were not detected in the associated client sample. The error associated with elevated recovery equates to a high bias. The quality of the data is not affected. The data were qualified to indicate potential sample matrix interferences.

E. Internal Standard:

F. Samples: The following sample was analyzed at dilution due to high non-target background components: T1721858001. This was necessary to allow for accurate detection of all surrogates and analytes. As physical evidence of the sample matrix interferences: the extract was a bright yellow hue, emitted a strong odor, and contained particulates. The sample was marked as a Leachate Effluent.

G. Other:

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Project No.: T1721858
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 8081
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

- A. Calibration: The upper control criterion was exceeded for several target analytes in Continuing Calibration Verification (CCV) standards for analytical batch 3564, 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: The control criteria for Tetrachloro-m-xylene and Decachlorobiphenyl in T1721858001, 2569876MS and 2569877MSD 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: The relative percent difference (RPD) for multiple analytes in the replicate matrix spike analyses of T1721858001 were outside control criteria. No further corrective action was appropriate.
- The matrix spike and duplicate matrix spike recoveries for multiple analytes in sample T1721858001 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable for all analytes; this indicates the analytical batch was in control. No further corrective action was appropriate.
- E. Internal Standard:
- F. Samples: Sample analyses proceeded normally.

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Advanced
Environmental Laboratories, Inc.

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

G. Other:

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Project No.: T1721858
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 8082A
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: The upper control criterion was exceeded for several target analytes in Continuing Calibration Verification (CCV) standards for analytical batch 3565, 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: The control criteria were exceeded for surrogate Tetrachloro-m-xylene in the Laboratory Control Sample (2569886LCS). The associated QC analysis recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outliers were flagged accordingly. No further corrective action was required.

The control criteria for Tetrachloro-m-xylene and Decachlorobiphenyl in T1721858001, 2569885MS and 2569886MSD are not applicable. The control criteria for Tetrachloro-m-xylene in J1712934001, J1712934002, and J1712934013 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: The matrix spike and duplicate matrix spike recoveries for Aroclor 1260 in sample T1721858001 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable for all analytes; this indicates the analytical batch was in control. No further corrective action was appropriate.

E. Internal Standard:

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F. Samples: Sample analyses proceeded normally.

G. Other:

Project No.: T1721858

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 504.1

Preparation: EPA 504.1

IV. Preparation

V. Analysis

A. Calibration: The upper control criterion was exceeded for target analyte 1,2-Dibromo-3-Chloropropane at 132% (Limits 70-130%) in the closing Continuing Calibration Verification (CCV) standard for analytical batch GCSj:3568, 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: The control criteria for Tetrachloro-m-xylene in T1721858001 are not applicable (at 58% (Limits 64-150%)). As recorded in the extraction logbook, the sample formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. In addition, the chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The sample was labeled as a leachate effluent. The affected surrogate was qualified to indicate matrix interference.

D. Spikes: All acceptance criteria were met.

E. Internal Standard:

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1721858
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 T1721858001 are not applicable (at 12% (Limits 70-130%)). As recorded in the extraction logbook, the sample formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. In addition, the chromatography indicated the presence of non-target background components that prevented adequate resolution of the surrogate. Accurate quantitation was not possible. The affected surrogate was qualified accordingly.
- D. Spikes: The matrix spike 2570361 (MS) recoveries of 2,4-D (at 0% (Limits 70-130%)) and Picloram (at 137% (Limits 70-130%)) for J1712975001 were outside control criteria. Recoveries in the Laboratory Control Sample 2570358 (LCS) and Laboratory Control Sample Duplicate 2570359 (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low and/or high bias in this matrix. As recorded in the extraction logbook, the sample formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect analyte recoveries. In addition, the chromatography indicated the presence of non-target background components that prevented adequate resolution of 2,4-D and Picloram. The affected sample was qualified to indicate matrix interference.
- E. Internal Standard: The data were reported as is.
- F. Samples: Sample analyses proceeded normally.

