Hillsborough County Florida

PUBLIC UTILITIES
PO Box 1110 Tampa, FL 33601-1110

September 29, 2017

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

RE: **Southeast County Landfill**
Leachate Treatment Plant (WACS Testsite #19864)
Quarterly Analytical Data Report
Second Quarter (April – June, 2017)

Dear Mr. Morgan:

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

The referenced plan requires monthly sampling of the leachate treatment plant effluent and the daily recording of the plant pH values. Monthly effluent samples are collected by the County and analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Nitrate, and five (5) field parameters. County personnel collected effluent samples from the designated sampling port at the treatment plant on April 25, and May 31, 2017. In addition, the County also collected the required semi-annual sample at the leachate treatment plant for primary and secondary drinking water standards and priority pollutant metals on June 8, 2017.

The daily pH values recorded by plant personnel ranged from 7.38 to 8.19 pH units, and the monthly analytical samples ranged from 7.71 to 7.86 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.

All effluent samples collected were analyzed by our contract laboratory, Advanced Environmental Laboratories, Inc., and the complete results are provided for your technical review. We apologize for the delay in submitting this analytical data, but want you to know that the delay was due to AEL not providing the AdaPT files for the semi-annual sampling event conducted in June. They requested that we inform you that the LDD was made using the Master Library 20170501 and the Rads report was made using the Regular DWM Library.

Should you have any questions or comments concerning the information provided in this submittal, please feel free to contact us at (813) 663-3222 or (813) 663-3221.

Respectfully,

Michael D. Townsel
Senior Hydrologist
Public Utilities Department
Environmental Services

9/29/2017

David S. Adams, P.G.
Environmental Manager
Public Utilities, Department
Environmental Services

9/29/2017

DAVID S. ADAMS LICENSE NO. 1607 STATE OF FLORIDA PROFESSIONAL GEOLOGIST

DSA/mdt
TSD\... \enviro\southeast\scanned reports-docs\Leachate plant\SELF2017-2ndQtrEffluent.pdf

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

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

May 16, 2017

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

RE: Workorder: T1707021 SELF Plant Effluent

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, April 25, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these 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: T1707021 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1707021001	Leachate	Water	4/25/2017 09:50	4/25/2017 12:30
T1707021002	Field Blank	Water	4/25/2017 09:48	4/25/2017 12:30

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
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Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1707021 SELF Plant Effluent

Lab ID: **T1707021001** Date Received: 04/25/17 12:30 Matrix: Water

Sample ID: **Leachate** Date Collected: 04/25/17 09:50

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	**16791**		**umhos/cm**	**1**			4/25/2017 09:50	
Dissolved Oxygen	**4.59**		**mg/L**	**1**			4/25/2017 09:50	
ORP-2580BW	**220.6**		**mV**	**1**			4/25/2017 09:50	
Temperature	**28.78**		**°C**	**1**			4/25/2017 09:50	
pH	**7.86**		**SU**	**1**			4/25/2017 09:50	
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**1300**		**mg/L**	**5**	250	120	5/9/2017 16:26	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**8800**		**mg/L**	**1.25**	12	12	4/27/2017 18:05	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**59**		**mg/L**	**5**	5.0	5.0	4/28/2017 11:41	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	4/25/2017 15:57	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**340**		**mg/L**	**1**	2.0	2.0	4/26/2017 14:03	T

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ANALYTICAL RESULTS

Workorder: T1707021 SELF Plant Effluent

Lab ID: **T1707021002**
Sample ID: **Field Blank**

Date Received: 04/25/17 12:30 Matrix: Water
Date Collected: 04/25/17 09:48

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**24**	**U**	**mg/L**	**1**	50	24	5/9/2017 16:26	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**	**U**	**mg/L**	**1.25**	12	12	4/27/2017 18:05	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**1.0**	**U**	**mg/L**	**1**	1.0	1.0	5/1/2017 12:23	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	4/25/2017 15:58	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	4/26/2017 14:24	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1707021 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: T1707021 SELF Plant Effluent

QC Batch: WCAt/8256 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1707021001, T1707021002

METHOD BLANK: 2335401

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

LABORATORY CONTROL SAMPLE: 2335402

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate	mg/L	1	1.1	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2335467 2335468 Original: T1707000002

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	1.1	1.1	107	109	90-110	2	10	

QC Batch: WCAt/8298 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1707021001, T1707021002

METHOD BLANK: 2336676

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: T1707021 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2336677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	180	93	84.6-115.4	

SAMPLE DUPLICATE: 2336678 Original: T1707018002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	240	230	2	20	

QC Batch: WCAt/8301 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T1707021001, T1707021002

METHOD BLANK: 2336751

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

LABORATORY CONTROL SAMPLE: 2336752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	570	86	75-125	

SAMPLE DUPLICATE: 2336753 Original: T1706997003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	790	800	1	5	

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QUALITY CONTROL DATA

Workorder: T1707021 SELF Plant Effluent

SAMPLE DUPLICATE: 2336754 Original: T1707023001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	680	680	0	5	

QC Batch: WCAt/8321 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1707021001

METHOD BLANK: 2337999

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

LABORATORY CONTROL SAMPLE: 2338000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	180	91	75-125	

SAMPLE DUPLICATE: 2338002 Original: T1707020001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	75	70	7	10	

QC Batch: WCAt/8353 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1707021002

METHOD BLANK: 2339532

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: T1707021 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2339533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	180	89	75-125	

SAMPLE DUPLICATE: 2339534 Original: T1706955003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	1.0U	1.0	0	10	

SAMPLE DUPLICATE: 2339535 Original: T1707039001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	1.0U	1.0	0	10	

QC Batch: WCAt/8560 Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4 Prepared:

Associated Lab Samples: T1707021001, T1707021002

METHOD BLANK: 2348306

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

LABORATORY CONTROL SAMPLE: 2348307

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

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QUALITY CONTROL DATA

Workorder: T1707021 SELF Plant Effluent

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2348316 2348317 Original: T1707021002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	0	500	490	490	98	99	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2348320 2348321 Original: A1703147002

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	2	500	490	490	98	99	90-110	0	10	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1707021 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1707021001	Leachate			SM 4500NO3-F	WCAt/8256
T1707021002	Field Blank			SM 4500NO3-F	WCAt/8256
T1707021001	Leachate			SM 5210B	WCAt/8298
T1707021002	Field Blank			SM 5210B	WCAt/8298
T1707021001	Leachate			SM 2540 C	WCAt/8301
T1707021002	Field Blank			SM 2540 C	WCAt/8301
T1707021001	Leachate			SM 2540D	WCAt/8321
T1707021002	Field Blank			SM 2540D	WCAt/8353
T1707021001	Leachate			EPA 410.4	WCAt/8560
T1707021002	Field Blank			EPA 410.4	WCAt/8560
T1707021001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

Advanced 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
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☐ **Miramar:** 10200 USA Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
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T/20/21

Client Name: Hills. Co. Public Utilities	Project Name: SELF Plant Effluent		
Address: 332 North Falkenburg Rd.	P.O. Number/Project Number: N/A		
Tampa, Florida 33619	Project Location: Southeast County Landfill		
Phone: (813) 663-3222	REMARKS/SPECIAL INSTRUCTIONS:		
FAX: (813) 274-6801			
Contact: Michael Townsel			
Sampled By: J. fuller / m. Townsel			
Turn Around Time: ☒ STANDARD ☐ RUSH			
Page: 1 of: 1			

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	ANALYSIS REQUIRED: COD	BOD	TDS	TSS	Nitrate						LABORATORY I.D. NUMBER
							BOTTLE SIZE & TYPE											
	Leachate Effluent	G	4/25/17	950	WW	5		X	X	X	X	X						01
	Field Blank	—	4/25/17	948	DI	5		X	X	X	X	X						02

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

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 4C (in degrees celcius)

Form revised 09/19/2012

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: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		4/25/17	1227		4/25/17	12:30
2						
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID: _____

Contact Person: _____ Phone: _____

Supplier of Water: _____

Site Address: _____

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: 4/25/17

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 mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
950	N/A	N/A	N/A	N/A	7.86	28.78	16791	4.59	N/A	Brown	Effluent

MDD 4/25/17

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: J. Fuller / M. Townsel	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 950	SAMPLING ENDED AT: 955
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y N Dedicated	TUBING Y N (replaced) Dedicated	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** ORP: 950 (220.6)

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

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

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

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

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant	SITE LOCATION: Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 4/25/17

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)

= (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)
948	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Field Blank (MDT) 4/25/17

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: J. Fuller / M. Towngel	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 948	SAMPLING ENDED AT: 952
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y N Dedicated	TUBING Y N (replaced) Dedicated	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: SEE C.O.C. FOR SAMPLE ANALYSIS

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

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

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

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

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

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
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June 14, 2017

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

RE: Workorder: T1709375 SELF Plant Effluent

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, May 31, 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: T1709375 SELF Plant Effluent

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1709375001	Leachate	Water	5/31/2017 09:38	5/31/2017 14:37
T1709375002	Field Blank	Water	5/31/2017 09:20	5/31/2017 14:37

CERTIFICATE OF ANALYSIS

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ANALYTICAL RESULTS

Workorder: T1709375 SELF Plant Effluent

Lab ID: **T1709375001** Date Received: 05/31/17 14:37 Matrix: Water

Sample ID: **Leachate** Date Collected: 05/31/17 09:38

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	**18937**		**umhos/cm**	**1**			5/31/2017 09:38	
Dissolved Oxygen	**1.25**		**mg/L**	**1**			5/31/2017 09:38	
ORP-2580BW	**118.4**		**mV**	**1**			5/31/2017 09:38	
Temperature	**31.66**		**°C**	**1**			5/31/2017 09:38	
Turbidity	**178**		**NTU**	**1**			5/31/2017 09:38	
pH	**7.75**		**SU**	**1**			5/31/2017 09:38	
WET CHEMISTRY								
Analysis Desc: COD,E410.4,Water	Analytical Method: EPA 410.4							
Chemical Oxygen Demand	**1800**		**mg/L**	**5**	250	120	6/6/2017 14:22	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**9300**		**mg/L**	**1**	10	10	6/6/2017 13:18	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**130**		**mg/L**	**5**	5.0	5.0	6/6/2017 08:47	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/1/2017 16:22	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**690**		**mg/L**	**1**	2.0	2.0	6/1/2017 19:31	T

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ANALYTICAL RESULTS

Workorder: T1709375 SELF Plant Effluent

Lab ID: **T1709375002**
Sample ID: **Field Blank**

Date Received: 05/31/17 14:37 Matrix: Water
Date Collected: 05/31/17 09:20

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,J4**	**mg/L**	**1**	50	24	6/6/2017 14:22	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**10**	**U**	**mg/L**	**1**	10	10	6/6/2017 13:18	T
Analysis Desc: TSS,SM2540D,Water	Analytical Method: SM 2540D							
Total Suspended Solids	**0.50**	**U**	**mg/L**	**0.5**	0.50	0.50	6/6/2017 08:47	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/1/2017 14:45	T
Analysis Desc: BOD,SM5210B,Water	Analytical Method: SM 5210B							
Biochemical Oxygen Demand	**2.0**	**U**	**mg/L**	**1**	2.0	2.0	6/1/2017 19:36	T

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1709375 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.
J4	Estimated Result

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: T1709375 SELF Plant Effluent

QC Batch: WCAt/9007 Analysis Method: SM 5210B
QC Batch Method: SM 5210B Prepared:
Associated Lab Samples: T1709375001, T1709375002

METHOD BLANK: 2369256

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

LABORATORY CONTROL SAMPLE: 2369257

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	200	230	115	84.6-115.4	

SAMPLE DUPLICATE: 2369258 Original: T1709411001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Biochemical Oxygen Demand	mg/L	1100	1100	3	20	

QC Batch: WCAt/9009 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1709375001, T1709375002

METHOD BLANK: 2369349

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

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QUALITY CONTROL DATA

Workorder: T1709375 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2369350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate	mg/L	1	1.1	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2369352 2369353 Original: T1709392001

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	1.1	1.0	108	101	90-110	6	10	

QC Batch: WCAt/9035 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Prepared:
Associated Lab Samples: T1709375001, T1709375002

METHOD BLANK: 2371199

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

LABORATORY CONTROL SAMPLE: 2371200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	200	180	92	75-125	

SAMPLE DUPLICATE: 2371202 Original: T1709348001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Suspended Solids	mg/L	420	430	3	10	

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QUALITY CONTROL DATA

Workorder: T1709375 SELF Plant Effluent

QC Batch: WCAt/9037 Analysis Method: SM 2540 C
QC Batch Method: SM 2540 C Prepared:
Associated Lab Samples: T1709375001, T1709375002

METHOD BLANK: 2371210

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

LABORATORY CONTROL SAMPLE: 2371211

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: 2371212 Original: T1709375002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	10U	10	0	5	

QC Batch: WCAt/9055 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Prepared:
Associated Lab Samples: T1709375001, T1709375002

METHOD BLANK: 2371897

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

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QUALITY CONTROL DATA

Workorder: T1709375 SELF Plant Effluent

LABORATORY CONTROL SAMPLE: 2371898

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Chemical Oxygen Demand	mg/L	500	520	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2371899 2371900 Original: T1709092001

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			1200	1200				3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2371903 2371904 Original: T1709375002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chemical Oxygen Demand	mg/L	0	500	560	570	111	115	90-110	3	10	J4

QUALITY CONTROL DATA QUALIFIERS

Workorder: T1709375 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

CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1709375 SELF Plant Effluent

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1709375001	Leachate			SM 5210B	WCAt/9007
T1709375002	Field Blank			SM 5210B	WCAt/9007
T1709375001	Leachate			SM 4500NO3-F	WCAt/9009
T1709375002	Field Blank			SM 4500NO3-F	WCAt/9009
T1709375001	Leachate			SM 2540D	WCAt/9035
T1709375002	Field Blank			SM 2540D	WCAt/9035
T1709375001	Leachate			SM 2540 C	WCAt/9037
T1709375002	Field Blank			SM 2540 C	WCAt/9037
T1709375001	Leachate			EPA 410.4	WCAt/9055
T1709375002	Field Blank			EPA 410.4	WCAt/9055
T1709375001	Leachate	Field Measurements	FLDt/	Field Measurements	FLDt/

T1709375

Advanced Environmental Laboratories, Inc.

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☐ **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 Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ **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

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: J. FULLER / A. LAFON
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: SELF Plant Effluent
P.O. Number/Project Number: N/A
Project Location: Southeast County Landfill
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	COD	BOD	TDS	TSS	Nitrate						LABORATORY I.D. NUMBER
	BOTTLE SIZE & TYPE																	
	ANALYSIS REQUIRED																	
LEACHATE EFFLUENT	Leachate Effluent		5/31/17	938				X	X	X	X	X						001
FIELD BLANK	Field Blank		5/31/17	920	DI			X	X	X	X	X						002

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

Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☐ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☑ Where required, pH checked Temperature when received 4.0 (in degrees celcius)

Form revised 09/19/2012

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: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		5/31/17	1437		5/31/17	1445
2						14:37
3						45 3 time
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:
Site Address:

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant	SITE LOCATION: Lithia, Florida	
WELL NO: Leachate Effluent	SAMPLE ID: Leachate Effluent	DATE: 5/31/17

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)
938	N/A	N/A	N/A	N/A	7.75	31.66	18937	1.25	178	DK YELLOW MURKY	LEACHATE
							ML 5/31/17				

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: J. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 938	SAMPLING ENDED AT: 942
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
FIELD DECONTAMINATION: ~~PUMP Y N~~	~~TUBING Y N (replaced)~~	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** ORP: 938 (118.4)

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

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

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

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

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant	SITE LOCATION: Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 5/31/17

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)

= (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)

FIELD BLANK
AL
5/31/17

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: J. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 920	SAMPLING ENDED AT: 924
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
FIELD DECONTAMINATION: ~~PUMP Y N~~	~~TUBING Y N (replaced)~~	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** FIELD BLANK

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

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

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

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

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

Advanced Environmental Laboratories, Inc.

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

Queue: WCAt

Batch Number: 9055

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 410.4

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recoveries of COD for T1709375002 were outside control criteria due to the presence of target analytes in the sample. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The affected sample is qualified to indicate matrix interference. The MS recovery was 111% and the MSD recovery was 115%. The acceptable recovery range is 90-110%.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

July 5, 2017

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

RE: Workorder: T1709955 SELF Plant Effluent Semi

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, June 08, 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: T1709955 SELF Plant Effluent Semi

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1709955001	Leachate Effluent(Semi Annual)	Water	6/8/2017 11:05	6/8/2017 14:06
T1709955002	Field Blank	Water	6/8/2017 10:20	6/8/2017 14:06
T1709955003	Travel Blank	Water	6/8/2017 00:00	6/8/2017 14:06

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

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	**17209**		**umhos/cm**	**1**			6/8/2017 11:05	
Dissolved Oxygen	**0.86**		**mg/L**	**1**			6/8/2017 11:05	
ORP-2580BW	**85.1**		**mV**	**1**			6/8/2017 11:05	
Temperature	**30.32**		**°C**	**1**			6/8/2017 11:05	
Turbidity	**52**		**NTU**	**1**			6/8/2017 11:05	
pH	**7.71**		**SU**	**1**			6/8/2017 11:05	
METALS								
Analysis Desc: E200.7 Analysis,Waters	Preparation Method: EPA 200.7 Analytical Method: EPA 200.7							
Aluminum	**0.025**	**U**	**mg/L**	**1**	0.60	0.025	6/14/2017 18:27	T
Barium	**0.037**		**mg/L**	**1**	0.0020	0.0015	6/14/2017 18:27	T
Beryllium	**0.00011**	**U**	**mg/L**	**1**	0.00060	0.00011	6/14/2017 18:27	T
Chromium	**0.0080**		**mg/L**	**1**	0.0025	0.0020	6/14/2017 18:27	T
Iron	**0.71**		**mg/L**	**1**	0.10	0.021	6/14/2017 18:27	T
Nickel	**0.044**		**mg/L**	**1**	0.0090	0.0044	6/14/2017 18:27	T
Sodium	**3300**		**mg/L**	**100**	20	17	6/15/2017 13:58	T
Zinc	**0.050**		**mg/L**	**1**	0.010	0.0074	6/14/2017 18:27	T
Analysis Desc: E200.8 Analysis,Waters	Preparation Method: EPA 200.8 Analytical Method: EPA 200.8							
Antimony	**0.0013**		**mg/L**	**1**	0.00070	0.000046	6/13/2017 18:50	J
Arsenic	**0.0043**		**mg/L**	**1**	0.0010	0.000077	6/13/2017 18:50	J
Cadmium	**0.000028**	**U**	**mg/L**	**1**	0.00050	0.000028	6/13/2017 18:50	J
Copper	**0.022**		**mg/L**	**1**	0.00070	0.00011	6/13/2017 18:50	J
Lead	**0.0059**		**mg/L**	**1**	0.00070	0.00024	6/13/2017 18:50	J
Manganese	**0.24**		**mg/L**	**1**	0.0010	0.000055	6/13/2017 18:50	J
Selenium	**0.00074**	**I**	**mg/L**	**1**	0.0050	0.00058	6/13/2017 18:50	J
Silver	**0.000064**	**I**	**mg/L**	**1**	0.00050	0.000027	6/13/2017 18:50	J
Thallium	**0.000057**	**U**	**mg/L**	**1**	0.00020	0.000057	6/13/2017 18:50	J
Uranium	**1.1**		**ug/L**	**1**	0.20	0.070	6/13/2017 18:50	J
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000050**	**U**	**mg/L**	**1**	0.00010	0.000050	6/20/2017 14:42	T

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
SEMIVOLATILES								
Analysis Desc: E504.1 Analysis, Water	Preparation Method: EPA 504.1 Analytical Method: EPA 504.1							
1,2-Dibromo-3-Chloropropane	**0.0061**	**U**	**ug/L**	**1**	0.020	0.0061	6/13/2017 03:34	J
Ethylene Dibromide (EDB)	**0.0063**	**U**	**ug/L**	**1**	0.020	0.0063	6/13/2017 03:34	J
Tetrachloro-m-xylene (S)	**22**	**J4**	**%**	**1**	64-150		6/13/2017 03:34	
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	6/14/2017 01:13	J
Endrin	**0.034**	**U**	**ug/L**	**5**	0.10	0.034	6/14/2017 01:13	J
Heptachlor	**0.030**	**U**	**ug/L**	**5**	0.10	0.030	6/14/2017 01:13	J
Heptachlor Epoxide	**0.026**	**U**	**ug/L**	**5**	0.10	0.026	6/14/2017 01:13	J
Hexachlorobenzene	**0.032**	**U**	**ug/L**	**5**	0.10	0.032	6/14/2017 01:13	J
Hexachlorocyclopentadiene	**0.062**	**U**	**ug/L**	**5**	0.10	0.062	6/14/2017 01:13	J
Methoxychlor	**0.034**	**U**	**ug/L**	**5**	0.10	0.034	6/14/2017 01:13	J
PCBs	**0.55**	**U**	**ug/L**	**5**	1.0	0.55	6/14/2017 01:13	J
Toxaphene	**0.60**	**U**	**ug/L**	**5**	1.0	0.60	6/14/2017 01:13	J
gamma-BHC (Lindane)	**0.036**	**U**	**ug/L**	**5**	0.10	0.036	6/14/2017 01:13	J
Tetrachloro-m-xylene (S)	**0**	**1**	**%**	**5**	70-130		6/14/2017 01:13	
Decachlorobiphenyl (S)	**0**	**1**	**%**	**5**	70-130		6/14/2017 01:13	
Analysis Desc: E515.3 Analysis, Water	Preparation Method: EPA 515.3 Analytical Method: EPA 515.3							
2,4-D	**7.7**	**U**	**ug/L**	**5**	25	7.7	6/15/2017 20:03	J
Dalapon	**1.0**	**U**	**ug/L**	**1**	5.0	1.0	6/14/2017 14:42	J
Dinoseb	**0.86**	**U**	**ug/L**	**1**	2.5	0.86	6/14/2017 14:42	J
Pentachlorophenol	**0.069**	**U**	**ug/L**	**1**	0.50	0.069	6/14/2017 14:42	J
Picloram	**0.23**	**U**	**ug/L**	**1**	0.50	0.23	6/14/2017 14:42	J
Silvex (2,4,5-TP)	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	6/14/2017 14:42	J
2,4-Dichlorophenylacetic acid (S)	**0**	**J4**	**%**	**1**	70-130		6/14/2017 14:42	
Analysis Desc: E525.2 Analysis, Water	Preparation Method: EPA 525.2 Analytical Method: EPA 525.2							
Alachlor	**1.2**	**U**	**ug/L**	**1**	2.4	1.2	6/26/2017 04:38	J
Atrazine	**0.76**	**U**	**ug/L**	**1**	2.4	0.76	6/26/2017 04:38	J
Benzo[a]pyrene	**0.46**	**U**	**ug/L**	**1**	2.4	0.46	6/26/2017 04:38	J
Di(2-ethylhexyl) adipate	**4.5**	**U**	**ug/L**	**1**	4.8	4.5	6/26/2017 04:38	J

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Simazine	**0.90**	**U**	**ug/L**	**1**	2.4	0.90	6/26/2017 04:38	J
bis(2-Ethylhexyl) phthalate	**7.1**	**U**	**ug/L**	**1**	9.5	7.1	6/26/2017 04:38	J
p-Terphenyl-d14 (S)	**24**	**J4**	**%**	**1**	70-130		6/26/2017 04:38	
Analysis Desc: E531.1 Analysis, Water	Analytical Method: EPA 531.1							
Carbofuran	**0.28**	**U**	**ug/L**	**1**	2.5	0.28	6/13/2017 06:29	J
Oxamyl	**0.57**	**U**	**ug/L**	**1**	2.5	0.57	6/13/2017 06:29	J
Analysis Desc: E547 Analysis, Water	Analytical Method: EPA 547							
Glyphosate	**6.5**	**U**	**ug/L**	**1**	50	6.5	6/14/2017 18:24	J
Analysis Desc: E548.1 Analysis, Water	Preparation Method: EPA 548.1 Analytical Method: EPA 548.1							
Endothall	**1.2**	**U**	**ug/L**	**1**	8.3	1.2	6/15/2017 16:29	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	6/13/2017 16:25	J
Analysis Desc: 552.2 Analysis,Water,HAA	Preparation Method: EPA 552.2 Analytical Method: EPA 552.2							
Bromoacetic Acid	**13.99**		**ug/L**	**1**	1.0	0.54	6/20/2017 05:06	T
Chloroacetic Acid	**10.76**		**ug/L**	**1**	1.0	0.50	6/20/2017 05:06	T
Dibromoacetic Acid	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	6/20/2017 05:06	T
Dichloroacetic Acid	**29.67**		**ug/L**	**1**	1.0	0.81	6/20/2017 05:06	T
Total Haloacetic Acids (HAA5)	**54.42**		**ug/L**	**1**	1.0	0.50	6/20/2017 05:06	T
Trichloroacetic Acid	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	6/20/2017 05:06	T
2,3-Dibromopropionic Acid (S)	**187**	**J4**	**%**	**1**	70-130		6/20/2017 05:06	
Analysis Desc: 8081A Pesticide Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: EPA 8081							
4,4`-DDD	**0.012**	**U**	**ug/L**	**5**	0.10	0.012	6/15/2017 01:10	M
4,4`-DDE	**0.0080**	**U**	**ug/L**	**5**	0.10	0.0080	6/15/2017 01:10	M
4,4`-DDT	**0.015**	**U**	**ug/L**	**5**	0.10	0.015	6/15/2017 01:10	M
Aldrin	**0.010**	**U**	**ug/L**	**5**	0.10	0.010	6/15/2017 01:10	M
Dieldrin	**0.0080**	**U**	**ug/L**	**5**	0.10	0.0080	6/15/2017 01:10	M
Endosulfan I	**0.0080**	**U**	**ug/L**	**5**	0.10	0.0080	6/15/2017 01:10	M
Endosulfan II	**0.0065**	**U**	**ug/L**	**5**	0.10	0.0065	6/15/2017 01:10	M
Endosulfan Sulfate	**0.0085**	**U**	**ug/L**	**5**	0.10	0.0085	6/15/2017 01:10	M

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Endrin Aldehyde	**0.024**	**U**	**ug/L**	**5**	0.10	0.024	6/15/2017 01:10	M
alpha-BHC	**0.020**	**U**	**ug/L**	**5**	0.10	0.020	6/15/2017 01:10	M
beta-BHC	**0.036**	**U**	**ug/L**	**5**	0.10	0.036	6/15/2017 01:10	M
delta-BHC	**0.028**	**U**	**ug/L**	**5**	0.10	0.028	6/15/2017 01:10	M
Tetrachloro-m-xylene (S)	**52**		**%**	**5**	44-124		6/15/2017 01:10	
Decachlorobiphenyl (S)	**76**		**%**	**5**	48-137		6/15/2017 01:10	
Analysis Desc: 8082A PCB Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8082A							
Aroclor 1016 (PCB-1016)	**0.75**	**U**	**ug/L**	**5**	1.0	0.75	6/15/2017 01:10	M
Aroclor 1221 (PCB-1221)	**0.65**	**U**	**ug/L**	**5**	1.0	0.65	6/15/2017 01:10	M
Aroclor 1232 (PCB-1232)	**0.95**	**U**	**ug/L**	**5**	1.0	0.95	6/15/2017 01:10	M
Aroclor 1242 (PCB-1242)	**0.85**	**U**	**ug/L**	**5**	1.0	0.85	6/15/2017 01:10	M
Aroclor 1248 (PCB-1248)	**0.80**	**U**	**ug/L**	**5**	1.0	0.80	6/15/2017 01:10	M
Aroclor 1254 (PCB-1254)	**0.20**	**U**	**ug/L**	**5**	1.0	0.20	6/15/2017 01:10	M
Aroclor 1260 (PCB-1260)	**0.10**	**U**	**ug/L**	**5**	1.0	0.10	6/15/2017 01:10	M
Tetrachloro-m-xylene (S)	**91**		**%**	**5**	61-119		6/15/2017 01:10	
Decachlorobiphenyl (S)	**71**		**%**	**5**	44-136		6/15/2017 01:10	
Analysis Desc: 8270C Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8270C							
1,2-Diphenylhydrazine	**4.8**	**U**	**ug/L**	**5**	25	4.8	6/15/2017 01:25	J
1,3-Dichlorobenzene	**5.1**	**U**	**ug/L**	**5**	25	5.1	6/15/2017 01:25	J
2,4,6-Trichlorophenol	**4.6**	**U**	**ug/L**	**5**	25	4.6	6/15/2017 01:25	J
2,4-Dichlorophenol	**4.5**	**U**	**ug/L**	**5**	25	4.5	6/15/2017 01:25	J
2,4-Dimethylphenol	**13**	**U**	**ug/L**	**5**	25	13	6/15/2017 01:25	J
2,4-Dinitrophenol	**3.1**	**U**	**ug/L**	**5**	50	3.1	6/15/2017 01:25	J
2,4-Dinitrotoluene (2,4-DNT)	**3.0**	**U**	**ug/L**	**5**	25	3.0	6/15/2017 01:25	J
2,6-Dinitrotoluene (2,6-DNT)	**5.5**	**U**	**ug/L**	**5**	25	5.5	6/15/2017 01:25	J
2-Chloronaphthalene	**4.9**	**U**	**ug/L**	**5**	25	4.9	6/15/2017 01:25	J
2-Chlorophenol	**5.9**	**U**	**ug/L**	**5**	25	5.9	6/15/2017 01:25	J
2-Methyl-4,6-dinitrophenol	**3.9**	**U**	**ug/L**	**5**	25	3.9	6/15/2017 01:25	J
2-Nitrophenol	**3.1**	**U**	**ug/L**	**5**	25	3.1	6/15/2017 01:25	J
3,3`-Dichlorobenzidine	**6.3**	**U**	**ug/L**	**5**	25	6.3	6/15/2017 01:25	J
4-Bromophenyl Phenyl Ether	**5.7**	**U**	**ug/L**	**5**	25	5.7	6/15/2017 01:25	J
4-Chloro-3-methylphenol	**3.1**	**U**	**ug/L**	**5**	25	3.1	6/15/2017 01:25	J
4-Chlorophenyl Phenyl Ether	**3.4**	**U**	**ug/L**	**5**	25	3.4	6/15/2017 01:25	J
4-Nitrophenol	**3.1**	**U**	**ug/L**	**5**	25	3.1	6/15/2017 01:25	J
Acenaphthene	**0.20**	**U**	**ug/L**	**5**	1.0	0.20	6/15/2017 01:25	J
Acenaphthylene	**0.21**	**U**	**ug/L**	**5**	1.0	0.21	6/15/2017 01:25	J

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Anthracene	**0.18**	**U**	**ug/L**	**5**	1.0	0.18	6/15/2017 01:25	J
Benzidine	**3.7**	**U**	**ug/L**	**5**	25	3.7	6/15/2017 01:25	J
Benzo[a]anthracene	**0.062**	**U**	**ug/L**	**5**	1.0	0.062	6/15/2017 01:25	J
Benzo[b]fluoranthene	**0.062**	**U**	**ug/L**	**5**	0.50	0.062	6/15/2017 01:25	J
Benzo[g,h,i]perylene	**0.24**	**U**	**ug/L**	**5**	1.0	0.24	6/15/2017 01:25	J
Benzo[k]fluoranthene	**0.24**	**U**	**ug/L**	**5**	1.0	0.24	6/15/2017 01:25	J
Butyl benzyl phthalate	**5.4**	**U**	**ug/L**	**5**	25	5.4	6/15/2017 01:25	J
Chrysene	**0.17**	**U**	**ug/L**	**5**	1.0	0.17	6/15/2017 01:25	J
Di-n-Butyl Phthalate	**4.4**	**U**	**ug/L**	**5**	25	4.4	6/15/2017 01:25	J
Di-n-octyl Phthalate	**6.1**	**U**	**ug/L**	**5**	25	6.1	6/15/2017 01:25	J
Dibenzo[a,h]anthracene	**0.12**	**U**	**ug/L**	**5**	1.0	0.12	6/15/2017 01:25	J
Diethyl phthalate	**4.9**	**U**	**ug/L**	**5**	25	4.9	6/15/2017 01:25	J
Dimethyl phthalate	**50**	**U**	**ug/L**	**5**	50	50	6/15/2017 01:25	J
Fluoranthene	**0.18**	**U**	**ug/L**	**5**	1.0	0.18	6/15/2017 01:25	J
Fluorene	**0.19**	**U**	**ug/L**	**5**	1.0	0.19	6/15/2017 01:25	J
Hexachlorobutadiene	**4.4**	**U**	**ug/L**	**5**	25	4.4	6/15/2017 01:25	J
Hexachloroethane	**6.2**	**U**	**ug/L**	**5**	25	6.2	6/15/2017 01:25	J
Indeno(1,2,3-cd)pyrene	**0.056**	**U**	**ug/L**	**5**	1.0	0.056	6/15/2017 01:25	J
Isophorone	**5.6**	**U**	**ug/L**	**5**	25	5.6	6/15/2017 01:25	J
N-Nitrosodi-n-propylamine	**11**	**U**	**ug/L**	**5**	25	11	6/15/2017 01:25	J
N-Nitrosodimethylamine	**3.1**	**U**	**ug/L**	**5**	25	3.1	6/15/2017 01:25	J
N-Nitrosodiphenylamine	**2.9**	**U**	**ug/L**	**5**	25	2.9	6/15/2017 01:25	J
Naphthalene	**0.24**	**U**	**ug/L**	**5**	1.0	0.24	6/15/2017 01:25	J
Nitrobenzene	**5.7**	**U**	**ug/L**	**5**	25	5.7	6/15/2017 01:25	J
Phenanthrene	**0.20**	**U**	**ug/L**	**5**	1.0	0.20	6/15/2017 01:25	J
Phenol	**2.7**	**U**	**ug/L**	**5**	25	2.7	6/15/2017 01:25	J
Pyrene	**0.18**	**U**	**ug/L**	**5**	1.0	0.18	6/15/2017 01:25	J
bis(2-Chloroethoxy)methane	**6.2**	**U**	**ug/L**	**5**	25	6.2	6/15/2017 01:25	J
bis(2-Chloroethyl)Ether	**7.3**	**U**	**ug/L**	**5**	25	7.3	6/15/2017 01:25	J
bis(2-Chloroisopropyl) Ether	**7.1**	**U**	**ug/L**	**5**	25	7.1	6/15/2017 01:25	J
bis(2-Ethylhexyl) phthalate	**9.9**	**U**	**ug/L**	**5**	25	9.9	6/15/2017 01:25	J
2-Fluorophenol (S)	**0**	**1**	**%**	**5**	31-134		6/15/2017 01:25	
Phenol-d6 (S)	**0**	**1**	**%**	**5**	24-120		6/15/2017 01:25	
Nitrobenzene-d5 (S)	**0**	**1**	**%**	**5**	38-139		6/15/2017 01:25	
2-Fluorobiphenyl (S)	**0**	**1**	**%**	**5**	42-138		6/15/2017 01:25	
2,4,6-Tribromophenol (S)	**0**	**1**	**%**	**5**	48-147		6/15/2017 01:25	
p-Terphenyl-d14 (S)	**0**	**1**	**%**	**5**	61-154		6/15/2017 01:25	