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6681 Southpoint Parkway
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Office (904) 363-9350
Fax (904) 363-9354

G. Other:

Project No.: T1721858

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 549.2

Preparation: EPA 549.2

IV. Preparation

The Method Detection Limit (MDL) for all analytes for T1721858001 were elevated due to difficult sample matrix. Due to matrix interferences, only 48mL of the sample was filtered during the extraction, instead of the typical 70mL.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates:

D. Spikes: The matrix spike 2566929 (MS) recovery of Diquat for T1721470001 was outside control criteria (at 45% (Limits 70-130%)). Recoveries in the Laboratory Control Sample 2566927 (LCS) and Laboratory Control Sample Duplicate 2566928 (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix.

E. Internal Standard:

F. Samples: The Method Detection Limit (MDL) for all analytes for T1721858001 were elevated due to difficult sample matrix. Due to matrix interferences, only 48mL of the sample was filtered during the extraction, instead of the typical 70mL. The particulates in the sample matrix clogged the filter and prevented the remaining the remaining 22mL from passing into the cartridge phase. The unfiltered sample volume was decanted and discarded. The cartridge phase was then eluted as per typical laboratory practice. As a result, the reported MDL is elevated on the final report.

G. Other:

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Project No.: T1721858
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 547
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:
D. Spikes: The upper control criterion was exceeded for the following analyte in the matrix for analytical batch 1280: Glyphosate (131% vs 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 quality of the data is not affected. No further corrective action was required.
E. Internal Standard:
F. Samples: Sample analyses proceeded normally.
G. Other:

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Project No.: T1721858
Client Name: Hillsborough County Public Utilities
ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation:

Analysis: All holding times were met.

III. Method

Analysis: EPA 531.1

Preparation: None

IV. Preparation

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates:

D. Spikes: The matrix spike 2575945 (MS) recovery of Carbofuran for J1712975001 were outside control criteria (at 75% (Limits 70-130%)). The matrix spike 2575946 (MS) recoveries of Carbofuran (at 0% (Limits 70-130%)) and Oxamyl (at 0% (Limits 70-130%)) for J1712920001 were outside control criteria. Recoveries in the Laboratory Control Sample 2575943 (LCS) and Laboratory Control Sample Duplicate 2575944 (LCSD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix.

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

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1721858
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 8270C
Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: The upper control criterion was exceeded for Benzyl Alcohol in the Continuing Calibration Verification (CCV) standard for analytical batch 2668, indicating increased sensitivity. The client samples reported from this run 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: The control criteria for several surrogates in T1721858001 are not applicable. As recorded in the extraction logbook, the sample 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.

The upper control criterion was exceeded for the surrogate Phenol-d6 in 2571560MB. The error associated with an elevated recovery equates to a high bias, no analytes were detected in the method blank. The quality of the sample data is not significantly affected, as internal recoveries were within acceptance criteria of the ICAL and are consistent with quality control samples. The surrogate was qualified accordingly.

The upper control criterion was exceeded for surrogate 2,4,6-Tribromophenol in 2571561LCS. The associated QC analysis recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outliers were flagged accordingly. No further corrective action was required.

D. Spikes: The matrix spike duplicate (MSD) recoveries of Hexachlorobenzene for J1713045001 were outside control criteria. Recoveries in the Laboratory Control Sample (LCS), Matrix Spike

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(MS), and Relative Percent Difference (%RPD) were acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The offending analytes were not detected in the client sample. No further corrective action is required.

The spike recovery of 2,4,6-Trichlorophenol for the Laboratory Control Sample (2571561LCS) was outside the upper control criterion. 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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Project No.: T1721858
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

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 spike recovery of Bis(2-Ethylhexyl)phthalate for the Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample were outside the upper control criterion. 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.