VOLATILES

Analysis Desc: 524.2 Analysis, Water Analytical Method: EPA 524.2

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,1,1-Trichloroethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	6/16/2017 14:54	J
1,1,2-Trichloroethane	**0.35**	**U**	**ug/L**	**1**	1.0	0.35	6/16/2017 14:54	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	6/16/2017 14:54	J
1,2,4-Trichlorobenzene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	6/16/2017 14:54	J
1,2-Dichlorobenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	6/16/2017 14:54	J
1,2-Dichloroethane	**0.27**	**U**	**ug/L**	**1**	1.0	0.27	6/16/2017 14:54	J
1,2-Dichloropropane	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	6/16/2017 14:54	J
1,4-Dichlorobenzene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	6/16/2017 14:54	J
Benzene	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	6/16/2017 14:54	J
Bromodichloromethane	**44.80**		**ug/L**	**1**	1.0	0.95	6/16/2017 14:54	J
Bromoform	**136.77**		**ug/L**	**1**	1.0	1.0	6/16/2017 14:54	J
Carbon Tetrachloride	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	6/16/2017 14:54	J
Chlorobenzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	6/16/2017 14:54	J
Chloroform	**11.54**		**ug/L**	**1**	1.0	0.98	6/16/2017 14:54	J
Dibromochloromethane	**98.17**		**ug/L**	**1**	1.0	0.82	6/16/2017 14:54	J
Ethylbenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	6/16/2017 14:54	J
Methylene Chloride	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	6/16/2017 14:54	J
Styrene	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	6/16/2017 14:54	J
Tetrachloroethylene (PCE)	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	6/16/2017 14:54	J
Toluene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	6/16/2017 14:54	J
Total Trihalomethanes	**291.28**		**ug/L**	**1**	1.0	0.82	6/16/2017 14:54	J
Trichloroethene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	6/16/2017 14:54	J
Vinyl Chloride	**0.13**	**U**	**ug/L**	**1**	1.0	0.13	6/16/2017 14:54	J
Xylene (Total)	**1.1**	**I**	**ug/L**	**1**	2.0	0.38	6/16/2017 14:54	J
cis-1,2-Dichloroethylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	6/16/2017 14:54	J
trans-1,2-Dichloroethylene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/16/2017 14:54	J
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	80-120		6/16/2017 14:54	
1,2-Dichloroethane-d4 (S)	**113**		**%**	**1**	80-120		6/16/2017 14:54	
Toluene-d8 (S)	**84**		**%**	**1**	81-118		6/16/2017 14:54	
Toluene-d8 (S)	**84**		**%**	**1**	81-118		6/16/2017 14:54	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-115		6/16/2017 14:54	
Bromofluorobenzene (S)	**111**		**%**	**1**	86-115		6/16/2017 14:54	
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	6/10/2017 07:13	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	6/10/2017 07:13	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	6/10/2017 07:13	T
Acrolein (Propenal)	**69**		**ug/L**	**1**	4.0	3.1	6/10/2017 07:13	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	6/10/2017 07:13	T

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Leachate Effluent(Semi Annual)** Date Collected: 06/08/17 11:05

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	6/10/2017 07:13	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/10/2017 07:13	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	6/10/2017 07:13	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	6/10/2017 07:13	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		6/10/2017 07:13	
Toluene-d8 (S)	**105**		**%**	**1**	77-119		6/10/2017 07:13	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		6/10/2017 07:13	
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water	Analytical Method: EPA 300.0							
Chloride	**4300**		**mg/L**	**25**	120	25	6/15/2017 01:11	T
Fluoride	**2.5**	**U**	**mg/L**	**25**	12	2.5	6/15/2017 01:11	T
Sulfate	**25**	**U**	**mg/L**	**25**	120	25	6/15/2017 01:11	T
Analysis Desc: Color,SM2120B,Water	Analytical Method: SM 2120 B							
Color	**530**		**PCU**	**10**	50	27	6/9/2017 08:55	T
pH for Color Analysis	**8.0**		**SU**	**10**	5.0	0.10	6/9/2017 08:55	T
Analysis Desc: Odor,SM2150B,Water	Analytical Method: SM 2150 B							
Odor	**24**		**TON**	**1**	1.0	1.0	6/8/2017 16:15	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**9600**		**mg/L**	**1.25**	12	12	6/13/2017 09:07	T
Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water	Analytical Method: SM 3500-CR D							
Hexavalent Chromium	**0.0025**	**U,Q**	**mg/L**	**1**	0.040	0.0025	6/12/2017 09:35	T
Analysis Desc: Cyanide, SM4500-E, Water	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0048**	**U**	**mg/L**	**1**	0.010	0.0048	6/20/2017 16:46	T
Analysis Desc: .PH,SM4500H+B, Water	Analytical Method: SM 4500H+B							
pH	**7.6**	**Q**	**SU**	**1**			6/9/2017 12:31	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/9/2017 13:27	T
Nitrite	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/9/2017 13:27	T

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955001**
Sample ID: **Leachate Effluent(Semi Annual)**

Date Received: 06/08/17 14:06 Matrix: Water
Date Collected: 06/08/17 11:05

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous	Analytical Method: SM 5540 C							
MBAS,as LAS,mol.wt.348	**0.27**		**mg/L**	**1**	0.20	0.040	6/9/2017 15:25	G

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: E200.7 Analysis,Waters	Preparation Method: EPA 200.7 Analytical Method: EPA 200.7							
Aluminum	**0.025**	**U**	**mg/L**	**1**	0.60	0.025	6/15/2017 14:02	T
Barium	**0.0015**	**U**	**mg/L**	**1**	0.0020	0.0015	6/15/2017 14:02	T
Beryllium	**0.00011**	**U**	**mg/L**	**1**	0.00060	0.00011	6/15/2017 14:02	T
Chromium	**0.0020**	**U**	**mg/L**	**1**	0.0025	0.0020	6/15/2017 14:02	T
Iron	**0.021**	**U**	**mg/L**	**1**	0.10	0.021	6/15/2017 14:02	T
Nickel	**0.0044**	**U**	**mg/L**	**1**	0.0090	0.0044	6/15/2017 14:02	T
Sodium	**0.17**	**U**	**mg/L**	**1**	0.20	0.17	6/15/2017 14:02	T
Zinc	**0.0085**	**I**	**mg/L**	**1**	0.010	0.0074	6/15/2017 14:02	T
Analysis Desc: E200.8 Analysis,Waters	Preparation Method: EPA 200.8 Analytical Method: EPA 200.8							
Antimony	**0.000046**	**U**	**mg/L**	**1**	0.00070	0.000046	6/13/2017 19:02	J
Arsenic	**0.000077**	**U**	**mg/L**	**1**	0.0010	0.000077	6/13/2017 19:02	J
Cadmium	**0.000028**	**U**	**mg/L**	**1**	0.00050	0.000028	6/13/2017 19:02	J
Copper	**0.00011**	**U**	**mg/L**	**1**	0.00070	0.00011	6/13/2017 19:02	J
Lead	**0.00024**	**U**	**mg/L**	**1**	0.00070	0.00024	6/13/2017 19:02	J
Manganese	**0.000055**	**U**	**mg/L**	**1**	0.0010	0.000055	6/13/2017 19:02	J
Selenium	**0.00058**	**U**	**mg/L**	**1**	0.0050	0.00058	6/13/2017 19:02	J
Silver	**0.000027**	**U**	**mg/L**	**1**	0.00050	0.000027	6/13/2017 19:02	J
Thallium	**0.000057**	**U**	**mg/L**	**1**	0.00020	0.000057	6/13/2017 19:02	J
Uranium	**0.070**	**U**	**ug/L**	**1**	0.20	0.070	6/13/2017 19:02	J
Analysis Desc: EPA 245.1 Analysis,Water	Preparation Method: EPA 245.1 Analytical Method: EPA 245.1							
Mercury	**0.000050**	**U**	**mg/L**	**1**	0.00010	0.000050	6/20/2017 14:42	T
SEMIVOLATILES								
Analysis Desc: E504.1 Analysis, Water	Preparation Method: EPA 504.1 Analytical Method: EPA 504.1							
1,2-Dibromo-3-Chloropropane	**0.0061**	**U**	**ug/L**	**1**	0.020	0.0061	6/13/2017 01:43	J
Ethylene Dibromide (EDB)	**0.0063**	**U**	**ug/L**	**1**	0.020	0.0063	6/13/2017 01:43	J
Tetrachloro-m-xylene (S)	**122**		**%**	**1**	64-150		6/13/2017 01:43	
Analysis Desc: E508 Analysis, Water	Preparation Method: EPA 508 Analytical Method: EPA 508							

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Chlordane (technical)	**0.053**	**U**	**ug/L**	**1**	0.20	0.053	6/13/2017 23:10	J
Endrin	**0.0069**	**U**	**ug/L**	**1**	0.020	0.0069	6/13/2017 23:10	J
Heptachlor	**0.0060**	**U**	**ug/L**	**1**	0.020	0.0060	6/13/2017 23:10	J
Heptachlor Epoxide	**0.0052**	**U**	**ug/L**	**1**	0.020	0.0052	6/13/2017 23:10	J
Hexachlorobenzene	**0.0063**	**U**	**ug/L**	**1**	0.020	0.0063	6/13/2017 23:10	J
Hexachlorocyclopentadiene	**0.012**	**U**	**ug/L**	**1**	0.020	0.012	6/13/2017 23:10	J
Methoxychlor	**0.0068**	**U**	**ug/L**	**1**	0.020	0.0068	6/13/2017 23:10	J
PCBs	**0.11**	**U**	**ug/L**	**1**	0.20	0.11	6/13/2017 23:10	J
Toxaphene	**0.12**	**U**	**ug/L**	**1**	0.20	0.12	6/13/2017 23:10	J
gamma-BHC (Lindane)	**0.0071**	**U**	**ug/L**	**1**	0.020	0.0071	6/13/2017 23:10	J
Tetrachloro-m-xylene (S)	**115**		**%**	**1**	70-130		6/13/2017 23:10	
Decachlorobiphenyl (S)	**94**		**%**	**1**	70-130		6/13/2017 23:10	
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	6/14/2017 12:28	J
Dalapon	**1.0**	**U**	**ug/L**	**1**	5.0	1.0	6/14/2017 12:28	J
Dinoseb	**0.86**	**U**	**ug/L**	**1**	2.5	0.86	6/14/2017 12:28	J
Pentachlorophenol	**0.069**	**U**	**ug/L**	**1**	0.50	0.069	6/14/2017 12:28	J
Picloram	**0.23**	**U**	**ug/L**	**1**	0.50	0.23	6/14/2017 12:28	J
Silvex (2,4,5-TP)	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	6/14/2017 12:28	J
2,4-Dichlorophenylacetic acid (S)	**92**		**%**	**1**	70-130		6/14/2017 12:28	
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	6/26/2017 05:04	J
Atrazine	**0.16**	**U**	**ug/L**	**1**	0.50	0.16	6/26/2017 05:04	J
Benzo[a]pyrene	**0.096**	**U**	**ug/L**	**1**	0.50	0.096	6/26/2017 05:04	J
Di(2-ethylhexyl) adipate	**0.95**	**U**	**ug/L**	**1**	1.0	0.95	6/26/2017 05:04	J
Simazine	**0.19**	**U**	**ug/L**	**1**	0.50	0.19	6/26/2017 05:04	J
bis(2-Ethylhexyl) phthalate	**1.5**	**U**	**ug/L**	**1**	2.0	1.5	6/26/2017 05:04	J
p-Terphenyl-d14 (S)	**97**		**%**	**1**	70-130		6/26/2017 05:04	
Analysis Desc: E531.1 Analysis, Water	Analytical Method: EPA 531.1							
Carbofuran	**0.28**	**U**	**ug/L**	**1**	2.5	0.28	6/13/2017 04:39	J
Oxamyl	**0.57**	**U**	**ug/L**	**1**	2.5	0.57	6/13/2017 04:39	J
Analysis Desc: E547 Analysis, Water	Analytical Method: EPA 547							
Glyphosate	**6.5**	**U**	**ug/L**	**1**	50	6.5	6/14/2017 15:48	J

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

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	**1.2**	**U**	**ug/L**	**1**	8.3	1.2	6/15/2017 17:00	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	6/13/2017 15:42	J
Analysis Desc: 552.2 Analysis,Water,HAA	Preparation Method: EPA 552.2 Analytical Method: EPA 552.2							
Bromoacetic Acid	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	6/20/2017 05:30	T
Chloroacetic Acid	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	6/20/2017 05:30	T
Dibromoacetic Acid	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	6/20/2017 05:30	T
Dichloroacetic Acid	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	6/20/2017 05:30	T
Total Haloacetic Acids (HAA5)	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	6/20/2017 05:30	T
Trichloroacetic Acid	**0.91**	**U**	**ug/L**	**1**	1.0	0.91	6/20/2017 05:30	T
2,3-Dibromopropionic Acid (S)	**100**		**%**	**1**	70-130		6/20/2017 05:30	
Analysis Desc: 8081A Pesticide Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: EPA 8081							
4,4`-DDD	**0.0024**	**U**	**ug/L**	**1**	0.020	0.0024	6/15/2017 01:31	M
4,4`-DDE	**0.0016**	**U**	**ug/L**	**1**	0.020	0.0016	6/15/2017 01:31	M
4,4`-DDT	**0.0030**	**U**	**ug/L**	**1**	0.020	0.0030	6/15/2017 01:31	M
Aldrin	**0.0020**	**U**	**ug/L**	**1**	0.020	0.0020	6/15/2017 01:31	M
Dieldrin	**0.0016**	**U**	**ug/L**	**1**	0.020	0.0016	6/15/2017 01:31	M
Endosulfan I	**0.0016**	**U**	**ug/L**	**1**	0.020	0.0016	6/15/2017 01:31	M
Endosulfan II	**0.0013**	**U**	**ug/L**	**1**	0.020	0.0013	6/15/2017 01:31	M
Endosulfan Sulfate	**0.0017**	**U**	**ug/L**	**1**	0.020	0.0017	6/15/2017 01:31	M
Endrin Aldehyde	**0.0048**	**U**	**ug/L**	**1**	0.020	0.0048	6/15/2017 01:31	M
alpha-BHC	**0.0041**	**U**	**ug/L**	**1**	0.020	0.0041	6/15/2017 01:31	M
beta-BHC	**0.0071**	**U**	**ug/L**	**1**	0.020	0.0071	6/15/2017 01:31	M
delta-BHC	**0.0056**	**U**	**ug/L**	**1**	0.020	0.0056	6/15/2017 01:31	M
Tetrachloro-m-xylene (S)	**55**		**%**	**1**	44-124		6/15/2017 01:31	
Decachlorobiphenyl (S)	**69**		**%**	**1**	48-137		6/15/2017 01:31	
Analysis Desc: 8082A PCB Analysis, Water	Preparation Method: SW-846 3510C Analytical Method: SW-846 8082A							
Aroclor 1016 (PCB-1016)	**0.15**	**U**	**ug/L**	**1**	0.20	0.15	6/15/2017 01:31	M

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Aroclor 1221 (PCB-1221)	**0.13**	**U**	**ug/L**	**1**	0.20	0.13	6/15/2017 01:31	M
Aroclor 1232 (PCB-1232)	**0.19**	**U**	**ug/L**	**1**	0.20	0.19	6/15/2017 01:31	M
Aroclor 1242 (PCB-1242)	**0.17**	**U**	**ug/L**	**1**	0.20	0.17	6/15/2017 01:31	M
Aroclor 1248 (PCB-1248)	**0.16**	**U**	**ug/L**	**1**	0.20	0.16	6/15/2017 01:31	M
Aroclor 1254 (PCB-1254)	**0.040**	**U**	**ug/L**	**1**	0.20	0.040	6/15/2017 01:31	M
Aroclor 1260 (PCB-1260)	**0.020**	**U**	**ug/L**	**1**	0.20	0.020	6/15/2017 01:31	M
Tetrachloro-m-xylene (S)	**52**		**%**	**1**	61-119		6/15/2017 01:31	
Decachlorobiphenyl (S)	**65**		**%**	**1**	44-136		6/15/2017 01:31	
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	6/15/2017 02:06	J
1,3-Dichlorobenzene	**1.0**	**U**	**ug/L**	**1**	5.0	1.0	6/15/2017 02:06	J
2,4,6-Trichlorophenol	**0.93**	**U**	**ug/L**	**1**	5.0	0.93	6/15/2017 02:06	J
2,4-Dichlorophenol	**0.90**	**U**	**ug/L**	**1**	5.0	0.90	6/15/2017 02:06	J
2,4-Dimethylphenol	**2.6**	**U**	**ug/L**	**1**	5.0	2.6	6/15/2017 02:06	J
2,4-Dinitrophenol	**0.62**	**U**	**ug/L**	**1**	10	0.62	6/15/2017 02:06	J
2,4-Dinitrotoluene (2,4-DNT)	**0.60**	**U**	**ug/L**	**1**	5.0	0.60	6/15/2017 02:06	J
2,6-Dinitrotoluene (2,6-DNT)	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	6/15/2017 02:06	J
2-Chloronaphthalene	**0.97**	**U**	**ug/L**	**1**	5.0	0.97	6/15/2017 02:06	J
2-Chlorophenol	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	6/15/2017 02:06	J
2-Methyl-4,6-dinitrophenol	**0.77**	**U**	**ug/L**	**1**	5.0	0.77	6/15/2017 02:06	J
2-Nitrophenol	**0.63**	**U**	**ug/L**	**1**	5.0	0.63	6/15/2017 02:06	J
3,3`-Dichlorobenzidine	**1.3**	**U**	**ug/L**	**1**	5.0	1.3	6/15/2017 02:06	J
4-Bromophenyl Phenyl Ether	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	6/15/2017 02:06	J
4-Chloro-3-methylphenol	**0.62**	**U**	**ug/L**	**1**	5.0	0.62	6/15/2017 02:06	J
4-Chlorophenyl Phenyl Ether	**0.69**	**U**	**ug/L**	**1**	5.0	0.69	6/15/2017 02:06	J
4-Nitrophenol	**0.62**	**U**	**ug/L**	**1**	5.0	0.62	6/15/2017 02:06	J
Acenaphthene	**0.040**	**U**	**ug/L**	**1**	0.20	0.040	6/15/2017 02:06	J
Acenaphthylene	**0.042**	**U**	**ug/L**	**1**	0.20	0.042	6/15/2017 02:06	J
Anthracene	**0.035**	**U**	**ug/L**	**1**	0.20	0.035	6/15/2017 02:06	J
Benzidine	**0.74**	**U**	**ug/L**	**1**	5.0	0.74	6/15/2017 02:06	J
Benzo[a]anthracene	**0.012**	**U**	**ug/L**	**1**	0.20	0.012	6/15/2017 02:06	J
Benzo[b]fluoranthene	**0.012**	**U**	**ug/L**	**1**	0.10	0.012	6/15/2017 02:06	J
Benzo[g,h,i]perylene	**0.048**	**U**	**ug/L**	**1**	0.20	0.048	6/15/2017 02:06	J
Benzo[k]fluoranthene	**0.048**	**U**	**ug/L**	**1**	0.20	0.048	6/15/2017 02:06	J
Butyl benzyl phthalate	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	6/15/2017 02:06	J
Chrysene	**0.033**	**U**	**ug/L**	**1**	0.20	0.033	6/15/2017 02:06	J
Di-n-Butyl Phthalate	**0.88**	**U**	**ug/L**	**1**	5.0	0.88	6/15/2017 02:06	J
Di-n-octyl Phthalate	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	6/15/2017 02:06	J

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

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	6/15/2017 02:06	J
Diethyl phthalate	**0.98**	**U**	**ug/L**	**1**	5.0	0.98	6/15/2017 02:06	J
Dimethyl phthalate	**9.9**	**U**	**ug/L**	**1**	10	9.9	6/15/2017 02:06	J
Fluoranthene	**0.037**	**U**	**ug/L**	**1**	0.20	0.037	6/15/2017 02:06	J
Fluorene	**0.038**	**U**	**ug/L**	**1**	0.20	0.038	6/15/2017 02:06	J
Hexachlorobutadiene	**0.87**	**U**	**ug/L**	**1**	5.0	0.87	6/15/2017 02:06	J
Hexachloroethane	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	6/15/2017 02:06	J
Indeno(1,2,3-cd)pyrene	**0.011**	**U**	**ug/L**	**1**	0.20	0.011	6/15/2017 02:06	J
Isophorone	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	6/15/2017 02:06	J
N-Nitrosodi-n-propylamine	**2.2**	**U**	**ug/L**	**1**	5.0	2.2	6/15/2017 02:06	J
N-Nitrosodimethylamine	**0.62**	**U**	**ug/L**	**1**	5.0	0.62	6/15/2017 02:06	J
N-Nitrosodiphenylamine	**0.59**	**U**	**ug/L**	**1**	5.0	0.59	6/15/2017 02:06	J
Naphthalene	**0.083**	**I**	**ug/L**	**1**	0.20	0.048	6/15/2017 02:06	J
Nitrobenzene	**1.1**	**U**	**ug/L**	**1**	5.0	1.1	6/15/2017 02:06	J
Phenanthrene	**0.040**	**U**	**ug/L**	**1**	0.20	0.040	6/15/2017 02:06	J
Phenol	**0.54**	**U**	**ug/L**	**1**	5.0	0.54	6/15/2017 02:06	J
Pyrene	**0.036**	**U**	**ug/L**	**1**	0.20	0.036	6/15/2017 02:06	J
bis(2-Chloroethoxy)methane	**1.2**	**U**	**ug/L**	**1**	5.0	1.2	6/15/2017 02:06	J
bis(2-Chloroethyl)Ether	**1.5**	**U**	**ug/L**	**1**	5.0	1.5	6/15/2017 02:06	J
bis(2-Chloroisopropyl) Ether	**1.4**	**U**	**ug/L**	**1**	5.0	1.4	6/15/2017 02:06	J
bis(2-Ethylhexyl) phthalate	**2.0**	**U**	**ug/L**	**1**	5.0	2.0	6/15/2017 02:06	J
2-Fluorophenol (S)	**59**		**%**	**1**	31-134		6/15/2017 02:06	
Phenol-d6 (S)	**45**		**%**	**1**	24-120		6/15/2017 02:06	
Nitrobenzene-d5 (S)	**80**		**%**	**1**	38-139		6/15/2017 02:06	
2-Fluorobiphenyl (S)	**76**		**%**	**1**	42-138		6/15/2017 02:06	
2,4,6-Tribromophenol (S)	**95**		**%**	**1**	48-147		6/15/2017 02:06	
p-Terphenyl-d14 (S)	**103**		**%**	**1**	61-154		6/15/2017 02:06	

VOLATILES

Analysis Desc: 524.2 Analysis, Water Analytical Method: EPA 524.2

1,1,1-Trichloroethane	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	6/16/2017 15:20	J
1,1,2-Trichloroethane	**0.35**	**U**	**ug/L**	**1**	1.0	0.35	6/16/2017 15:20	J
1,1-Dichloroethylene	**0.18**	**U**	**ug/L**	**1**	1.0	0.18	6/16/2017 15:20	J
1,2,4-Trichlorobenzene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	6/16/2017 15:20	J
1,2-Dichlorobenzene	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	6/16/2017 15:20	J
1,2-Dichloroethane	**0.27**	**U**	**ug/L**	**1**	1.0	0.27	6/16/2017 15:20	J
1,2-Dichloropropane	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	6/16/2017 15:20	J
1,4-Dichlorobenzene	**0.23**	**U**	**ug/L**	**1**	1.0	0.23	6/16/2017 15:20	J
Benzene	**0.15**	**U**	**ug/L**	**1**	1.0	0.15	6/16/2017 15:20	J
Bromodichloromethane	**0.95**	**U**	**ug/L**	**1**	1.0	0.95	6/16/2017 15:20	J

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromoform	**1.0**	**U**	**ug/L**	**1**	1.0	1.0	6/16/2017 15:20	J
Carbon Tetrachloride	**0.24**	**U**	**ug/L**	**1**	1.0	0.24	6/16/2017 15:20	J
Chlorobenzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	6/16/2017 15:20	J
Chloroform	**0.98**	**U**	**ug/L**	**1**	1.0	0.98	6/16/2017 15:20	J
Dibromochloromethane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	6/16/2017 15:20	J
Ethylbenzene	**0.21**	**U**	**ug/L**	**1**	1.0	0.21	6/16/2017 15:20	J
Methylene Chloride	**0.25**	**U**	**ug/L**	**1**	1.0	0.25	6/16/2017 15:20	J
Styrene	**0.14**	**U**	**ug/L**	**1**	1.0	0.14	6/16/2017 15:20	J
Tetrachloroethylene (PCE)	**0.30**	**U**	**ug/L**	**1**	1.0	0.30	6/16/2017 15:20	J
Toluene	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	6/16/2017 15:20	J
Total Trihalomethanes	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	6/16/2017 15:20	J
Trichloroethene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	6/16/2017 15:20	J
Vinyl Chloride	**0.13**	**U**	**ug/L**	**1**	1.0	0.13	6/16/2017 15:20	J
Xylene (Total)	**0.38**	**U**	**ug/L**	**1**	2.0	0.38	6/16/2017 15:20	J
cis-1,2-Dichloroethylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	6/16/2017 15:20	J
trans-1,2-Dichloroethylene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/16/2017 15:20	J
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	80-120		6/16/2017 15:20	
1,2-Dichloroethane-d4 (S)	**114**		**%**	**1**	80-120		6/16/2017 15:20	
Toluene-d8 (S)	**84**		**%**	**1**	81-118		6/16/2017 15:20	
Toluene-d8 (S)	**84**		**%**	**1**	81-118		6/16/2017 15:20	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-115		6/16/2017 15:20	
Bromofluorobenzene (S)	**114**		**%**	**1**	86-115		6/16/2017 15:20	
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	6/10/2017 03:45	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	6/10/2017 03:45	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	6/10/2017 03:45	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	6/10/2017 03:45	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	6/10/2017 03:45	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	6/10/2017 03:45	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/10/2017 03:45	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	6/10/2017 03:45	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	6/10/2017 03:45	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		6/10/2017 03:45	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		6/10/2017 03:45	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		6/10/2017 03:45	

WET CHEMISTRY

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955002** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Field Blank** Date Collected: 06/08/17 10:20

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	6/15/2017 01:27	T
Fluoride	**0.10**	**U**	**mg/L**	**1**	0.50	0.10	6/15/2017 01:27	T
Sulfate	**1.0**	**U**	**mg/L**	**1**	5.0	1.0	6/15/2017 01:27	T
Analysis Desc: Color,SM2120B,Water	Analytical Method: SM 2120 B							
Color	**2.7**	**U,Q**	**PCU**	**1**	5.0	2.7	6/14/2017 16:25	T
pH for Color Analysis	**6.0**		**SU**	**1**	5.0	0.10	6/14/2017 16:25	T
Analysis Desc: Odor,SM2150B,Water	Analytical Method: SM 2150 B							
Odor	**1.0**	**U**	**TON**	**1**	1.0	1.0	6/8/2017 16:15	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**	**U**	**mg/L**	**1.25**	12	12	6/9/2017 11:33	T
Analysis Desc: Hexavalent Chromium,SM3500-CR D,Water	Analytical Method: SM 3500-CR D							
Hexavalent Chromium	**0.0025**	**U,Q**	**mg/L**	**1**	0.040	0.0025	6/12/2017 09:37	T
Analysis Desc: Cyanide, SM4500-E, Water	Analytical Method: SM 4500-CN-E							
Cyanide	**0.0048**	**U**	**mg/L**	**1**	0.010	0.0048	6/20/2017 15:49	T
Analysis Desc: .PH,SM4500H+B, Water	Analytical Method: SM 4500H+B							
pH	**8.7**	**Q**	**SU**	**1**			6/9/2017 12:32	T
Analysis Desc: Nitrate,Nitrite SM4500NO3F,Water	Analytical Method: SM 4500NO3-F							
Nitrate	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/9/2017 13:30	T
Nitrite	**0.18**	**U**	**mg/L**	**1**	0.20	0.18	6/9/2017 13:30	T
Analysis Desc: SURFACT-MBAS,SM5540C,Aqueous	Analytical Method: SM 5540 C							
MBAS,as LAS,mol.wt.348	**0.055**	**I**	**mg/L**	**1**	0.20	0.040	6/9/2017 13:20	G

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955003** Date Received: 06/08/17 14:06 Matrix: Water

Sample ID: **Travel Blank** Date Collected: 06/08/17 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	6/10/2017 03:19	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	6/10/2017 03:19	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	6/10/2017 03:19	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	6/10/2017 03:19	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	6/10/2017 03:19	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	6/10/2017 03:19	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	6/10/2017 03:19	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	6/10/2017 03:19	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	6/10/2017 03:19	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	6/10/2017 03:19	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	6/10/2017 03:19	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	6/10/2017 03:19	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	6/10/2017 03:19	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	6/10/2017 03:19	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	6/10/2017 03:19	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	6/10/2017 03:19	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	6/10/2017 03:19	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	6/10/2017 03:19	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	6/10/2017 03:19	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/10/2017 03:19	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	6/10/2017 03:19	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	6/10/2017 03:19	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	6/10/2017 03:19	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	6/10/2017 03:19	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	6/10/2017 03:19	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	6/10/2017 03:19	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	6/10/2017 03:19	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	6/10/2017 03:19	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	6/10/2017 03:19	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	6/10/2017 03:19	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	6/10/2017 03:19	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	6/10/2017 03:19	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	6/10/2017 03:19	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	6/10/2017 03:19	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	6/10/2017 03:19	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	6/10/2017 03:19	T

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ANALYTICAL RESULTS

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID: **T1709955003**
Sample ID: **Travel Blank**

Date Received: 06/08/17 14:06 Matrix: Water
Date Collected: 06/08/17 00:00

Sample Description:

Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		6/10/2017 03:19	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		6/10/2017 03:19	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		6/10/2017 03:19	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: T1709955 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
J4	Estimated Result

LAB QUALIFIERS

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

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

QC Batch: WCAt/9131 Analysis Method: SM 2150 B
QC Batch Method: SM 2150 B Prepared:
Associated Lab Samples: T1709955001, T1709955002

SAMPLE DUPLICATE: 2375523 Original: T1709955002

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

QC Batch: DGMj/3095 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Prepared: 06/12/2017 07:30
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2375613

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Manganese	mg/L	0.000055	0.000055	U
Copper	mg/L	0.00011	0.00011	U
Arsenic	mg/L	0.000077	0.000077	U
Selenium	mg/L	0.00058	0.00058	U
Silver	mg/L	0.000027	0.000027	U
Cadmium	mg/L	0.000028	0.000028	U
Antimony	mg/L	0.000046	0.000046	U
Thallium	mg/L	0.000057	0.000057	U
Lead	mg/L	0.00024	0.00024	U
Uranium	ug/L	0.070	0.070	U

LABORATORY CONTROL SAMPLE: 2375614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Manganese	mg/L	0.1	0.093	93	85-115	
Copper	mg/L	0.1	0.090	90	85-115	
Arsenic	mg/L	0.1	0.097	97	85-115	
Selenium	mg/L	0.1	0.10	101	85-115	
Silver	mg/L	0.1	0.094	94	85-115	
Cadmium	mg/L	0.1	0.092	92	85-115	
Antimony	mg/L	0.1	0.095	95	85-115	
Thallium	mg/L	0.1	0.091	91	85-115	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2375614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	0.1	0.092	92	85-115	
Uranium	ug/L	100	86	86	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2375615 2375616 Original: M1702234002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Manganese	mg/L	0	0.1	0.095	0.095	95	95	70-130	0	20	
Copper	mg/L	0	0.1	0.085	0.085	85	85	70-130	1	20	
Arsenic	mg/L	0	0.1	0.096	0.097	96	97	70-130	1	20	
Selenium	mg/L	0	0.1	0.096	0.10	96	100	70-130	5	20	
Silver	mg/L	0	0.1	0.092	0.092	92	92	70-130	0	20	
Cadmium	mg/L	7.1e-006	0.1	0.092	0.091	92	91	70-130	1	20	
Antimony	mg/L	0	0.1	0.098	0.097	98	97	70-130	1	20	
Thallium	mg/L	0	0.1	0.090	0.092	90	92	70-130	3	20	
Lead	mg/L	0	0.1	0.089	0.092	89	92	70-130	3	20	
Uranium	ug/L	0	100	91	92	91	92	70-130	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2375617 2375618 Original: M1702235002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Manganese	mg/L			0.096	0.095				1	20	
Copper	mg/L			0.086	0.086				0	20	
Arsenic	mg/L			0.10	0.10				1	20	
Selenium	mg/L			0.099	0.096				4	20	
Silver	mg/L			0.093	0.091				2	20	
Cadmium	mg/L			0.093	0.091				3	20	
Antimony	mg/L			0.099	0.096				3	20	
Thallium	mg/L			0.092	0.091				1	20	
Lead	mg/L			0.088	0.091				3	20	
Uranium	ug/L			94	95				1	20	

QC Batch: WCAt/9137 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T1709955002

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2375758

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

LABORATORY CONTROL SAMPLE: 2375759

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: 2375761 Original: T1709713001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	92	95	3	5	

QC Batch: WCAt/9141 Analysis Method: SM 2120 B

QC Batch Method: SM 2120 B Prepared:

Associated Lab Samples: T1709955001

METHOD BLANK: 2375910

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: 2375912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU		0.10			
Color	PCU	30	30	99	90-110	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

SAMPLE DUPLICATE: 2375913 Original: T1709957001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU	7.0	7.0	0	10	
Color	PCU	8.5	8.7	2	20	