The spike recovery of Benzo(a)pyrene for Duplicate Laboratory Control Sample (LCSD) in analytical batch 2684 was outside the lower control criterion (66% versus a criterion of 70%). The analyte in question was not detected in the associated client samples. The Laboratory Control Sample (LCS) associated with batch 2684 was within control criteria, showing the batch was within control. The error associated with reduced recovery was isolated to the LCSD. Additional analysis of the associated client samples could not be performed because insufficient sample remained for testing.

The matrix spike recovery of Bis(2-ethylhexyl) phthalate for sample J171275001 was outside the upper control criterion (135% versus 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.

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Fax (904) 363-9354

The matrix spike recovery of Benzo(a)pyrene for sample J171275001 was outside control criteria (60% versus a criterion of 70%). Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

- E. Internal Standard: The data were reported as is.
- F. Samples: Sample analyses proceeded normally.
- G. Other:

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Project No.: T1721858
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: The Method Blank (MB) contained low levels of Methylene Chloride and Napthalene above the Method Detection Limit (MDL). All sample results found in the Method Blank are flagged with a V qualifier to indicate the data is an estimate.
- C. Surrogates: All acceptance criteria were met.
- D. Spikes: The matrix spike recoveries of vinyl chloride, 1,1-dichloroethylene, methyl tert-butyl ether, chloroform, cis-1,2-dichloroethene, benzene, trichloroethylene, toluene, tetrachloroethylene, chlorobenzene, ethylbenzene, m,p-xylene, o-xylene, 1,2,4-trimethylbenzene, 1,3-dichlorobenzene, and 1,2-dichlorobenzene for T1721993002 were outside control criteria. The matrix spike RPDs and recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential 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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Project No.: T1721858
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: SM 5540 C
Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

- A. Calibration: All acceptance criteria were met.
- B. Blanks: The Continuing Calibration Blank (CCB) associated with G1710814-G1710822, T1721858 and T1721862 contained low levels of MBAS above the Method Detection Limit (MDL). In accordance with AEL QA policy, all sample results less than ten times the level found in the CCB are flagged with a V to indicate the data is an estimate.
- C. Duplicates:
- D. Spikes: The matrix spike recovery and Matrix Spike Duplicate (MSD) of MBAS for G1710814002 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. No further corrective action was required.
- E. Serial Dilution:
- F. Samples: Sample analyses proceeded normally.
- G. Other:

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Queue: ICMj

Batch Number: 1834

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 Ag and Mn for S1702016001 were outside control criteria. Recovery in the Laboratory Control Sample (LCS) were acceptable, which indicates the analytical batch was in control. The matrix spike outliers suggest a potential 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:

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Report Date: January 5, 2018

Advanced Environmental Labs
9610 Princess Palm Ave
Tampa, FL 33619

Field Custody: Client
Client/Field ID: T1721858001
Leachate Effl
Sample Collection: 12-20-17/1030
Lab ID No: 17.14353
Lab Custody Date: 12-22-17/1100
Sample description: Water

CERTIFICATE OF ANALYSIS

Parameter	Units	Results	Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	3.8 I $\pm$ 1.2	12-27-17/1646	EPA 00-02	1.7
Combined Radium (Radium-226 + Radium 228)	pCi/l	2.1 I $\pm$ 1.1	Calc	Calc	1.6
Radium-226	pCi/l	2.1 I $\pm$ 1.1	1-3-18/0939	EPA 903.0	1.6
Radium-228	pCi/l	0.9 U $\pm$ 0.5	1-4-18/1124	EPA Ra-05	0.9

Alpha Standard: Th-230

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

James W. Hayes
Laboratory Manager

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

Chain of Custody

Document 68275 - HBN 53959

Workorder

SELF Plant Effluent

Results Requested By 1/1/2018

Report To	Subcontract To	Requested Analysis
-----------	----------------	--------------------

Project Manager Tampa
Advanced Environmental Laboratories, Inc
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Tampa, FL 33619
Payments:
P.O. Box 551580
Jacksonville, FL 32255-1580
Phone (813)630-9616

KNL-FL
KNL Laboratory Services, Inc.
2742 North Florida Avenue
Tampa, FL 33602
Phone
Fax

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers	EPA 903.1	EPA Ra-05	EPA 900	LAB USE ONLY
1	Leachate Effluent(SemiAnnual)	12/20/2017 10:30	T1721856001	Water	HNO3				
2						X	X	X	
3									
4									
5									

Report

Electronic Data Deliverables

Comments

☐ Standard (Results only)

☐ Standard with Batch QC

☐ CLP

☐ Other

☐ SEDD Stage 2A

☐ SEDD Stage 2B

☐ SEDD Stage 3

☐ Other

17.14353

Preservative	Transfers	Released By	Date/Time	Received By	Date/Time
--------------	-----------	-------------	-----------	-------------	-----------

HNO3 = HNO3

DUE 1/9/17
@nbor

1					
2					
3					
4					
5					

February 02, 2018

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

Re: Dioxin Subcontract - Tampa
Work Order: 11831
SDG: T1721858

Dear Mr. Cammarata:

Cape Fear Analytical, LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 19, 2018. This revised data report has been prepared and reviewed in accordance with CFA's standard operating procedures. Refer to the fractional case narrative for revision details.

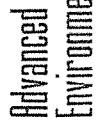
Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (910) 795-0421.

Sincerely,



Cynde Larkins
Project Manager

Purchase Order: T1721858
Enclosures



Environmental Laboratories, Inc.

☐ **Altamonte Springs:** 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597

☐ **Gainesville:** 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639

☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354

☐ **Miramar:** 10200 USA Tower Way, Miramar, FL 33025 • 954.899.2288 • Fax 954.899.2281

☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275

☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

CFA NO #11831

[illegible]

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: AELI	Work Order: 11831
Shipping Company: FedEx	Date/Time Received: 27 Dec 17 1145

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: _____

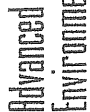
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	☒			Circle Applicable: seals broken damaged container leaking container other(describe)
2 Chain of Custody documents included with shipment?	☒			
3 Samples requiring cold preservation within 0-6°C?	☒			Preservation Method: ice bags blue ice dry ice none other (describe) 3.4° - 1.9 = 1.5°C
4 Aqueous samples found to have visible solids?			☒	Sample IDs, containers affected:
5 Samples requiring chemical preservation at proper pH?		☒		Sample IDs, containers affected and pH observed: pH=8 on both containers If preservative added, Lot#:
6 Samples requiring preservation have no residual chlorine?	☒			Sample IDs, containers affected: If preservative added, Lot#:
7 Samples received within holding time?	☒			Sample IDs, tests affected:
8 Sample IDs on COC match IDs on containers?	☒			Sample IDs, containers affected:
9 Date & time of COC match date & time on containers?	☒			Sample IDs, containers affected:
10 Number of containers received match number indicated on COC?	☒			List type and number of containers / Sample IDs, containers affected: 1 - 1L MMA per sample
11 COC form is properly signed in relinquished/received sections?	☒			

Comments:

Checklist performed by: Initials: **CS**

Date: **27 DEC 17**

CF-UD-F-7



Environmental Laboratories, Inc.

CFA WO #11831

☐ **Altamonte Springs:** 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
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☐ **Tampa:** 9610 Princess Palm Ave., Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

[illegible]

Received on Ice ☒ Yes ☐ No ☒ Temp taken from sample ☐ Temp from blank ☐ here required, pH checked Temperature when received 1.5 (in degrees Celsius)

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

DCN: AD-051 Form last revised 08/18/2014

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Josh Sneed	12-20-17	17:30	Cynthia Perkins	23-Dec-17	1145
2						
3						
4						

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

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site Address: _____

----- Forwarded Message -----

Subject:CFA WO #11831

Date:Thu, 1 Feb 2018 16:43:38 -0500

From:Heidi Parker <harker@aellab.com>

Organization:Advanced Environmental Laboratories Inc.