QC Batch: EXTj/3786 Analysis Method: SW-846 8270C

QC Batch Method: SW-846 3510C Prepared: 06/11/2017 14:00

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2376407

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Phenol	ug/L	0.54	0.54	U
2-Chlorophenol	ug/L	1.2	1.2	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	0.62	0.62	U
2,4,6-Trichlorophenol	ug/L	0.93	0.93	U
2,4-Dinitrophenol	ug/L	0.62	0.62	U
4-Nitrophenol	ug/L	0.62	0.62	U
2-Methyl-4,6-dinitrophenol	ug/L	0.77	0.77	U
N-Nitrosodimethylamine	ug/L	0.62	0.62	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
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	0.87	0.87	U
2-Chloronaphthalene	ug/L	0.97	0.97	U
Dimethyl phthalate	ug/L	9.9	9.9	U
2,6-Dinitrotoluene (2,6-DNT)	ug/L	1.1	1.1	U
Acenaphthylene	ug/L	0.042	0.042	U
Acenaphthene	ug/L	0.040	0.040	U
2,4-Dinitrotoluene (2,4-DNT)	ug/L	0.60	0.60	U
Diethyl phthalate	ug/L	0.98	0.98	U

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2376407

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Fluorene	ug/L	0.038	0.038	U
4-Chlorophenyl Phenyl Ether	ug/L	0.69	0.69	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	0.74	0.74	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	0.59	0.59	U
2-Fluorophenol (S)	%	102	31-134	
Phenol-d6 (S)	%	95	24-120	
Nitrobenzene-d5 (S)	%	97	38-139	
2-Fluorobiphenyl (S)	%	92	42-138	
2,4,6-Tribromophenol (S)	%	106	48-147	
p-Terphenyl-d14 (S)	%	102	61-154	

LABORATORY CONTROL SAMPLE: 2376408

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
Phenol	ug/L	40	32	81	19-106	
2,4-Dichlorophenol	ug/L	40	39	99	47-121	
4-Chloro-3-methylphenol	ug/L	40	40	101	52-119	
2,4,6-Trichlorophenol	ug/L	40	39	98	50-125	
Hexachloroethane	ug/L	40	36	90	21-115	
Nitrobenzene	ug/L	40	38	96	45-121	
Hexachlorobutadiene	ug/L	40	33	83	22-124	
Acenaphthene	ug/L	40	41	102	47-122	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2376408

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dinitrotoluene (2,4-DNT)	ug/L	40	44	111	57-128	
Fluorene	ug/L	40	41	103	52-124	
Fluoranthene	ug/L	40	43	107	57-128	
bis(2-Ethylhexyl) phthalate	ug/L	40	44	109	55-135	
2-Fluorophenol (S)	%			95	31-134	
Phenol-d6 (S)	%			94	24-120	
Nitrobenzene-d5 (S)	%			95	38-139	
2-Fluorobiphenyl (S)	%			103	42-138	
2,4,6-Tribromophenol (S)	%			114	43-140	
p-Terphenyl-d14 (S)	%			108	61-154	

QC Batch: WCAt/9154 Analysis Method: SM 3500-CR D

QC Batch Method: SM 3500-CR D Prepared:

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2376507

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

LABORATORY CONTROL SAMPLE: 2376508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Hexavalent Chromium	mg/L	0.01	0.0090	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2376510 2376511 Original: T1709955002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Hexavalent Chromium	mg/L	0.002	0.01	0.011	0.011I	110	110	85-115	0	20	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

QC Batch: EXTj/3790 Analysis Method: EPA 504.1
QC Batch Method: EPA 504.1 Prepared: 06/12/2017 10:45
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2376534

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)	%	99	64-150	

LABORATORY CONTROL SAMPLE & LCSD: 2376535 2376536

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	0.26	0.27	105	108	70-130	3	30	
1,2-Dibromo-3-Chloropropane	ug/L	0.25	0.25	0.25	100	98	70-130	2	30	
Tetrachloro-m-xylene (S)	%				113	113	64-150	0		

MATRIX SPIKE SAMPLE: 2376538 Original: J1705726006

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Ethylene Dibromide (EDB)	ug/L	0	0.25	0.26	105	70-130	
1,2-Dibromo-3-Chloropropane	ug/L	0	0.25	0.25	100	70-130	
Tetrachloro-m-xylene (S)	%	110			126	64-150	

QC Batch: MSVt/3169 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 06/09/2017 19:00
Associated Lab Samples: T1709955001, T1709955002, T1709955003

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2377044

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Dichlorodifluoromethane	ug/L	0.36	0.36	U
Chloromethane	ug/L	0.36	0.36	U
Vinyl Chloride	ug/L	0.26	0.26	U
Bromomethane	ug/L	0.81	0.81	U
Chloroethane	ug/L	0.38	0.38	U
Trichlorofluoromethane	ug/L	0.84	0.84	U
Acrolein (Propenal)	ug/L	3.1	3.1	U
1,1-Dichloroethylene	ug/L	0.70	0.70	U
Acrylonitrile	ug/L	4.6	4.6	U
Methylene Chloride	ug/L	1.0	1.0	U
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	0.49	0.49	U
1,1,1-Trichloroethane	ug/L	0.44	0.44	U
Carbon Tetrachloride	ug/L	0.57	0.57	U
Benzene	ug/L	0.17	0.17	U
1,2-Dichloropropane	ug/L	0.76	0.76	U
Trichloroethene	ug/L	0.66	0.66	U
Bromodichloromethane	ug/L	0.49	0.49	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
cis-1,3-Dichloropropene	ug/L	0.17	0.17	U
trans-1,3-Dichloropropylene	ug/L	0.29	0.29	U
1,1,2-Trichloroethane	ug/L	0.46	0.46	U
Toluene	ug/L	0.45	0.45	U
Dibromochloromethane	ug/L	0.38	0.38	U
Tetrachloroethylene (PCE)	ug/L	0.52	0.52	U
Chlorobenzene	ug/L	0.56	0.56	U
Ethylbenzene	ug/L	0.26	0.26	U
Bromoform	ug/L	0.61	0.61	U
1,1,2,2-Tetrachloroethane	ug/L	0.32	0.32	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	1.1	1.1	U
1,2-Dichloroethane-d4 (S)	%	97	70-128	
Toluene-d8 (S)	%	103	77-119	
Bromofluorobenzene (S)	%	108	86-123	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2377045 2377046

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	19	101	96	70-130	5	30	
1,1-Dichloroethylene	ug/L	20	20	20	99	99	70-130	0	30	
cis-1,2-Dichloroethylene	ug/L	20	20	19	100	97	70-130	3	30	
Chloroform	ug/L	20	20	20	98	99	70-130	1	30	
Benzene	ug/L	20	20	20	100	98	70-130	2	30	
Trichloroethene	ug/L	20	20	20	100	98	70-130	2	30	
Toluene	ug/L	20	20	20	102	99	70-130	3	30	
Tetrachloroethylene (PCE)	ug/L	20	20	20	101	100	70-130	1	30	
Chlorobenzene	ug/L	20	21	20	103	99	70-130	4	30	
Ethylbenzene	ug/L	20	20	19	100	97	70-130	3	30	
1,3-Dichlorobenzene	ug/L	20	21	21	104	107	70-130	4	30	
1,2-Dichlorobenzene	ug/L	20	21	21	103	105	70-130	2	30	
Xylene (Total)	ug/L	60	60	58	100	97	70-130	3	30	
1,2-Dichloroethane-d4 (S)	%				103	98	70-128	6		
Toluene-d8 (S)	%				101	100	77-119	0		
Bromofluorobenzene (S)	%				106	109	86-123	3		

MATRIX SPIKE SAMPLE: 2377047 Original: T1709876001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	20	101	70-130	
1,1-Dichloroethylene	ug/L	0	20	20	100	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	20	98	70-130	
Chloroform	ug/L	0	20	20	99	70-130	
Benzene	ug/L	0	20	19	97	70-130	
Trichloroethene	ug/L	0	20	20	101	70-130	
Toluene	ug/L	0	20	20	101	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	20	100	70-130	
Chlorobenzene	ug/L	0	20	20	101	70-130	
Ethylbenzene	ug/L	0	20	20	98	70-130	
1,3-Dichlorobenzene	ug/L	0	20	21	103	70-130	
1,2-Dichlorobenzene	ug/L	0	20	21	103	70-130	
Xylene (Total)	ug/L	0	60	60	100	70-130	
1,2-Dichloroethane-d4 (S)	%				100	70-128	
Toluene-d8 (S)	%				101	77-119	
Bromofluorobenzene (S)	%				103	86-123	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

QC Batch: EXTj/3794 Analysis Method: EPA 548.1
QC Batch Method: EPA 548.1 Prepared: 06/12/2017 13:30
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2377332

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Endothall	ug/L	0.75	0.75	U

LABORATORY CONTROL SAMPLE & LCSD: 2377333 2377334

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Endothall	ug/L	50	55	57	111	114	63-131	3	30	

MATRIX SPIKE SAMPLE: 2379150 Original: T1709928001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Endothall	ug/L	0	83	25	30	63-131	

QC Batch: EXTj/3794 Analysis Method: EPA 548.1
QC Batch Method: EPA 548.1 Prepared: 06/13/2017 12:00
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2377332

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Endothall	ug/L	0.75	0.75	U

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2377333 2377334

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Endothall	ug/L	50	55	57	111	114	63-131	3	30	

MATRIX SPIKE SAMPLE: 2379150 Original: T1709928001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Endothall	ug/L	0	83	25	30	63-131	

QC Batch: WCAt/9164 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T1709955001

METHOD BLANK: 2377636

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

LABORATORY CONTROL SAMPLE: 2377637

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: 2377638 Original: T1709884001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	75	75	0	5	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

SAMPLE DUPLICATE: 2377639 Original: T1709977001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	95	93	3	5	

QC Batch: HPLj/1206 Analysis Method: EPA 531.1
QC Batch Method: EPA 531.1 Prepared:
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2377809

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: 2377810 2377811

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Oxamyl	ug/L	20	20	18	101	92	70-130	10	30	
Carbofuran	ug/L	20	24	24	122	119	70-130	3	30	

MATRIX SPIKE SAMPLE: 2377813 Original: J1705639001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Oxamyl	ug/L	0	20	20	99	70-130	
Carbofuran	ug/L	0	20	4.5	22	70-130	

QC Batch: WCAt/9175 Analysis Method: SM 4500NO3-F
QC Batch Method: SM 4500NO3-F Prepared:
Associated Lab Samples: T1709955001, T1709955002

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2377928

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: 2377929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Nitrate	mg/L	1	0.90	90	90-110	
Nitrite	mg/L	1	1.1	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378021 2378022 Original: T1709997001

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	2.2	1	3.1	3.2	97	101	90-110	1	10	
Nitrite	mg/L	0.01	1	1.1	1.0	108	105	90-110	3	10	

QC Batch: EXTm/2362
Analysis Method: EPA 8081
QC Batch Method: SW-846 3510C
Prepared: 06/13/2017 08:36
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2378062

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
alpha-BHC	ug/L	0.0041	0.0041	U
beta-BHC	ug/L	0.0071	0.0071	U
delta-BHC	ug/L	0.0056	0.0056	U
Aldrin	ug/L	0.0020	0.0020	U
Endosulfan I	ug/L	0.0016	0.0016	U
4,4`-DDE	ug/L	0.0016	0.0016	U
Dieldrin	ug/L	0.0016	0.0016	U
4,4`-DDD	ug/L	0.0024	0.0024	U

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2378062

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Endosulfan II	ug/L	0.0013	0.0013	U
Endrin Aldehyde	ug/L	0.0048	0.0048	U
4,4`-DDT	ug/L	0.0030	0.0030	U
Endosulfan Sulfate	ug/L	0.0017	0.0017	U
Tetrachloro-m-xylene (S)	%	62	44-124	
Decachlorobiphenyl (S)	%	66	48-137	

LABORATORY CONTROL SAMPLE: 2378063

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
alpha-BHC	ug/L	0.1	0.11	107	54-138	
beta-BHC	ug/L	0.1	0.056	56	56-136	
delta-BHC	ug/L	0.1	0.12	118	52-142	
Aldrin	ug/L	0.1	0.11	108	45-134	
Endosulfan I	ug/L	0.1	0.11	110	62-126	
4,4`-DDE	ug/L	0.1	0.10	103	57-135	
Dieldrin	ug/L	0.1	0.10	102	60-136	
4,4`-DDD	ug/L	0.1	0.10	101	56-143	
Endosulfan II	ug/L	0.1	0.11	107	52-135	
Endrin Aldehyde	ug/L	0.1	0.095	95	51-132	
4,4`-DDT	ug/L	0.1	0.11	114	51-143	
Endosulfan Sulfate	ug/L	0.1	0.11	109	62-133	
Tetrachloro-m-xylene (S)	%			64	44-124	
Decachlorobiphenyl (S)	%			68	48-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378064 2378065 Original: M1702282018

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES											
alpha-BHC	ug/L	0	0.2	0.20	0.18	100	91	54-138	10	30	
beta-BHC	ug/L	0	0.2	0.12	0.16	60	78	56-136	26	30	
delta-BHC	ug/L	0	0.2	0.22	0.19	111	93	52-142	18	30	
Aldrin	ug/L	0	0.2	0.22	0.19	108	95	45-134	13	30	
Endosulfan I	ug/L	0	0.2	0.19	0.17	95	86	62-126	11	30	
4,4`-DDE	ug/L	0	0.2	0.16	0.16	81	79	57-135	2	30	
Dieldrin	ug/L	0	0.2	0.17	0.17	86	83	60-136	4	30	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378064 2378065 Original: M1702282018

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
4,4`-DDD	ug/L	0	0.2	0.19	0.18	94	90	56-143	4	30	
Endosulfan II	ug/L	0	0.2	0.19	0.18	97	92	52-135	5	30	
Endrin Aldehyde	ug/L	0	0.2	0.17	0.17	87	87	51-132	0	30	
4,4`-DDT	ug/L	0	0.2	0.18	0.19	93	95	51-143	2	30	
Endosulfan Sulfate	ug/L	0	0.2	0.19	0.18	96	88	62-133	9	30	
Tetrachloro-m-xylene (S)	%	47				44	46	44-124	5		
Decachlorobiphenyl (S)	%	74				63	76	48-137	19		

QC Batch: EXTm/2363 Analysis Method: SW-846 8082A

QC Batch Method: SW-846 3510C Prepared: 06/13/2017 08:36

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2378075

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Aroclor 1016 (PCB-1016)	ug/L	0.15	0.15	U
Aroclor 1221 (PCB-1221)	ug/L	0.13	0.13	U
Aroclor 1232 (PCB-1232)	ug/L	0.19	0.19	U
Aroclor 1242 (PCB-1242)	ug/L	0.17	0.17	U
Aroclor 1248 (PCB-1248)	ug/L	0.16	0.16	U
Aroclor 1254 (PCB-1254)	ug/L	0.040	0.040	U
Aroclor 1260 (PCB-1260)	ug/L	0.020	0.020	U
Tetrachloro-m-xylene (S)	%	69	61-119	
Decachlorobiphenyl (S)	%	72	44-136	

LABORATORY CONTROL SAMPLE: 2378076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES						
Aroclor 1016 (PCB-1016)	ug/L	1	1.2	120	38-156	
Aroclor 1221 (PCB-1221)	ug/L		0.13			
Aroclor 1232 (PCB-1232)	ug/L		0.19			
Aroclor 1242 (PCB-1242)	ug/L		0.17			
Aroclor 1248 (PCB-1248)	ug/L		0.16			
Aroclor 1254 (PCB-1254)	ug/L		0.040			
Aroclor 1260 (PCB-1260)	ug/L	1	0.87	87	45-134	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2378076

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloro-m-xylene (S)	%			79	61-119	
Decachlorobiphenyl (S)	%			82	44-136	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2388153 2388154 Original: M1702447001

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	1.4	1.5	69	76	38-156	10	30	
Aroclor 1221 (PCB-1221)	ug/L			0.26	0.26U				0	30	
Aroclor 1232 (PCB-1232)	ug/L			0.38	0.38U				0	30	
Aroclor 1242 (PCB-1242)	ug/L			0.34	0.34U				0	30	
Aroclor 1248 (PCB-1248)	ug/L			0.32	0.32U				0	30	
Aroclor 1254 (PCB-1254)	ug/L			0.080	0.080U				0	30	
Aroclor 1260 (PCB-1260)	ug/L	0	2	1.8	1.7	92	83	45-134	10	30	
Tetrachloro-m-xylene (S)	%	43				78	58	61-119	30		
Decachlorobiphenyl (S)	%	70				104	76	44-136	31		

QC Batch: EXTj/3797 Analysis Method: EPA 508

QC Batch Method: EPA 508 Prepared: 06/13/2017 12:00

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2378415

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
SEMIVOLATILES				
Hexachlorocyclopentadiene	ug/L	0.012	0.012	U
Hexachlorobenzene	ug/L	0.0063	0.0063	U
gamma-BHC (Lindane)	ug/L	0.0071	0.0071	U
Heptachlor	ug/L	0.0060	0.0060	U
Heptachlor Epoxide	ug/L	0.0052	0.0052	U
Endrin	ug/L	0.0069	0.0069	U
Methoxychlor	ug/L	0.0068	0.0068	U
PCBs	ug/L	0.11	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	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2378416 2378417

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Hexachlorocyclopentadiene	ug/L	0.1	0.098	0.099	98	99	70-130	1	20	
Hexachlorobenzene	ug/L	0.1	0.11	0.094	107	94	70-130	12	20	
gamma-BHC (Lindane)	ug/L	0.1	0.097	0.098	97	98	70-130	1	20	
Heptachlor	ug/L	0.1	0.10	0.11	105	109	70-130	4	20	
Heptachlor Epoxide	ug/L	0.1	0.097	0.098	97	98	70-130	1	20	
Endrin	ug/L	0.1	0.096	0.099	96	99	70-130	2	20	
Methoxychlor	ug/L	0.1	0.094	0.094	94	94	70-130	0	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)	%				115	114	70-130	1		
Decachlorobiphenyl (S)	%				104	98	70-130	6		

MATRIX SPIKE SAMPLE: 2378418 Original: T1709930001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.1	0.11	110	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.082	82	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.099	99	65-135	
Heptachlor	ug/L	0	0.1	0.097	97	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.10	101	65-135	
Endrin	ug/L	0	0.1	0.091	91	65-135	
Methoxychlor	ug/L	0	0.1	0.083	83	65-135	
PCBs	ug/L			0.11			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Tetrachloro-m-xylene (S)	%	123			111	70-130	
Decachlorobiphenyl (S)	%	121			94	70-130	

MATRIX SPIKE SAMPLE: 2378419 Original: T1709989001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Hexachlorocyclopentadiene	ug/L	0	0.1	0.10	104	65-135	
Hexachlorobenzene	ug/L	0	0.1	0.087	87	65-135	
gamma-BHC (Lindane)	ug/L	0	0.1	0.10	101	65-135	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2378419 Original: T1709989001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Heptachlor	ug/L	0	0.1	0.097	97	65-135	
Heptachlor Epoxide	ug/L	0	0.1	0.099	99	65-135	
Endrin	ug/L	0	0.1	0.092	92	65-135	
Methoxychlor	ug/L	0	0.1	0.085	85	65-135	
PCBs	ug/L			0.11			
Chlordane (technical)	ug/L			0.053			
Toxaphene	ug/L			0.12			
Tetrachloro-m-xylene (S)	%				127	70-130	
Decachlorobiphenyl (S)	%				100	70-130	

QC Batch: WCAt/9197 Analysis Method: SM 4500H+B
QC Batch Method: SM 4500H+B Prepared:
Associated Lab Samples: T1709955001, T1709955002

SAMPLE DUPLICATE: 2379126 Original: T1709275003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
pH	SU	12	12	0	10	Q

QC Batch: EXTj/3800 Analysis Method: EPA 549.2
QC Batch Method: EPA 549.2 Prepared: 06/13/2017 11:30
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2379128

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

LABORATORY CONTROL SAMPLE & LCSD: 2379129 2379130

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Diquat	ug/L	290	300	320	105	112	70-130	6	30	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2379131 Original: T1709928001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Diquat	ug/L	0	290	260	90	70-130	

QC Batch: GCSj/2913 Analysis Method: EPA 515.3
QC Batch Method: EPA 515.3 Prepared: 06/13/2017 16:00
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2379152

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
Picloram	ug/L	0.23	0.23	U
Dinoseb	ug/L	0.86	0.86	U
2,4-Dichlorophenylacetic acid (S)	%	103	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 2379153 2379154

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Dalapon	ug/L	25	23	24	92	95	70-130	4	30	
2,4-D	ug/L	12	12	12	96	98	70-130	3	30	
Pentachlorophenol	ug/L	2.5	2.4	2.5	98	101	70-130	3	30	
Silvex (2,4,5-TP)	ug/L	5	4.2	4.7	84	93	70-130	10	30	
Picloram	ug/L	2.5	2.3	2.4	91	96	70-130	5	30	
Dinoseb	ug/L	12	11	12	90	93	70-130	3	30	
2,4-Dichlorophenylacetic acid (S)	%				98	98	70-130	0		

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2379155 Original: T1709784001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Dalapon	ug/L	0	25	23	93	70-130	
2,4-D	ug/L	0	12	11	87	70-130	
Pentachlorophenol	ug/L	0	2.5	2.2	90	70-130	
Silvex (2,4,5-TP)	ug/L	0	5	4.2	84	70-130	
Picloram	ug/L	0	2.5	2.5	100	70-130	
Dinoseb	ug/L	0	12	11	88	70-130	
2,4-Dichlorophenylacetic acid (S)	%				116	70-130	

MATRIX SPIKE SAMPLE: 2379156 Original: T1709989001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Dalapon	ug/L	0	25	25	99	70-130	
2,4-D	ug/L	0	12	12	99	70-130	
Pentachlorophenol	ug/L	0	2.5	2.6	102	70-130	
Silvex (2,4,5-TP)	ug/L	0	5	4.7	94	70-130	
Picloram	ug/L	0	2.5	2.5	100	70-130	
Dinoseb	ug/L	0	12	12	95	70-130	
2,4-Dichlorophenylacetic acid (S)	%				103	70-130	

QC Batch: DGMt/3150 Analysis Method: EPA 200.7

QC Batch Method: EPA 200.7 Prepared: 06/14/2017 11:30

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2379648

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Aluminum	mg/L	0.025	0.025	U
Barium	mg/L	0.0015	0.0015	U
Beryllium	mg/L	0.00011	0.00011	U
Chromium	mg/L	0.0020	0.0020	U
Iron	mg/L	0.021	0.021	U
Sodium	mg/L	0.17	0.17	U
Nickel	mg/L	0.0044	0.0044	U
Zinc	mg/L	0.0074	0.0074	U

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE: 2379649

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Aluminum	mg/L	25	25	97	85-115	
Barium	mg/L	0.4	0.37	93	85-115	
Beryllium	mg/L	0.4	0.37	92	85-115	
Chromium	mg/L	0.4	0.37	93	85-115	
Iron	mg/L	25	26	102	85-115	
Sodium	mg/L	50	50	99	85-115	
Nickel	mg/L	0.4	0.35	88	85-115	
Zinc	mg/L	0.4	0.36	90	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2379650 2379651 Original: F1700246001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Aluminum	mg/L	-0.17	25	26	26	102	101	70-130	2	20	
Barium	mg/L	0.028	0.4	0.43	0.45	100	105	70-130	4	20	
Beryllium	mg/L	0.0002	0.4	0.40	0.38	99	96	70-130	3	20	
Chromium	mg/L	0.0008	0.4	0.41	0.40	103	99	70-130	4	20	
Iron	mg/L	6.3	25	34	34	110	108	70-130	1	20	
Sodium	mg/L	130	50	180	180	104	100	70-130	1	20	
Nickel	mg/L	0.0047	0.4	0.40	0.39	100	97	70-130	2	20	
Zinc	mg/L	0.75	0.4	1.2	1.1	107	97	70-130	3	20	

QC Batch: WCAg/5144 Analysis Method: SM 5540 C

QC Batch Method: SM 5540 C Prepared:

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2380555

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

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2380796

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

LABORATORY CONTROL SAMPLE: 2380556

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
MBAS,as LAS,mol.wt.348	mg/L	2	2.0	102	75-125	

LABORATORY CONTROL SAMPLE: 2380797

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
MBAS,as LAS,mol.wt.348	mg/L	2	2.0	101	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2380557 2380558 Original: M1702234003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
MBAS,as LAS,mol.wt.348	mg/L	0.077	1	1.1	1.1	101	99	75-125	2	20	

QC Batch: HPLj/1208 Analysis Method: EPA 547
QC Batch Method: EPA 547 Prepared:
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2380841

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

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2380842 2380843

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Glyphosate	ug/L	200	190	200	95	98	70-130	4	30	

MATRIX SPIKE SAMPLE: 2380845 Original: A1704224001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Glyphosate	ug/L	0	200	200	99	70-130	

QC Batch: WCAt/9235 Analysis Method: SM 2120 B

QC Batch Method: SM 2120 B Prepared:

Associated Lab Samples: T1709955002

METHOD BLANK: 2380968

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: 2380970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU		0.10			
Color	PCU	30	28	93	90-110	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

SAMPLE DUPLICATE: 2387931 Original: T1710159001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
pH for Color Analysis	SU	6.0	6.0	0	10	
Color	PCU	2.7U	2.7	0	20	

QC Batch: MSVj/4201 Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2 Prepared:

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2383336

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Vinyl Chloride	ug/L	0.13	0.13	U
1,1-Dichloroethylene	ug/L	0.18	0.18	U
Methylene Chloride	ug/L	0.25	0.25	U
trans-1,2-Dichloroethylene	ug/L	0.38	0.38	U
cis-1,2-Dichloroethylene	ug/L	0.29	0.29	U
1,2-Dichloroethane	ug/L	0.27	0.27	U
1,1,1-Trichloroethane	ug/L	0.21	0.21	U
Carbon Tetrachloride	ug/L	0.24	0.24	U
Benzene	ug/L	0.15	0.15	U
1,2-Dichloropropane	ug/L	0.15	0.15	U
Trichloroethene	ug/L	0.31	0.31	U
1,1,2-Trichloroethane	ug/L	0.35	0.35	U
Toluene	ug/L	0.20	0.20	U
Tetrachloroethylene (PCE)	ug/L	0.30	0.30	U
Chlorobenzene	ug/L	0.17	0.17	U
Ethylbenzene	ug/L	0.21	0.21	U
Styrene	ug/L	0.14	0.14	U
1,4-Dichlorobenzene	ug/L	0.23	0.23	U
1,2-Dichlorobenzene	ug/L	0.24	0.24	U
1,2,4-Trichlorobenzene	ug/L	0.20	0.20	U
Xylene (Total)	ug/L	0.38	0.38	U
1,2-Dichloroethane-d4 (S)	%	97	80-120	
Toluene-d8 (S)	%	91	81-118	
Bromofluorobenzene (S)	%	117	86-115	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2383337 2383338

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Vinyl Chloride	ug/L	20	18	18	92	89	70-130	4	30	
1,1-Dichloroethylene	ug/L	20	21	22	103	109	70-130	6	30	
Methylene Chloride	ug/L	20	17	19	86	94	70-130	9	30	
trans-1,2-Dichloroethylene	ug/L	20	20	20	102	99	70-130	2	30	
cis-1,2-Dichloroethylene	ug/L	20	20	22	102	109	70-130	6	30	
1,2-Dichloroethane	ug/L	20	23	23	115	113	70-130	2	30	
1,1,1-Trichloroethane	ug/L	20	24	24	118	122	70-130	3	30	
Carbon Tetrachloride	ug/L	20	24	24	121	120	70-130	1	30	
Benzene	ug/L	20	20	20	99	99	70-130	0	30	
1,2-Dichloropropane	ug/L	20	20	21	101	105	70-130	3	30	
Trichloroethene	ug/L	20	21	20	105	101	70-130	4	30	
1,1,2-Trichloroethane	ug/L	20	20	20	102	98	70-130	4	30	
Toluene	ug/L	20	20	18	99	91	70-130	8	30	
Tetrachloroethylene (PCE)	ug/L	20	19	18	94	92	70-130	2	30	
Chlorobenzene	ug/L	20	20	18	101	91	70-130	11	30	
Ethylbenzene	ug/L	20	20	19	100	95	70-130	5	30	
Styrene	ug/L	20	21	20	106	102	70-130	4	30	
1,4-Dichlorobenzene	ug/L	20	22	21	108	107	70-130	1	30	
1,2-Dichlorobenzene	ug/L	20	21	21	106	106	70-130	0	30	
1,2,4-Trichlorobenzene	ug/L	20	15	15	75	77	70-130	3	30	
Xylene (Total)	ug/L	60	62	59	103	99	70-130	4	30	
1,2-Dichloroethane-d4 (S)	%				107	120	80-120	12		
Toluene-d8 (S)	%				88	87	81-118	2		
Bromofluorobenzene (S)	%				106	108	86-115	1		

MATRIX SPIKE SAMPLE: 2383339 Original: T1709955001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Vinyl Chloride	ug/L	0	20	15	77	70-130	
1,1-Dichloroethylene	ug/L	0	20	18	93	70-130	
Methylene Chloride	ug/L	0	20	17	83	70-130	
trans-1,2-Dichloroethylene	ug/L	0	20	18	89	70-130	
cis-1,2-Dichloroethylene	ug/L	0	20	19	96	70-130	
1,2-Dichloroethane	ug/L	0	20	21	105	70-130	
1,1,1-Trichloroethane	ug/L	0	20	20	103	70-130	
Carbon Tetrachloride	ug/L	0	20	22	108	70-130	
Benzene	ug/L	0	20	19	97	70-130	
1,2-Dichloropropane	ug/L	0	20	18	92	70-130	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE SAMPLE: 2383339 Original: T1709955001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	0	20	17	84	70-130	
1,1,2-Trichloroethane	ug/L	0	20	18	90	70-130	
Toluene	ug/L	0	20	17	83	70-130	
Tetrachloroethylene (PCE)	ug/L	0	20	15	76	70-130	
Chlorobenzene	ug/L	0	20	17	87	70-130	
Ethylbenzene	ug/L	0	20	18	88	70-130	
Styrene	ug/L	0	20	19	95	70-130	
1,4-Dichlorobenzene	ug/L	0	20	18	92	70-130	
1,2-Dichlorobenzene	ug/L	0	20	19	94	70-130	
1,2,4-Trichlorobenzene	ug/L	0	20	14	69	70-130	
Xylene (Total)	ug/L	1.1	60	57	93	70-130	
1,2-Dichloroethane-d4 (S)	%	113			115	80-120	
Toluene-d8 (S)	%	84			87	81-118	
Bromofluorobenzene (S)	%	111			107	86-115	

QC Batch: MSVj/4202 Analysis Method: EPA 524.2

QC Batch Method: EPA 524.2 Prepared:

Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2383398

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Chloroform	ug/L	0.98	0.98	U
Bromodichloromethane	ug/L	0.95	0.95	U
Dibromochloromethane	ug/L	0.82	0.82	U
Bromoform	ug/L	1.0	1.0	U
Total Trihalomethanes	ug/L	0.82	0.82	U
1,2-Dichloroethane-d4 (S)	%	97	80-120	
Toluene-d8 (S)	%	91	81-118	
Bromofluorobenzene (S)	%	117	86-115	

LABORATORY CONTROL SAMPLE & LCSD: 2383399 2383400

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES										
Chloroform	ug/L	20	22.43	21.51	112	108	70-130	4	30	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

LABORATORY CONTROL SAMPLE & LCSD: 2383399 2383400

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Bromodichloromethane	ug/L	20	23.28	23.29	116	116	70-130	0	30	
Dibromochloromethane	ug/L	20	23.36	22.91	117	115	70-130	2	30	
Bromoform	ug/L	20	22.30	22.97	112	115	70-130	3	30	
Total Trihalomethanes	ug/L		91.37	90.68				1		
1,2-Dichloroethane-d4 (S)	%				113	103	80-120	10		
Toluene-d8 (S)	%				90	88	81-118	2		
Bromofluorobenzene (S)	%				108	106	86-115	2		

MATRIX SPIKE SAMPLE: 2383401 Original: T1709955001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloroform	ug/L	11.54	20	31.94	102	70-130	
Bromodichloromethane	ug/L	44.8	20	68.28	117	70-130	
Dibromochloromethane	ug/L	98.17	20	125.46	136	70-130	
Bromoform	ug/L	136.77	20	158.87	111	70-130	
Total Trihalomethanes	ug/L			384.55			
1,2-Dichloroethane-d4 (S)	%	113			110	80-120	
Toluene-d8 (S)	%	84			87	81-118	
Bromofluorobenzene (S)	%	111			105	86-115	

MATRIX SPIKE SAMPLE: 2383402 Original: T1709805003

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
VOLATILES							
Chloroform	ug/L	13.32	20	33.10	99	70-130	
Bromodichloromethane	ug/L	15.96	20	37.30	107	70-130	
Dibromochloromethane	ug/L	11.63	20	31.93	102	70-130	
Bromoform	ug/L	2.05	20	18.40	82	70-130	
Total Trihalomethanes	ug/L			120.73			
1,2-Dichloroethane-d4 (S)	%	104			107	80-120	
Toluene-d8 (S)	%	85			88	81-118	
Bromofluorobenzene (S)	%	113			98	86-115	

QC Batch: GCSt/1910 Analysis Method: EPA 552.2

QC Batch Method: EPA 552.2 Prepared: 06/19/2017 09:45

Associated Lab Samples: T1709955001, T1709955002

CERTIFICATE OF ANALYSIS

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2383770

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)	%	91	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 2383771 2383772

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
SEMIVOLATILES										
Chloroacetic Acid	ug/L	20	21.96	22.91	110	115	70-130	4	30	
Bromoacetic Acid	ug/L	20	21.08	22.01	105	110	70-130	4	30	
Dichloroacetic Acid	ug/L	20	22.06	23.08	110	115	70-130	5	30	
Trichloroacetic Acid	ug/L	20	20.60	21.16	103	106	70-130	3	30	
Dibromoacetic Acid	ug/L	20	21.31	21.83	107	109	70-130	2	30	
Total Haloacetic Acids (HAA5)	ug/L		107.01	110.99				4	30	
2,3-Dibromopropionic Acid (S)	%				94	96	70-130	3	30	