To:'Heather Patterson' <heather.patterson@cfanalytical.com>

Hi Heather,

I am sorry, Could you change the report to reflect the Sample Descriptions I put on the CoC attached.

Heidi Parker

Project Manager

Advanced Environmental Laboratories, Inc.

Florida's Largest Laboratory Network!

9610 Princess Palm Avenue

Tampa, FL 33619

813-630-9616 Voice

813-630-4327 Fax

Website: https://urldefense.proofpoint.com/v2/url?u=http-3A_www.aellab.com&d=DwIFaQ&c=euGZstcaTD1lvimE

-----Original Message-----

From: scan.tampa@aellab.com [<mailto:scan.tampa@aellab.com>]

Sent: Thursday, February 01, 2018 6:00 PM

To: hbrooks@aellab.com

Subject: Scanned Image from Tpa-pKyocera1

Please see attached.

Tpa-pKyocera1

This address is not monitored for replies.

Advanced Environmental Laboratories, Inc.

813-630-9616 Voice

—Attachments:—

pdf20180201180017.pdf

27 bytes

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
Advanced Environmental Laboratories, Incorporated (AELI)
SDG T1721858
Work Order 11831

Revision 1

This data package has been revised to change the Client Sample IDs, per client request.

Method/Analysis Information

Product: TCDD Only by EPA Method 1613B in Liquids

Analytical Method: EPA Method 1613B

Extraction Method: SW846 3520C

Analytical Batch Number: 36745

Clean Up Batch Number: 36742

Extraction Batch Number: 36741

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
11831001	Leachate Effluent
11831002	Field Blank
12020520	Method Blank (MB)
12020521	Laboratory Control Sample (LCS)
12020522	Laboratory Control Sample Duplicate (LCSD)

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# 15.

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
HRP750_2	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: T1721858 CFA Work Order: 11831

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
- 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: 02 FEB 2018

Title: Group Leader

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: T1721858
Lab Sample ID: 11831001
Client Sample: 1613B TCDD Water
Client ID: Leachate Effluent
Batch ID: 36745
Run Date: 01/25/2018 13:28
Data File: A25JAN18A-5
Prep Batch: 36741
Prep Date: 23-JAN-18

Client: AELI001
Date Collected: 12/20/2017 10:30
Date Received: 01/19/2018 13:45

Method: EPA Method 1613B
Analyst: MJC

Prep Method: SW846 3520C
Prep Aliquot: 959.2 mL

Project: AELI00716
Matrix: WATER

Prep Basis: As Received

Instrument: HRP750
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		1520	2090	pg/L	73.0	(31%-137%)
37Cl-2,3,7,8-TCDD		157	209	pg/L	75.5	(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: T1721858
Lab Sample ID: 11831002
Client Sample: 1613B TCDD Water
Client ID: Field Blank
Batch ID: 36745
Run Date: 01/25/2018 14:16
Data File: A25JAN18A-6
Prep Batch: 36741
Prep Date: 23-JAN-18

Client: AELI001
Date Collected: 12/20/2017 09:50
Date Received: 01/19/2018 13:45
Method: EPA Method 1613B
Analyst: MJC
Prep Method: SW846 3520C
Prep Aliquot: 934.8 mL

Project: AELI00716
Matrix: WATER
Prep Basis: As Received
Instrument: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.7	pg/L	10.7

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1750	2140	pg/L	82.0	(31%-137%)
37Cl-2,3,7,8-TCDD		163	214	pg/L	76.2	(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**