MATRIX SPIKE SAMPLE: 2383774 Original: S1700850001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Chloroacetic Acid	ug/L	0.72	20	19.18	92	70-130	
Bromoacetic Acid	ug/L	2.54	20	30.85	142	70-130	J4
Dichloroacetic Acid	ug/L	3.2	20	26.83	118	70-130	
Trichloroacetic Acid	ug/L	2.71	20	28.24	128	70-130	
Dibromoacetic Acid	ug/L	8.14	20	32.40	121	70-130	
Total Haloacetic Acids (HAA5)	ug/L			137.49			
2,3-Dibromopropionic Acid (S)	%	113			104	70-130	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

QC Batch: WCAt/9275 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2383798

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: 2383799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	2.5	2.6	104	90-110	
Chloride	mg/L	25	27	108	90-110	
Sulfate	mg/L	25	27	108	90-110	

QC Batch: DGMt/3177 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Prepared: 06/19/2017 10:30
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2383951

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

LABORATORY CONTROL SAMPLE: 2383952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Mercury	mg/L	0.001	0.0010	103	85-115	

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2383953 2383954 Original: M1702260002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	mg/L	0	0.001	0.0010	0.0010	102	100	70-130	2	20	

QC Batch: WCAt/9332 Analysis Method: SM 4500-CN-E
QC Batch Method: SM 4500-CN-E Prepared:
Associated Lab Samples: T1709955001, T1709955002

METHOD BLANK: 2385782

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

LABORATORY CONTROL SAMPLE: 2385783

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2385784 2385785 Original: T1709955001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Cyanide	mg/L	0.00064	0.04	0.036	0.036	89	90	90-110	0	10	J4

QC Batch: EXTj/3848 Analysis Method: EPA 525.2
QC Batch Method: EPA 525.2 Prepared: 06/22/2017 11:00
Associated Lab Samples: T1709955001, T1709955002

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QUALITY CONTROL DATA

Workorder: T1709955 SELF Plant Effluent Semi

METHOD BLANK: 2388268

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)	%	97	70-130	

LABORATORY CONTROL SAMPLE & LCSD: 2388269 2388270

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	1.9	100	96	70-130	4	30	
Atrazine	ug/L	2	2.0	1.9	100	97	70-130	3	30	
Alachlor	ug/L	2	1.9	1.9	95	93	70-130	2	30	
Di(2-ethylhexyl) adipate	ug/L	2	1.7	1.7	87	87	70-130	1	30	
bis(2-Ethylhexyl) phthalate	ug/L	2	2.4	2.2	120	112	70-130	7	30	
Benzo[a]pyrene	ug/L	2	1.7	1.6	87	81	70-130	7	30	
p-Terphenyl-d14 (S)	%				97	103	70-130	5		

MATRIX SPIKE SAMPLE: 2388271 Original: T1709955002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
SEMIVOLATILES							
Simazine	ug/L	0	2	2.1	103	70-130	
Atrazine	ug/L	0	2	2.1	103	70-130	
Alachlor	ug/L	0	2	1.9	97	70-130	
Di(2-ethylhexyl) adipate	ug/L	0	2	1.9	93	70-130	
bis(2-Ethylhexyl) phthalate	ug/L	0.61	2	2.5	124	70-130	
Benzo[a]pyrene	ug/L	0	2	1.9	96	70-130	
p-Terphenyl-d14 (S)	%	97			108	70-130	

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QUALITY CONTROL DATA QUALIFIERS

Workorder: T1709955 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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1709955001	Leachate Effluent(Semi Annual)			SM 2150 B	WCAt/9131
T1709955002	Field Blank			SM 2150 B	WCAt/9131
T1709955001	Leachate Effluent(Semi Annual)	EPA 200.8	DGMj/3095	EPA 200.8	ICMj/1570
T1709955002	Field Blank	EPA 200.8	DGMj/3095	EPA 200.8	ICMj/1570
T1709955002	Field Blank			SM 2540 C	WCAt/9137
T1709955001	Leachate Effluent(Semi Annual)			SM 2120 B	WCAt/9141
T1709955001	Leachate Effluent(Semi Annual)	SW-846 3510C	EXTj/3786	SW-846 8270C	MSSj/2192
T1709955002	Field Blank	SW-846 3510C	EXTj/3786	SW-846 8270C	MSSj/2192
T1709955001	Leachate Effluent(Semi Annual)			SM 3500-CR D	WCAt/9154
T1709955002	Field Blank			SM 3500-CR D	WCAt/9154
T1709955001	Leachate Effluent(Semi Annual)	EPA 504.1	EXTj/3790	EPA 504.1	GCSj/2910
T1709955002	Field Blank	EPA 504.1	EXTj/3790	EPA 504.1	GCSj/2910
T1709955001	Leachate Effluent(Semi Annual)	SW-846 5030B	MSVt/3169	SW-846 8260B	MSVt/3170
T1709955002	Field Blank	SW-846 5030B	MSVt/3169	SW-846 8260B	MSVt/3170
T1709955003	Travel Blank	SW-846 5030B	MSVt/3169	SW-846 8260B	MSVt/3170
T1709955001	Leachate Effluent(Semi Annual)	EPA 548.1	EXTj/3794	EPA 548.1	MSSj/2204
T1709955002	Field Blank	EPA 548.1	EXTj/3794	EPA 548.1	MSSj/2204
T1709955001	Leachate Effluent(Semi Annual)			SM 2540 C	WCAt/9164
T1709955001	Leachate Effluent(Semi Annual)			EPA 531.1	HPLj/1206

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1709955002	Field Blank			EPA 531.1	HPLj/1206
T1709955001	Leachate Effluent(Semi Annual)			SM 4500NO3-F	WCAt/9175
T1709955002	Field Blank			SM 4500NO3-F	WCAt/9175
T1709955001	Leachate Effluent(Semi Annual)	SW-846 3510C	EXTm/2362	EPA 8081	GCSm/1787
T1709955002	Field Blank	SW-846 3510C	EXTm/2362	EPA 8081	GCSm/1787
T1709955001	Leachate Effluent(Semi Annual)	SW-846 3510C	EXTm/2363	SW-846 8082A	GCSm/1788
T1709955002	Field Blank	SW-846 3510C	EXTm/2363	SW-846 8082A	GCSm/1788
T1709955001	Leachate Effluent(Semi Annual)	EPA 508	EXTj/3797	EPA 508	GCSj/2914
T1709955002	Field Blank	EPA 508	EXTj/3797	EPA 508	GCSj/2914
T1709955001	Leachate Effluent(Semi Annual)			SM 4500H+B	WCAt/9197
T1709955002	Field Blank			SM 4500H+B	WCAt/9197
T1709955001	Leachate Effluent(Semi Annual)	EPA 549.2	EXTj/3800	EPA 549.2	HPLj/1207
T1709955002	Field Blank	EPA 549.2	EXTj/3800	EPA 549.2	HPLj/1207
T1709955001	Leachate Effluent(Semi Annual)	EPA 515.3	GCSj/2913	EPA 515.3	GCSj/2915
T1709955002	Field Blank	EPA 515.3	GCSj/2913	EPA 515.3	GCSj/2915
T1709955001	Leachate Effluent(Semi Annual)	EPA 200.7	DGMt/3150	EPA 200.7	ICPt/2337
T1709955002	Field Blank	EPA 200.7	DGMt/3150	EPA 200.7	ICPt/2337
T1709955001	Leachate Effluent(Semi Annual)			SM 5540 C	WCAg/5144
T1709955002	Field Blank			SM 5540 C	WCAg/5144

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1709955 SELF Plant Effluent Semi

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1709955001	Leachate Effluent(Semi Annual)			EPA 547	HPLj/1208
T1709955002	Field Blank			EPA 547	HPLj/1208
T1709955002	Field Blank			SM 2120 B	WCAt/9235
T1709955001	Leachate Effluent(Semi Annual)			EPA 524.2	MSVj/4201
T1709955002	Field Blank			EPA 524.2	MSVj/4201
T1709955001	Leachate Effluent(Semi Annual)			EPA 524.2	MSVj/4202
T1709955002	Field Blank			EPA 524.2	MSVj/4202
T1709955001	Leachate Effluent(Semi Annual)	EPA 552.2	GCSt/1910	EPA 552.2	GCSt/1911
T1709955002	Field Blank	EPA 552.2	GCSt/1910	EPA 552.2	GCSt/1911
T1709955001	Leachate Effluent(Semi Annual)			EPA 300.0	WCAt/9275
T1709955002	Field Blank			EPA 300.0	WCAt/9275
T1709955001	Leachate Effluent(Semi Annual)	EPA 245.1	DGMt/3177	EPA 245.1	CVAt/1571
T1709955002	Field Blank	EPA 245.1	DGMt/3177	EPA 245.1	CVAt/1571
T1709955001	Leachate Effluent(Semi Annual)			SM 4500-CN-E	WCAt/9332
T1709955002	Field Blank			SM 4500-CN-E	WCAt/9332
T1709955001	Leachate Effluent(Semi Annual)	EPA 525.2	EXTj/3848	EPA 525.2	MSSj/2217
T1709955002	Field Blank	EPA 525.2	EXTj/3848	EPA 525.2	MSSj/2217
T1709955001	Leachate Effluent(Semi Annual)	Field Measurements	FLDt/	Field Measurements	FLDt/

T1709955

Advanced Environmental Laboratories, Inc.

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Client Name: Hills. Co. Public Utilities
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Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: J. FULLER / A. LAFON
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: SELF Plant Effluent Semi
P.O. Number/Project Number: N/A
Project Location: Southeast County Landfill
REMARKS/SPECIAL INSTRUCTIONS

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: PDWS 62.550.310	SDWS 62.550.320	Priority Pollutants	8260							LABORATORY I.D. NUMBER
	Leachate Effluent (Semi Annual)		6/8/17	1105	WW				X	X	X								001
	Travel Blank		6/8/17	N/A	DI							X							003
	FIELD BLANK		6/8/17	1020	DI				X	X	X								002

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
Preservation Code: I = ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 1.0 (in degrees celcius)

Form revised 09/19/2012

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: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		6/8/17	1407		6/9/17	1006
2						
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:
Site Address:

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: 6/8/17

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)
1105	N/A	N/A	N/A	N/A	7.71	30.32	17209	0.86	52	BROWN	LEACHATE
							AL 6/8/17				

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: J. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1105	SAMPLING ENDED AT: 1135
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
							AL 6/8/17		

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** ORP: ~~1105 (103.7)~~ 1105 (85.1)

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

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

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

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

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

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County Landfill - Plant	SITE LOCATION: Lithia, Florida	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 6/8/17

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)

= (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)

FIELD BLANK

AL
6/8/17

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: J. FULLER / A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1020	SAMPLING ENDED AT: 1050
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

REMARKS: **SEE C.O.C. FOR SAMPLE ANALYSIS** FIELD BLANK

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

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

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

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

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

Advanced
Environmental Laboratories, Inc.

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

Project No.: T1709955

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

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 Tetrachloro-m-xylene in T1709955001 are not applicable (at 22% (Limits 64-150%)). As recorded in the extraction logbook, the sample formed an emulsion in the solvent layer during the extraction so that nearly the entire solvent layer was an emulsion. Such emulsions are known to negatively affect surrogate yields. As further evidence of sample matrix interferences: the sample was a brown hue, emitted a strong odor, and contained sediments. 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:

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:

_____

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Jacksonville, Florida 32216
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Fax (904) 363-9354

Project No.: T1709955

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: The upper control criterion was exceeded for target analyte Hexachlorobenzene at 120.5% (Limits 80-120%)) in one of the bracketing Continuing Calibration Verification (CCV) standards for analytical batch GCSj:2914, 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 the following surrogates in T1709955001 are not applicable: Tetrachloro-m-xylene and Decachlorobiphenyl. The analysis of the sample required a dilution, which results in surrogate concentrations below the Practical Quantitation Limit (PQl). No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard:

F. Samples: Samples T1709931001, T1709957001, and T1709955001 were Copper cleaned as per EPA method 3660b to remove matrix interferences.

The following sample was analyzed at dilution due to high concentrations of non-target background components: T1709955001. This was necessary to allow for accurate detection of all surrogates and analytes. As physical evidence of the sample matrix interference: the extract was a yellow hue, contained viscous particulates, and emitted a strong odor. Cleanup of the sample extract was performed as per method criteria, but did not eliminate enough of the background components to prevent dilution.

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

G. Other:

Project No.: T1709955

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 T1709955001 are not applicable. As recorded in the extraction logbook, the sample formed an emulsion in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate yields. As physical evidence of the sample matrix interference: the sample was a dark yellow hue, contained particulates, and emitted a strong odor. In addition, due to the presence of non-target background components that prevented adequate resolution of the surrogate, accurate quantitation was not possible. The affected surrogate was qualified to indicate matrix interference.

D. Spikes: All acceptance criteria were met.

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

F. Samples: The Method Detection Limit (MDL) is elevated for 2,4-D for sample T1709955001 due to sample matrix interference. The chromatogram indicated the presence of non-target background components within the 2,4-D retention time window of interest that prevented adequate resolution of the target analyte. The 2,4-D result was reported from a 1:5 dilution. This was necessary to allow for accurate detection.

G. Other:

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Project No.: T1709955

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 552.2

Preparation: EPA 552.2

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: T1709955001:
The upper control criterion for 2,3-Dibromopropionic Acid in the above sample was exceeded. The sample was dark yellow with precipitates and a sewage smell. It also had an emulsion during extraction. High surrogate was observed in both extractions of the sample. The affected surrogate was qualified accordingly. No further corrective action was required.

D. Spikes: S1700833002 MS, S1700850001 MS:
The matrix spike (MS) recoveries of Monobromoacetic Acid (MBAA) for the above samples was outside control criteria by 11% and 12%, respectively. Recoveries in the laboratory control sample (LCS) and duplicate (LCSD) were acceptable for all analytes indicating the analytical batch was in control. The samples were qualified accordingly. 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.: T1709955

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: The upper control criterion was exceeded for several target analytes in one or more of the Continuing Calibration Verification (CCV) standards for analytical batch HPLj:1206, 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:

D. Spikes: The matrix spike 2377813 (MS) recovery of Carbofuran for J1705639001 was outside control criteria at 22% (Limits 70-130%). Recoveries in the Laboratory Control Sample 2377810 (LCS) and Laboratory Control Sample Duplicate 2377811 (LCSD) 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 is required.

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

F. Samples: Sample analyses proceeded normally.

G. Other:

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Fax (904) 363-9354

Project No.: T1709955

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: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The control criteria for all the surrogates in T1709955001 are not applicable. The analysis of the sample required a dilution, which results in undetected surrogate concentrations. No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: The following sample was analyzed at a dilution due to high non-target background components: T1709955001. This was necessary to allow for accurate detection of all internal standards, surrogates and analytes.

G. Other:

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Project No.: T1709955

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 548.1

Preparation: EPA 548.1

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: The matrix spike recovery of Endothall for sample T1709928001 was outside control criteria (30% versus a criterion of 63%). Recovery in the Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample (LCSD) were acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1709955

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: The lower control criterion was exceeded for the following surrogate in T1709955001 due to matrix interference. No target analytes were detected in the sample. The quality of the sample data is not significantly affected as internal standard area counts met criteria. No further corrective action is required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1709955

Client Name: Hillsborough County Public Utilities

ProjectID: SELF Plant Effluent Semi

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: The analysis of T1709955001 & T1709955002 were initially performed past the recommended holding time. An internal laboratory failure occurred which resulted in the missed holding time. Efforts were made to analyze the sample as soon as the error was identified. The data is qualified to indicate the holding time violation.

Analysis: The analysis of T1709955001 & T1709955002 were initially performed past the recommended holding time. An internal laboratory failure occurred which resulted in the missed holding time. Efforts were made to analyze the sample as soon as the error was identified. The data is qualified to indicate the holding time violation.

III. Method

Analysis: SM 3500-CR D

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates:

D. Spikes: All acceptance criteria were met.

E. Serial Diluion:

F. Samples: Sample analyses proceeded normally.

G. Other:

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Project No.: T1709955

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: The analysis of T1709955002 was initially performed within the recommended holding time. An internal laboratory failure occurred which resulted in the affected sample requiring reanalysis out of hold. Efforts were made to reanalyze the sample as soon as the error was identified. The data is qualified to indicate the holding time violation.

III. Method

Analysis: SM 2120 B

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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_____

Advanced Environmental Laboratories, Inc.

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

Queue: WCAt

Batch Number: 9332

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SM 4500-CN-E

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: The matrix spike recovery of Cyanide (MS 89%) for T1709955001 was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. The affected sample is qualified to indicate matrix interference.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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Advanced Environmental Laboratories, Inc.

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

Queue: MSVj

Batch Number: 4202

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 524.2

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The control criteria were exceeded for surrogate bromofluorobenzene in MB 2383398. 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 upper control criterion was exceeded for the following surrogate in T1709989001, T1710014001, T1710090001, -002, F1700220001, -002, -003, and -004: bromofluorobenzene. No target analytes were associated to the surrogate in question in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: Sample analyses proceeded normally.

G. Other:

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

Queue: WCAt

Batch Number: 9275

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: EPA 300.0

Preparation: None

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Duplicates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Serial Diluion: All acceptance criteria were met.

F. Samples: T1709955001 was analyzed at a dilution for Sulfate and Fluoride due to high Chloride. This was necessary to allow for accurate detection of all internal standards, surrogates and analytes.

G. Other:

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Advanced Environmental Laboratories, Inc.

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

Queue: GCSm

Batch Number: 1787

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: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: All acceptance criteria were met.

D. Spikes: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: The following sample was analyzed at dilution due to the presence of high non-target background components within the sample matrix: T1709955001. This dilution was necessary to allow for accurate detection and quantification of all internal standards, surrogates, and analytes.

G. Other:

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

Queue: GCSm

Batch Number: 1788

I. Receipt

No Exceptions were encountered.

II. Holding Times

Preparation: All holding times were met.

Analysis: All holding times were met.

III. Method

Analysis: SW-846 8082A

Preparation: SW-846 3510C

IV. Preparation

Sample preparation proceeded normally.

V. Analysis

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Surrogates: The control criteria were exceeded for surrogate; TCMX in the matrix spike duplicate (MSD) for M1702447001, M1702447001, and T1709955002. 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: All acceptance criteria were met.

E. Internal Standard: All acceptance criteria were met.

F. Samples: The following sample was analyzed at dilution due to high non-target background components within the sample matrix: T1709955001. This dilution was necessary to allow for accurate detection and quantification of all internal standards, surrogates, and analytes.

G. Other:

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CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421
www.capefearanalytical.com

July 05, 2017

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

Re: Dioxin Subcontract - M. Cammarata
Work Order: 10951
SDG: T1709955

Dear Mr. Cammarata:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 20, 2017. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

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

Sincerely,

Cynde Larkins

Cynde Larkins
Project Manager

Chain of Custody: 30994-HBN 024325
Enclosures

Chain of Custody

CFA WO# 10951

Document 30994 - HBN 24325 **Workorder** SELF Plant Effluent **Results Requested By** 6/20/2017 Standard

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

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: NONE	Requested Analysis: SW8290 TCDD	Requested Analysis: SW8290 DIOXIN	LAB USE ONLY
1	Leachate Effluent(Semi Annual)	6/8/2017 11:05	T1709955001	Water	1	X		
2	Field Blank	6/8/2017 10:20	T1709955002	Water	1	X		
3								
4								
5								

Report	Electronic Data Deliverables	Comments
☐ Standard (Results only)	☐ SEDD Stage 2A	
☐ Standard with Batch QC	☐ SEDD Stage 2B	
☐ CLP	☐ SEDD Stage 3	
☐ Other _____	☐ Other _____	

Preservative	Transfers	Released By	Date/Time	Received By	Date/Time
NONE = NONE	1		6/13/17 1730		6/14/17 1050
3.3	2		9gs		
	3				
	4				
	5				

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: AEL	Work Order: 10951
Shipping Company: Fedex	Date/Time Received: 6/20/17

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) CK 20Jun17 6.2° - 2.9 = 3.3°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: If preservative added, Lot#: 7
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:
11	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: CK Date: 6/20/17

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
Advanced Environmental Laboratories, Incorporated (AELI)
SDG T1709955
Work Order 10951

Method/Analysis Information

Product:	**TCDD Only by EPA Method 1613B in Liquids**
Analytical Method:	EPA Method 1613B
Extraction Method:	SW846 3520C
Analytical Batch Number:	34922
Clean Up Batch Number:	34921
Extraction Batch Number:	34920

Sample Analysis

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

Sample ID	Client ID
10951001	Leachate Effluent (Semi-Annual)
10951002	Field Blank
12018866	Method Blank (MB)
12018867	Laboratory Control Sample (LCS)
12018868	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# 14.

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: T1709955 CFA Work Order: 10951

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: Erin Suhrie**

Date: 05 JUL 2017 **Title: Data Validator**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**10951001**	**Date Collected:**	**06/08/2017 11:05**	**Matrix:**	**WATER**
Client Sample:	**1613 TCDD Water**	**Date Received:**	**06/20/2017 10:50**		
Client ID:	**Leachate Effluent (Semi-Annual)**			**Prep Basis:**	**As Received**
Batch ID:	**34922**	**Method:**	**EPA Method 1613B**		
Run Date:	**06/30/2017 12:26**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A29JUN17A_3-6**			**Dilution:**	**1**
Prep Batch:	**34920**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**23-JUN-17**	**Prep Aliquot:**	**968.1 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.3	pg/L	10.3

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1750	2070	pg/L	84.8	(31%-137%)
37Cl-2,3,7,8-TCDD		179	207	pg/L	86.5	(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

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**10951002**	**Date Collected:**	**06/08/2017 10:20**	**Matrix:**	**WATER**
Client Sample:	**1613 TCDD Water**	**Date Received:**	**06/20/2017 10:50**		
Client ID:	**Field Blank**			**Prep Basis:**	**As Received**
Batch ID:	**34922**	**Method:**	**EPA Method 1613B**		
Run Date:	**06/30/2017 13:14**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A29JUN17A_3-7**			**Dilution:**	**1**
Prep Batch:	**34920**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**23-JUN-17**	**Prep Aliquot:**	**969.1 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.3	pg/L	10.3

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1750	2060	pg/L	85.0	(31%-137%)
37Cl-2,3,7,8-TCDD		169	206	pg/L	81.9	(42%-164%)

Comments:

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

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: T1709955

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12018867	LCS for batch 34920	13C-2,3,7,8-TCDD		91.6	(25%-141%)
		37Cl-2,3,7,8-TCDD		87.8	(37%-158%)
12018868	LCSD for batch 34920	13C-2,3,7,8-TCDD		89.2	(25%-141%)
		37Cl-2,3,7,8-TCDD		88.0	(37%-158%)
12018866	MB for batch 34920	13C-2,3,7,8-TCDD		89.8	(31%-137%)
		37Cl-2,3,7,8-TCDD		85.6	(42%-164%)
10951001	Leachate Effluent (Semi-Annual)	13C-2,3,7,8-TCDD		84.8	(31%-137%)
		37Cl-2,3,7,8-TCDD		86.5	(42%-164%)
10951002	Field Blank	13C-2,3,7,8-TCDD		85.0	(31%-137%)
		37Cl-2,3,7,8-TCDD		81.9	(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

SDG Number: **T1709955** **Sample Type:** **Laboratory Control Sample**

Client ID: **LCS for batch 34920** **Matrix:** **WATER**

Lab Sample ID: **12018867**

Instrument: **HRP750** **Analysis Date:** **06/30/2017 08:27** **Dilution:** **1**

Analyst: **MJC** **Prep Batch ID:** **34920**

Batch ID: **34922**

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	192	95.8	73-146

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: **T1709955** **Sample Type:** **Laboratory Control Sample Duplicate**

Client ID: **LCSD for batch 34920** **Matrix:** **WATER**

Lab Sample ID: **12018868**

Instrument: **HRP750** **Analysis Date:** **06/30/2017 09:15** **Dilution:** **1**

Analyst: **MJC** **Prep Batch ID:** **34920**

Batch ID: **34922**

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	202	101	73-146	5.25	0-20

Method Blank Summary

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 34920**	**Instrument ID:**	**HRP750**	**Data File:**	**A29JUN17A_3-3**
Lab Sample ID:	**12018866**	**Prep Date:**	**23-JUN-17**	**Analyzed:**	**06/30/17 10:02**
Column:					

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 34920	12018867	A29JUN17A_3-1	06/30/17	0827
02	LCSD for batch 34920	12018868	A29JUN17A_3-2	06/30/17	0915
03	Leachate Effluent (Semi-Annual)	10951001	A29JUN17A_3-6	06/30/17	1226
04	Field Blank	10951002	A29JUN17A_3-7	06/30/17	1314

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12018866**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 34920**				
Client ID:	**MB for batch 34920**			**Prep Basis:**	**As Received**
Batch ID:	**34922**	**Method:**	**EPA Method 1613B**		
Run Date:	**06/30/2017 10:02**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A29JUN17A_3-3**			**Dilution:**	**1**
Prep Batch:	**34920**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**23-JUN-17**	**Prep Aliquot:**	**1000 mL**		

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		1800	2000	pg/L	89.8	(31%-137%)
37Cl-2,3,7,8-TCDD		171	200	pg/L	85.6	(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

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12018867**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 34920**				
Client ID:	**LCS for batch 34920**			**Prep Basis:**	**As Received**
Batch ID:	**34922**	**Method:**	**EPA Method 1613B**		
Run Date:	**06/30/2017 08:27**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A29JUN17A_3-1**			**Dilution:**	**1**
Prep Batch:	**34920**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**23-JUN-17**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		192	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1830	2000	pg/L	91.6	(25%-141%)
37Cl-2,3,7,8-TCDD		176	200	pg/L	87.8	(37%-158%)

Comments:

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**T1709955**	**Client:**	**AELI001**	**Project:**	**AELI00716**
Lab Sample ID:	**12018868**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 34920**				
Client ID:	**LCSD for batch 34920**			**Prep Basis:**	**As Received**
Batch ID:	**34922**	**Method:**	**EPA Method 1613B**		
Run Date:	**06/30/2017 09:15**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A29JUN17A_3-2**			**Dilution:**	**1**
Prep Batch:	**34920**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**23-JUN-17**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		202	pg/L	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1780	2000	pg/L	89.2	(25%-141%)
37Cl-2,3,7,8-TCDD		176	200	pg/L	88.0	(37%-158%)

Comments:

KNL ENVIRONMENTAL TESTING

DOH Certification #E84025

Report Date: June 27, 2017

Advanced Environmental Labs
9610 Princess Palm Ave
Tampa, FL 33619

Field Custody:	Client
Client/Field ID:	Field Blank T1709955002
Sample Collection:	6-8-17/1020
Lab ID No:	17.7122
Lab Custody Date:	6-15-17/1605
Sample description:	Water

CERTIFICATE OF ANALYSIS

Parameter	Units	Results	Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	1.5 U ± 0.5	6-17-17/0832	EPA 900.0	1.5
Combined Radium (Radium-226 + Radium 228)	pCi/l	0.3 U ± 0.2	Calc	Calc	0.3
Radium-226	pCi/l	0.3 U ± 0.2	6-20-17/1211	EPA 903.1	0.3
Radium-228	pCi/l	0.7 U ± 0.5	6-26-17/1112	EPA Ra-05	0.7

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.

KNL ENVIRONMENTAL TESTING

DOH Certification #E84025

Report Date: June 27, 2017

Advanced Environmental Labs
9610 Princess Palm Ave
Tampa, FL 33619

Field Custody:	Client
Client/Field ID:	Leachate Eff T1709955001
Sample Collection:	6-8-17/1105
Lab ID No:	17.7121
Lab Custody Date:	6-15-17/1605
Sample description:	Water

CERTIFICATE OF ANALYSIS

Parameter	Units	Results	Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	4.2 I ± 1.9	6-16-17/1721	EPA 900.0	3.2
Combined Radium (Radium-226 + Radium 228)	pCi/l	5.5 I ± 2.5	Calc	Calc	3.6
Radium-226	pCi/l	5.5 I ± 2.5	6-20-17/1211	EPA 903.1	3.6
Radium-228	pCi/l	7.6 U ± 4.8	6-26-17/1112	EPA Ra-05	7.6

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 30985 - HBN 24319 **Workorder** SELF Plant Effluent **Results Requested By** 6/20/2017

Report To	Subcontract To
Project Manager Tampa Advanced Environmental Laboratories, Inc 9610 Princess Palm Ave 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 6-27

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Requested Analysis: EPA 903.1	EPA Ra-05	EPA 900	EPA 900.1 6-15-17	LAB USE ONLY
1	Leachate Effluent(Semi Annual)	6/8/2017 11:05	T1709955001	Water	3	X	X	X		
2	Field Blank	6/8/2017 10:20	T1709955002	Water	3	X	X	X	X	
3										
4										
5										

Report

- ☐ Standard (Results only)
- ☐ Standard with Batch QC
- ☐ CLP
- ☐ Other _____

Electronic Data Deliverables

- ☐ SEDD Stage 2A
- ☐ SEDD Stage 2B
- ☐ SEDD Stage 3
- ☐ Other _____

Comments

6-27-17

17.7121-22

Preservative

HNO3 = HNO3

Transfers	Released By	Date/Time	Received By	Date/Time
1		6/15/17 1530		6-15-17 1605
2				
3				
4				
5				

PH Calibration Log

Month	APRIL '17					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.00	10.01	7.78	7.98	
2						
3	4.00	7.00	10.00	7.81	7.90	No Spray
4	4.00	6.99	9.99	7.67	7.80	8.30
5	4.00	7.00	10.01	7.69	7.75	8.00
6	4.00	6.99	10.00	7.76	7.38	8.29
7	4.00	7.01	10.00	7.70	7.69	8.30
8	4.01	7.02	10.01	7.75	7.91	
9						
10	4.01	7.02	10.00	7.65	7.67	8.39
11	4.01	7.01	10.01	7.66	7.89	8.35
12	4.01	7.01	10.00	7.77	8.05	8.29
13	4.00	7.01	10.01	7.85	8.04	8.27
14	4.00	7.01	10.01	7.74	7.84	
15	4.00	7.01	10.01	7.75	7.78	8.02
16						
17	4.00	7.00	10.01	7.96	8.07	8.27
18	4.01	7.00	10.01	7.76	7.96	8.21
19	4.00	7.01	10.02	7.71	7.99	8.44
20	4.00	7.01	10.01	7.71	7.89	8.22
21	4.00	7.00	10.00	7.58	7.85	8.22
22	4.00	7.00	10.01	7.76	7.79	8.21
23						
24	4.00	7.00	10.00	7.77	7.82	8.39
25	4.00	7.01	10.00	7.63	7.89	8.20
26	4.00	7.00	10.01	7.68	7.88	8.23
27	4.00	7.01	10.00	7.69	7.93	8.49
28	4.00	7.00	10.01	7.64	7.80	8.20
29	4.00	7.01	10.01	7.75	7.83	7.54
30						
31						

PH Calibration Log

Month	MAX 17					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.00	10.00	7.62	7.83	8.16
2	4.00	7.00	10.00	7.65	7.92	8.12
3	4.00	7.00	10.00	7.63	7.92	8.21
4	4.01	7.00	10.01	7.65	7.91	8.25
5	4.00	7.01	10.00	7.65	7.96	8.16
6	4.00	7.01	10.01	7.73	7.87	8.07
7						
8	4.00	7.01	10.00	7.65	7.87	8.09
9	4.00	7.00	10.01	7.66	7.88	8.32
10	4.00	7.00	10.02	7.76	7.93	8.01
11	4.00	7.01	10.00	7.61	7.78	8.14
12	4.00	699	10.00	7.77	7.82	8.40
13	4.00	7.00	10.00	7.70	7.81	7.87
14						
15	4.01	7.01	10.01	7.83	8.13	8.48
16	4.00	7.00	10.00	7.79	8.11	8.23
17	4.00	6.99	10.00	7.77	7.97	8.10
18	4.01	6.99	10.00	7.97	8.19	8.15
19	4.00	7.00	10.00	7.83	8.09	8.40
20	4.00	7.00	10.00	7.85	8.01	
21						
22	4.00	7.00	10.01	7.85	7.95	8.43
23	4.00	7.00	10.00	7.86	8.03	8.21
24	4.00	7.00	10.00	7.88	7.91	8.27
25	4.00	7.00	10.00	7.87	7.86	8.00
26	4.00	7.00	10.01	7.92	8.15	8.16
27						
28						
29						
30	4.00	7.00	10.00	7.78	8.12	8.50
31	4.00	7.02	10.00	7.78	8.00	8.20

PH Calibration Log

Month	JUNE '17					
Date	PH 4	PH 7	PH 10	INF PH	EFF PH	POND
1	4.00	7.01	10.01	7.96	8.01	NO SPRAY
2	4.00	7.01	10.01	7.85	8.00	NO SPRAY
3	4.00	7.00	10.01	7.70	7.92	7.94
4						
5	4.00	7.00	10.00	7.90	7.71	8.41
6	4.00	7.00	10.01	7.87	7.82	NO SPRAY
7	4.00	7.02	10.00	7.75	7.78	NO SPRAY
8	4.00	7.01	10.01	7.68	7.86	NO SPRAY
9	4.00	7.00	10.01	7.59	7.80	NO SPRAY
10	4.00	7.00	10.01	7.70	7.73	7.72
11						
12	4.00	7.04	10.00	7.69	7.77	8.04
13	4.00	7.00	10.00	7.72	7.86	NO SPRAY
14	4.00	7.01	10.00	7.85	7.86	7.58
15	4.00	7.00	10.00	7.76	7.70	7.82
16	4.00	7.01	10.01	7.97	7.79	NO SPRAY
17	3.99	7.00	10.01	7.75	7.72	NO SPRAY
18						
19	4.00	7.00	10.00	7.74	7.69	NO SPRAY
20	4.00	7.00	10.00	7.65	7.78	NO SPRAY
21	3.99	7.02	10.04	7.39	7.79	
22	4.00	7.00	10.01	7.53	7.83	7.97
23	4.00	7.00	10.00	7.55	7.83	NO SPRAY
24	4.00	7.00	10.01	7.58	7.78	7.97
25	4.00	7.00	10.00			
26	4.00	7.00	10.00	7.87	8.02	8.20
27	4.00	7.00	10.00	7.60	7.90	7.87
28	4.00	7.00	10.00	7.59	8.01	7.77
29	4.00	7.00	10.00	7.65	7.89	7.87
30	4.01	7.01	10.00	7.64	7.70	7.90
31						