Page 1 of 1

SDG Number: T1721858

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12020521	LCS for batch 36741	13C-2,3,7,8-TCDD		86.7	(25%-141%)
		37Cl-2,3,7,8-TCDD		77.2	(37%-158%)
12020522	LCSD for batch 36741	13C-2,3,7,8-TCDD		74.7	(25%-141%)
		37Cl-2,3,7,8-TCDD		67.8	(37%-158%)
12020520	MB for batch 36741	13C-2,3,7,8-TCDD		82.9	(31%-137%)
		37Cl-2,3,7,8-TCDD		75.3	(42%-164%)
11831001	Leachate Effluent	13C-2,3,7,8-TCDD		73.0	(31%-137%)
		37Cl-2,3,7,8-TCDD		75.5	(42%-164%)
11831002	Field Blank	13C-2,3,7,8-TCDD		82.0	(31%-137%)
		37Cl-2,3,7,8-TCDD		76.2	(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: T1721858

Client ID: LCS for batch 36741

Lab Sample ID: 12020521

Instrument: HRP750

Analyst: MJC

Sample Type: Laboratory Control Sample

Matrix: WATER

Analysis Date: 01/25/2018 11:05

Dilution: 1

Prep Batch ID:36741

Batch ID: 36745

		Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
CAS No.	Parmname				
1746-01-6	LCS 2,3,7,8-TCDD	200	193	96.3	73-146

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

Page 2 of 2

SDG Number: T1721858

Client ID: LCSD for batch 36741

Lab Sample ID: 12020522

Instrument: HRP750

Analyst: MJC

Sample Type: Laboratory Control Sample Duplicate

Matrix: WATER

Analysis Date: 01/25/2018 11:52

Dilution: 1

Prep Batch ID:36741

Batch ID: 36745

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	193	96.6	73-146	0.394	0-20

Method Blank Summary

Page 1 of 1

SDG Number: T1721858
Client ID: MB for batch 36741
Lab Sample ID: 12020520
Column:

Client: AELI001
Instrument ID: HRP750
Prep Date: 23-JAN-18

Matrix: WATER
Data File: A25JAN18A-4
Analyzed: 01/25/18 12:40

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 36741	12020521	A25JAN18A-2	01/25/18	1105
02 LCSD for batch 36741	12020522	A25JAN18A-3	01/25/18	1152
03 Leachate Effluent	11831001	A25JAN18A-5	01/25/18	1328
04 Field Blank	11831002	A25JAN18A-6	01/25/18	1416

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: T1721858
Lab Sample ID: 12020520
Client Sample: QC for batch 36741
Client ID: MB for batch 36741
Batch ID: 36745
Run Date: 01/25/2018 12:40
Data File: A25JAN18A-4
Prep Batch: 36741
Prep Date: 23-JAN-18

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: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1660	2000	pg/L	82.9	(31%-137%)
37Cl-2,3,7,8-TCDD		151	200	pg/L	75.3	(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: T1721858
Lab Sample ID: 12020521
Client Sample: QC for batch 36741
Client ID: LCS for batch 36741
Batch ID: 36745
Run Date: 01/25/2018 11:05
Data File: A25JAN18A-2
Prep Batch: 36741
Prep Date: 23-JAN-18

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: HRP750
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		193	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1730	2000	pg/L	86.7	(25%-141%)
37Cl-2,3,7,8-TCDD		154	200	pg/L	77.2	(37%-158%)

Comments:

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number:	T1721858	Client:	AELI001	Project:	AELI00716
Lab Sample ID:	12020522			Matrix:	WATER
Client Sample:	QC for batch 36741				
Client ID:	LCSD for batch 36741			Prep Basis:	As Received
Batch ID:	36745	Method:	EPA Method 1613B		
Run Date:	01/25/2018 11:52	Analyst:	MJC	Instrument:	HRP750
Data File:	A25JAN18A-3			Dilution:	1
Prep Batch:	36741	Prep Method:	SW846 3520C		
Prep Date:	23-JAN-18	Prep Aliquot:	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		193	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1490	2000	pg/L	74.7	(25%-141%)
37Cl-2,3,7,8-TCDD		136	200	pg/L	67.8	(37%-158%)

Comments: